

**CONNECTING THE DOTS - HIGHER
EDUCATION AND SCIENCE FOR A HEALTHIER
WORLD**

Connecting the Dots - Higher Education and Science for a Healthier World

IATI ID :	BE-BCE_KBO-0410057701-prg2022
Start date :	01/01/2022
End date :	12/31/2026
Grouped application ? :	Non-grouped
Joint program ? :	Non-joint

General description

With our **ITM-programme 'Connecting the Dots - Higher Education and Science for a Healthier World'** ITM, together with its partners, works to increase the quality of, and access to health care worldwide. The programme encompasses twelve countries and includes four global programmes. The main focus of the ITM-programme is on institutional capacity strengthening and collaboration, with special attention to training and empowerment of (future) health professionals.

Within our twelve **Country Programmes**, ITM and its partners strive for better health for local populations through platform development (knowledge and technology), education and research projects and building synergies. More importantly, we ensure science and education with a high societal relevance by including a component in each intervention to 'Get Research into Policy and Practice' (GRIPP). The countries we collaborate with are RDC, Benin, Burkina Faso, Ethiopia, Guinee, South-Africa, Rwanda; Cambodia, Nepal, Vietnam, Cuba and Peru.

Our four **Global Programmes** focus on Education & Scholarships, Policy Support, Global Citizenship Education and Synergies. Through our Education and Scholarship programme, we encourage staff and student mobility and lifelong learning. Our Policy Support directs itself mainly at the Belgian federal government, but also encompasses networks to generate learning and exchange within the global health sector. Under the World Citizenship component, we sensitise the general public on the importance of global health and solidarity. Lastly, our Synergy programme creates conditions for collaboration between our various country programmes; enables researchers and (partner) institutions to participate in international research projects ; and offers network opportunities on some of the most pressing issues of our time, incl. urbanization, climate change and health.

The ITM-programme budget totals about 79 million euro which implies a 10% increase over the 2017-2021 multiyear budget including the additional subsidy for the "Credo project" (Building Scientific and Research Capacity to Respond to Emerging Diseases in DRC (COVID-19)). The raised budget is needed: to start institutional collaborations in two new least developed countries (Rwanda and Nepal); to further strengthen collaborations in DRC and to assure continuity of and to capitalize on the successful Credo project now that the Covid pandemic is gaining momentum; and to cover part of the indexation. Over 50% and 80% of the country programme budget will be concentrated in DRC and Africa respectively.

Country selection takes DGD priorities into account with 8 out of 12 country programmes in Least Developed Countries (66%), including 5 bilateral priority countries (>40%) and 7 countries with "high warning" to "high alert" score in the Fragile State Index (58%).

The ITM-programme is part of the Joint Strategic Framework on Higher Education and Science for Sustainable Development, together with the umbrella organisations for higher education from Flanders and francophone Belgium, VLIR-UOS and ARES.

Mandatory annexes classified by programme

Title of the annex	Type of document	File
FA3 Report FULL - Volume I-II and Inception Report	Other	https://fundhub.openaid.be/sites/default/files/2021-07/FA3%20Report%20FULL%20-%20Volume%20I-II%20and%20Inception%20Report.pdf
FA4 Partner agreement EN TEMPLATE	Partnership Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FA4%20Partner%20Agreement%20EN%20TEMPLATE.pdf

Title of the annex	Type of document	File
Original_budget_July2021	Budget	https://fundhub.openaid.be/sites/default/files/2021-07/Budget-excel-NGOprgs2022-2026%20V10_ITM.xlsx
Updated_budget_file_April2022	Budget	https://fundhub.openaid.be/sites/default/files/2022-04/Budget-excel-NGOprgs2022-2026_V12_Final.xlsx
Brief_ITG_wijzigingen_050422	Other	https://fundhub.openaid.be/sites/default/files/2022-04/Brief_ITG_wijzigingen_050422_0.pdf
Aanpassingen_Narratief_ITG_050422	Other	https://fundhub.openaid.be/sites/default/files/2022-04/Aanpassingen_Narratief_ITG_050422_0.pdf

Comments on programme

Submitted by ITG-IMT on Thu, 03/31/2022 - 16:34

Response to general comments after final assessment

Vietnam: 30,14% of the operational costs is intended for the headquarters staff salary, which is a very important part of the budget. Also, almost half of the budget (48,68%) is dedicated to the ITM headquarters!

Reply

144.694 euro is destined to “headquarters staff salary”. This is 21% of the operational budget and is pays for (part of) for scientific collaborators who provide support from Antwerp and during capacity strengthening missions in the field.

The Headquarter functioning budget includes 75.000 euro for items bought in Antwerp (for instance because it is not available, but destined for the local partner). Internally they are labeled as “Loc@ ITM”, but in the DGD-summary table they appear as “Hoofdzetel”.

Cambodia: 22,70% of the operational costs is intended for the headquarters staff salary, which is a very important part of the budget.

Reply:

Indeed about 22% of the operational budget goes to “headquarters staff salary”. It pays for (part of) scientific collaborators who provide support from Antwerp and during capacity strenghtening missions in the field.

These findings also apply more generally: An important part of the budget (40,5 % excluding global programmes) stays at the ITM headquarters, with peaks in Burkina (57,6%) and Ethiopia (61,6%). Headquarter salary costs fluctuate around 20% for non-global programme interventions, which is a higher proportion than in most other ANGC.

Reply:

The Headquarter functioning budget also includes for items bought in Antwerp (for instance because it is not available locally but destined for and shipped to the local partner). Internally they are labeled as “Loc@ITM”, but in the DGD-summary table they appear as “Hoofdzetel” as the purchase and shipment will be done in Antwerp. Eg. for Burkina Faso this amounts over 141.000 euro (of the € 392.247 HQ functioning costs). For Ethiopia this amounts to 242.495 of the 583.200 euro HQ functioning costs.

Increase the institutional capacity of LRM and CERRHUD for improved quality of health care in Benin

Contacts

Contact details for the outcome's ANGC reference person in Belgium

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Contact details for the outcome's ANGC reference person or their representative in the field

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin		
IATI activity identifier :	BE-BCE-KBO-0410057701-prg2022-3-BJ		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Benin		
Sector :	13020 - Reproductive Health & rights - Reproductive health care	Budget share :	39%
Sector :	12250 - Health - Infectious disease control	Budget share :	35%
Sector :	12263 - Health - Tuberculosis control	Budget share :	26%

Other CSOs/IAs involved

N/A

Strategic target involved

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

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Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

LRM

Lat/Long :	6.365367147719, 2.4411212686525
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CNHU

Lat/Long :	6.3553578792699, 2.4121679416648
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CERRHUD

Lat/Long :	6.3554565792249, 2.4051522398172
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Outcome summary

Description of the outcome

The main aim of our programme is to strengthen the institutional capacity of the "Laboratoire de Référence des Mycobactéries" (LRM) and "Centre de Recherche en Reproduction Humaine et en Démographie's" (CERRHUD). This will allow them to contribute to an improved quality of the health care service delivery for bacterial bloodstream infections, tuberculosis and sexual and reproductive health (SRH) in Benin.

A country-wide network will be created to monitor antimicrobial resistance (AMR) and to report this information to the national level, while the already existing national tuberculosis network will be continued. To enable the institutes to keep up with the

ongoing and future digitalization trends, bioinformatics capacity will be strengthened at LRM and CERRHUD’s IT and the electronic data system will be optimized. In addition, research capacity at institutional and individual levels will be strengthened with two PhD trajectories and methodological short courses.

To improve the knowledge and practices of current and future health staff, district level managers and policy makers, blended course modules will be developed on the containment of AMR, quality improvement in the field of maternal and neonatal health and the basic skills needed to conduct operational research. These will be taught through an online training platform and will be complemented with face-to-face trainings.

New knowledge will be obtained through research projects on the molecular epidemiology of tuberculosis, AMR and SRH. Moreover, context-based policy research will be conducted in the field of (adolescent) SRH, following a mapping of the national policy research landscape. Finally, a national network for operational research on SRH will be initiated to promote the development of joint research projects. This newly gathered knowledge will contribute to the elaboration of evidence-based health policies and strategies in the country.

Wording of the outcome

Increasing the institutional capacity of LRM and CERRHUD will allow our partners to contribute to improved quality of health care services for (myco-)bacterial infections and SRH, and related research in Benin.

Target groups

This programme targets scientists and supporting staff at the partner institutes of LRM and CERRHUD. The beneficiaries of this programme include patients with (myco-)bacterial infections who attend health services in Benin, communities and individuals, focusing on vulnerable populations such as women and children, health staff at the district and regional levels and health planners within the technical departments of the Ministry of Health.

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	2
10. HIV / AIDS :	1
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	No

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

The outcome of our programme does not relate to the key objectives defined in this strategy paper. Therefore, we indicated our position as "Not applicable".

Education

Our programme includes activities that link to the Education sector, but the outcome of our programme is not aligned to the key objectives described in this strategy paper. Intersectoral collaboration will be sought in the field of SRH to provide adequate

information to adolescents. Even though we focus on lifelong learning, this is not linked to the priorities of focus, being primary, secondary and vocational education.

Children's rights

Our programme aims to improve access to quality health services including to women, new-borns and adolescents. Quality maternal, neonatal and SRH health services will not only reduce maternal and neonatal mortality but also the burden related to HIV/AIDS and the number of infants and adolescents newly infected by HIV through better HIV prevention. Our programme will contribute to provide increased access to information and services related to contraception and other preventive measures such as those to fight against malaria during pregnancy.

Development education

In our programme, we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own. In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

In our programme, we pay attention to the separation of medical from non-medical waste and the correct processing of laboratory waste via autoclave and incinerator platforms. The risk-based ISO 15189 approach, a standard quality norm in use in the clinical bacteriology laboratory, includes risk assessment and mitigation for environmental pollution by biomedical and chemical laboratory waste. Hospital-based waste management platforms are installed by collaborating ANGCs.

Gender

Women and adolescents are specific target groups of the programme but that is not enough to ensure a gender-based approach. A gender lens will be used to provide equal opportunities to girls and boys

(adolescents services), women and men in participating into research, training and accessing services, at all stages of the programme including planning and evaluation. Given some evidence (Guinea) that women tend to have less access to technologies and follow online courses in a lower proportion compared to men, a special attention will be given to try to reach out to women and support them in completing the courses. Similarly, a rights-based perspective will be included in research, training and services to increase participation, prevent discrimination, promote SRHR accountability towards vulnerable groups incl. adolescents and empower women and adolescents and enable them to exercise their SRH rights.

Migration

The outcome of our programme does not relate to the key objectives defined in this strategy paper. Therefore, we indicated our position as "Not applicable".

Digitalization - Digital for Development D4D

Blended courses including online modules will be developed by both LRM and CERRHUD. Online courses will enable a more inclusive approach, reaching a higher number of participants throughout the country. The COVID-19 period has increased the use of digitalization at national and international levels (South-South and North-South). This is likely to shape the next few years and increase the use of online courses. Data provide the basis for almost any development and humanitarian intervention. They allow for objectively describing the situation or the problem that one will address. Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. Data is also needed to keep track of a country's progress towards the SDGs. (DGD strategy paper D4D). Our programme will generate quality-assured data on AMR, TB and SRH which will be used to timely inform policy makers, so that they can design policies and plan interventions based on context-specific evidence.

Health

The long-term goal to which our programme wants to contribute is that health services delivered to and used by the Beninese population are responsive and of high quality. In our programme, we will contribute to the strengthening of the health care system in Benin by upgrading health staff through need-based trainings related to AMR containment, TB and SRH; by installing quality-assured laboratory surveillance of invasive bacterial infections through a country-wide AMR surveillance network and by continuing the supranational TB reference laboratory activities of LRM and the generation of data on TB epidemiology and transmission through the existing national TB laboratory network. In the field of SRH, context-based policy research will be

conducted and a national network on operational research on sexual and reproductive health will be initiated to promote the development of joint research projects responding to local needs. New knowledge will be generated to inform policy makers and in turn contribute to improve SRH services in Benin.

Private sector

The outcome of our programme does not relate to the key objectives defined in this strategy paper. Therefore, we indicated our position as “Not applicable”.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

A human rights-based approach is based on respect for equity, participation, transparency, accountability and non-discrimination, and focuses specifically on the most vulnerable populations. In this programme we adopt a human rights-based approach, by contributing to ensuring the right to health for all. We work at the level of the ‘duty bearers’ (public actors, health staff -providers and managers -, professional associations, civil society organisations, etc.) by increasing their capacity to help them to fulfil their obligations properly and increase accountability. The programme also aims to contribute to empower different groups of ‘rights holders’ (the final beneficiaries, including women and vulnerable groups such as adolescents, the civil society organisations and communities around them) to know, claim and fully exercise their right to quality health care. Our programme is in line with the Enabel ‘She Decides’ initiative in Benin which aims to increase access to quality SRH services (Emergency Obstetric Care), to reduce maternal and neonatal mortality, to adopt a human rights-based approach and to promote sexual and reproductive health rights (SRHR).

Decent and sustainable work

Our programme aims to increase individual capacity among health and research staff that will potentially allow them to conduct their work in a more satisfactory manner and equip them to secure a decent job and progress in their career trajectory. Better working conditions, enabling environment, human resource management within the partner institutions will be addressed in our programme and will in the medium- to long-term lead to retention of qualified staff both at LRM and CERRHUD. As there is not yet a social protection system in place within the country, our program will focus on the vulnerable population by reducing the price of blood culture for those not covered by a social security system (25% of original price). In addition, we work on laboratory safety measures, hence ensuring a safe working environment.

Gender

Gender equality is embedded in our programme. Two of the strategic priorities from the Belgian Gender Strategy have been taken into account, namely education, and health and sexual and reproductive rights. In terms of education, capacity building activities will involve and provide equitable opportunities to female and male staff. Part of our programme will also address adapted SRH services for adolescents, which will include access to information on SRH, comprehensive sexuality education. Even though the strategy mainly focuses on primary and secondary education, we think it is important to mention this here, with a focus on life-long learning, and increasing opportunities for women on the labour market, and for women in science in particular. A gender and rights-based approach will also be used for the conduct of research, with particular attention to participation and equity (including gender equity/equality), no discrimination and accountability. In a setting where one gender is disproportionately represented, we will look for compensating mechanisms in selection of collaborators, within and beyond the institutes. For instance, we will ensure that both men and women do field research, conduct interviews for surveys (in the case of SRH, more women will be involved), analyse the data, write publications, etc. A person-centred or respectful care approach in SRH services is in line with a gender and human right-based approach. It will contribute to empower women to become aware and participate in decisions related to their health. At the same time men’s involvement in SRH services which is a key aspect to increase utilization of SRH services and achieving better SRH outcomes will be addressed in our training content and research as relevant.

Environment

The potential impact of the programme on the environment includes the production of biohazard and chemical waste, the use of single-use consumables and paper forms in the laboratory settings and international travels.

The potential impact of climate change on the country programme includes a rise in temperature and rainfall which will likely aggravate the challenges already faced by the agriculture and forestry sectors, while the coastal areas (where the partner institutes are based) will experience a sharp rise in sea level (Reliefweb 2019). However, the impact of climate change will be mainly indirect through its impact on the socio-economic situation and development of the country. In certain rural areas, extended periods of draughts can be expected. Collaborating ANGCs are involved in mitigating activities such as constructions of in-hospital water reservoirs.

Actions for neutralizing and managing the potentially negative effects include the correct processing of laboratory waste via

autoclave and incinerator platforms. The risk-based ISO 15189 approach, a standard quality norm in use in the clinical bacteriology laboratory, includes risk assessment and mitigation for environmental pollution by biomedical and chemical laboratory waste. Hospital-based waste management platforms are installed by collaborating ANGCs. Furthermore, we pay attention to the reduction of packaging and reusing of materials where possible and provided its correct reprocessing (cleaning, decontamination, sterilization). We reduce the use of paper registers in the laboratory by digitalization of the laboratory data system where possible (e.g. through a laboratory information system). Regarding international travel, we will adhere to ITM's travel policy (currently in a pilot phase) to minimize flying and to pay compensations for carbon-neutralize travel. The use of solar energy is currently not included in our programme but will be considered as an area for investment in the future.

Common outcome within a common programme

N/A

Common outcome between distinct programmes

N/A

Areas of complementarity and synergy with the intervention of ENABEL

In line with Enabel's "She Decides" approach implemented in Benin, our programme aims to increase access to quality SRH services which will contribute to reduce maternal and neonatal mortality. We will also promote SRH rights among women and men of reproductive age including adolescents. More specifically two Enabel projects (2019-2024) namely P@SRIS and EQUITE address quality of maternity care (Emergency Obstetric and neonatal Care) and promote SRH rights. Enabel is also conducting research-action projects on SRH issues. Synergies and complementarity will be further explored with these Enabel projects.

'- Since the submission of our programme, we have continued to explore the collaboration with ENABEL. In November 2021, synergies and complementarity between CERRHUD and Enabel regarding the She Decides projects have been further discussed. CERRHUD is willing to support and strengthen the She Decides research actions projects (policy and health systems research). Similarly Enabel expressed interest in supporting an operations research implemented by CERRHUD to improve maternal health and more specifically postpartum and family planning care (as a follow-up of the Continuum of maternal health / Covid SSR projects during the previous multi-year programme).

' - As part of this, the ambition of Enabel is to reduce neonatal and maternal mortality (2019-2023) for Enabel embraces IPC as a tool to reducing the burden by healthcare-associated infections. In this multi-year programme, the AMR surveillance network in Benin will be extended to hospitals and health zones supported by Enabel (Dassa, Bembèrèkè).

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin
Indicator title :	OC1 - AMR surveillance network established
Indicator description :	LRM-specific indicator. Qualitative indicator. Scale used: 1 - initiated (referral hospitals are selected and being trained); 2 - medium implemented (referral hospitals are starting up AMR surveillance activities); 3 - fully operational (referral hospitals are producing quality-assured AMR surveillance data that is shared on yearly meetings and with WHO GLASS national focal point) Source of verification: AMR newsletter
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin
Indicator title :	OC2 - Percentage (%) of students that scored "satisfied" or "very satisfied" about the quality and relevance of study programme/module (disaggregated by gender)

Indicator description :	Joint indicator. Baseline value is currently at 0 because new courses need to be developed. Total percentage given will be the average of all the given course modules. 5 point Likert Scale : 1 - not satisfied at all; 2 - not satisfied; 3.- Neutral; 4 - Satisfied; 5 - Very satisfied; Source of verification: Post-training satisfaction evaluation of participants
Baseline :	0
Target Year 3 – 31/12/2024 :	65% (50% f)
Target Year 5 – 31/12/2026 :	65% (50% f)

Formulation of outcome or result :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin
Indicator title :	OC3 - Number of articles published in international peer reviewed journals (through the support of the programme)
Indicator description :	Joint indicator for both partners. Absolute number. Cummulative over years. Source of verification: Pubmed, Science Direct
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	7

Formulation of outcome or result :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin
Indicator title :	OC4 - Uptake/influence of ITM-supported research in public policies and strategies
Indicator description :	CERRHUD-specific indicator Qualitative indicator Scale used: 1 - knowledge has been disseminated; 2 - there have been some first exchanges with policymakers after dissemination; 3 - we are actively working with policy makers on translating our findings to policy; 4 - new knowledge has been translated into policy; 5 - new knowledge is being implemented at scale through changed policies Source of verification: Meeting reports, adapted policies, audit reports
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin
Indicator title :	OC5 - Uptake/influence of ITM-supported research findings and knowledge gained through education provided by the programme to health staff
Indicator description :	LRM-specific indicator. Qualitative indicator. This indicator includes research as well as trainings, workshops and courses given. Scale used: 1 - knowledge has been disseminated; 2 - first exchanges and request for support from target groups after dissemination; 3 - first signs of uptake: smaller groups are applying our knowledge in practice; 4 - new knowledge is being applied in practice at scale Source of verification: Meeting reports, tranings, workshop, course reports.
Baseline :	0
Target Year 3 – 31/12/2024 :	1

Target Year 5 – 31/12/2026 :	3
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Formulation of outcome or result :	To increase the institutional capacity of LRM and CERRHUD allowing them to contribute to improved quality of health care services for (myco-)bacterial infections and sexual and reproductive health and related research in Benin
Indicator title :	OC6 - Proportion of funded versus submitted joint projects or proposals by network partners
Indicator description :	CERRHUD-specific indicator Proportion expressed through a percentage. Cummulative over years. Source of verification: Responses given by donor agencies
Baseline :	0
Target Year 3 – 31/12/2024 :	30%
Target Year 5 – 31/12/2026 :	40%

Formulation of outcome or result :	LR1 - AMR and TB surveillance networks are operational
Indicator title :	LR1.1 - Number of AMR surveillance data reported to the national WHO GLASS focal point
Indicator description :	Absolute number. Cumulative over the years. Ascending SoV: Email of communication
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	LR1 - AMR and TB surveillance networks are operational
Indicator title :	LR1.2 - Proportion of people who opened the AMR surveillance network newsletter
Indicator description :	The indicator is presented as a cumulative percentage over the programme. The proportion and disaggregation will be added in the narrative comment box. SoV: newsletter statistics
Baseline :	0
Target Year 3 – 31/12/2024 :	80%
Target Year 5 – 31/12/2026 :	80%

Formulation of outcome or result :	LR 1 - AMR and TB surveillance networks are operational
Indicator title :	LR1.3 - Number of annual reports of TB network data submitted to WHO
Indicator description :	Absolute number, cumulative over years, ascending. SoV: Annual report of National TB programme
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	LR2 - Increased capacity of bioinformatics at LRM
Indicator title :	LR2.1 - PhD in bioinformatics
Indicator description :	Qualitative indicator, indicating progress over the years. Scale used: 0 - Phd not yet initiated, 1 - progress below expectation, 2 - progress as expected, 3 - progress exceeds expectations, 4 - target achieved SoV: Feedback reports from PhD committee at ITM, PhD diploma
Baseline :	0
Target Year 3 – 31/12/2024 :	2

Target Year 5 - 31/12/2026 :	4
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Formulation of outcome or result :	LR3 - Organization of (blended) needs-based courses on AMR containment
Indicator title :	LR3 - Proportion of people who participated/completed the blended courses on AMR, disaggregated by gender
Indicator description :	The percentage reflects the proportion of participants/completed as a cumulative percentage over the programme. SoV: Workshop reports
Baseline :	0
Target Year 3 - 31/12/2024 :	80% (50% f)
Target Year 5 - 31/12/2026 :	80% (50% f)

Formulation of outcome or result :	LR4 - Operational research on AMR surveillance and TB molecular surveillance using the bioinformatics platform
Indicator title :	LR4.1 - Number of scientific publications on AMR
Indicator description :	Abstracts presented at national/international conferences. Absolute number, cumulative over years, ascending. SoV: Conference abstract book
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	LR4 - Operational research on AMR surveillance and TB molecular surveillance using the bioinformatics platform
Indicator title :	LR 4.1 - Number of scientific publications on TB molecular surveillance
Indicator description :	Abstracts presented at national/international conferences. Absolute number, cumulative over years, ascending. SoV: Conference abstract book
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	LR5 - Dissemination of representative and quality-assured AMR and TB surveillance data to the Ministry of Health
Indicator title :	LR5.1 - Number of reports of AMR surveillance results to Ministry of Health
Indicator description :	Number of reports to the MoH. Absolute numbers, cumulative over the years, ascending. SoV: Reports documented by the programme.
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	LR5 - Dissemination of representative and quality-assured AMR and TB surveillance data to the Ministry of Health
Indicator title :	LR 5.2 - Number of reports of molecular TB epidemiologic data to the National TB Program
Indicator description :	Number of reports to the National TB programme. Absolute numbers, cumulative over the years, ascending SoV: Reports documented by the programme.
Baseline :	0
Target Year 3 - 31/12/2024 :	1

Target Year 5 - 31/12/2026 :	1
Formulation of outcome or result :	LR6 - Joint TB-AMR surveillance meetings
Indicator title :	LR6.1 - Number of joint TB-AMR surveillance meetings
Indicator description :	Number of meetings. Absolute numbers, cumulative over the years, ascending. SoV: Meeting reports.
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	LR6 - Joint TB-AMR surveillance meetings
Indicator title :	LR6.2 - Number of joint biannual scientific conferences on AMR and TB
Indicator description :	Number of conferences. Absolute numbers, cumulative over the years, ascending SoV: Conference programme
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	LR6 - Joint TB-AMR surveillance meetings
Indicator title :	LR6.3 - e-platform to disseminate professional guidance resources about AMR containment in French
Indicator description :	Qualitative indicator. Scale used: 1 - e-platform developed and available online; 2 - e-platform shared with AMR surveillance partners; 3 - e-platform functional (at least 20 people visit the e-platform every year) SoV: e-platform statistics
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	CR1 - Optimized management, research and educational capacities of CERRHUD
Indicator title :	CR1.1 - Number of male employees against female employees who have completed short courses (technical and management) (ratio)
Indicator description :	Number of CERRHUD staff who completed (less than 3 months) short course (technical and management), disaggregated by gender (m:f). Absolute number, cumulative over the programme, ascending SoV: End courses certificates; training reports
Baseline :	0
Target Year 3 - 31/12/2024 :	3:1
Target Year 5 - 31/12/2026 :	5:4

Formulation of outcome or result :	CR1 - Optimized management, research and educational capacities of CERRHUD
Indicator title :	CR1.2 - 1 PhD in Epidemiology on track
Indicator description :	Qualitative indicator indicating progress over the programme years Scale used: 0 - Phd not yet initiated, 1 - progress below expectation, 2 - progress as expected, 3 - progress exceeds expectations, 4 - target achieved SoV: Feedback reports from PhD committee at ITM, PhD thesis document and diploma
Baseline :	0
Target Year 3 - 31/12/2024 :	2

Target Year 5 - 31/12/2026 :	4
Formulation of outcome or result :	CR1 - Optimized management, research and educational capacities of CERRHUD
Indicator title :	CR1.3 - Number of junior research staff who benefited from mentoring program for research, disaggregated by gender
Indicator description :	Number of junior research staff, who benefited from mentoring program during implemented research, disaggregated by gender (m:f). Absolute numbers, cumulative over the years, ascending SoV: Training reports
Baseline :	0
Target Year 3 - 31/12/2024 :	0:1
Target Year 5 - 31/12/2026 :	1:2

Formulation of outcome or result :	CR2 - Strengthened IT and logistics support
Indicator title :	CR2.1 - Number of automated activities processed under PERFECTO and other management computer applications
Indicator description :	Qualitative indicator - Scale: 1. Perfecto system in place for financial management; 2. Extended to logistic and HR management and staff trained; 3. an MS project is installed and staff trained; 4. Overall system is operational SoV: Reports, observation and survey
Baseline :	1
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	CR2 - Strengthened IT and logistics support
Indicator title :	CR2.2 - Operational Energy supply system
Indicator description :	Qualitative progress indicator Energy supply system = 0. Not operational 1. in place with 1 battery 2. In place with 2 batteries SoV: Institutional reports
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	CR2 - Strengthened IT and logistics support
Indicator title :	CR2.3 - Percentages of solved queries by IT desk
Indicator description :	Number of solved queries by IT desk / total number of requests , presented as a percentage. Cumulative over the programme, absolute number, ascending. SoV: Number of solved queries by IT desk / total number of requests
Baseline :	30%
Target Year 3 - 31/12/2024 :	50%
Target Year 5 - 31/12/2026 :	70%

Formulation of outcome or result :	CR3 - High quality and policy-relevant research is conducted
Indicator title :	CR3.1 - Number of research protocols implemented
Indicator description :	Cumulative number of protocols approved by Ethical Committees and implemented Absolute numbers, ascending. SoV: Ethical Committees approvals
Baseline :	0
Target Year 3 - 31/12/2024 :	2

Target Year 5 – 31/12/2026 :	3
Formulation of outcome or result :	CR3 - High quality and policy-relevant research is conducted
Indicator title :	C3.2 - Number of abstracts presented at (national & international) conferences
Indicator description :	Cumulative number of abstracts presented at national and international conferences SoV: Conference books
Baseline :	0
Target Year 3 – 31/12/2024 :	4
Target Year 5 – 31/12/2026 :	6

Formulation of outcome or result :	CR3 - High quality and policy-relevant research is conducted
Indicator title :	C3.3 - The mapping of the national research landscape is completed
Indicator description :	Qualitative indicator, indicating progress over time. Scale: 1. Is conducted ; 2. Results disseminated; 3. Has led to identify gaps in policy research and initiate new research SoV: Research project reports
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	CR4 - High quality educational programme is developed and implemented
Indicator title :	CR4.1 - Number of participants (F2F) trained yearly, disaggregated per gender, professional category
Indicator description :	Number of participants trained yearly (F2F research methods), disaggregated per gender (female:male), professional category Cumulative over years. SoV: Training reports
Baseline :	0
Target Year 3 – 31/12/2024 :	20 (10:10)
Target Year 5 – 31/12/2026 :	40 (20:20)

Formulation of outcome or result :	CR4 - High quality educational programme is developed and implemented
Indicator title :	CR4.2 - Number of participants (online) trained yearly, disaggregated per gender, professional category
Indicator description :	Number of participants trained yearly (online on quality), disaggregated per gender (female:male), professional category Cumulative over years. SoV: Moodle statistics, registration sheet statistics, training report
Baseline :	0
Target Year 3 – 31/12/2024 :	40 (12:28)
Target Year 5 – 31/12/2026 :	100 (30:70)

Formulation of outcome or result :	CR4 - High quality educational programme is developed and implemented
Indicator title :	CR4.3 - Proportion of participants who completed each online course, disaggregated by gender
Indicator description :	Number of participants who completed each online course / number of participants enrolled, disaggregated by gender. Presented as a percentage. Cumulative over years, ascending. SoV: Training statistics and reports
Baseline :	0
Target Year 3 – 31/12/2024 :	50 (30% f)

Target Year 5 – 31/12/2026 :	70 (30%f)
Formulation of outcome or result :	CR5 - CERRHUD's networks are strengthened and the use and dissemination of evidence and knowledge is optimized (GRIPP)
Indicator title :	CR5.1 - Procedure leading to CERRHUD affiliation to CAMES and effective recognition within the national and regional landscapes
Indicator description :	Qualitative indicator, indicating progress over time. Scale: 1. Application documents elaborated and requests made. 2. CERRHUD recognized public utility /scientific organization at national level; 3. CERRHUD is effectively affiliated to CAMES SoV: Affiliation document signed par CAMES; Notification letter and Official journal of public utility organization
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	CR5 - CERRHUD's networks are strengthened and the use and dissemination of evidence and knowledge is optimized (GRIPP)
Indicator title :	CR5.2 - Number of health staff that become, during the programme implementation, members of the national SRH research network
Indicator description :	Number of health staff that become, during the programme implementation, members of the national SRH research network; disaggregated by gender. Absolute number, ascending, cumulative over years.
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	CR5 - CERRHUD's networks are strengthened and the use and dissemination of evidence and knowledge is optimized (GRIPP)
Indicator title :	CR5.3 - Number of research outcomes (policy brief) disseminated to MoH and other stakeholders;
Indicator description :	Number of research outcomes (policy brief) disseminated to MoH and other stakeholders; cumulative over the years, expressed as an absolute number, ascending. SoV: Policy briefs
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Activities, targets groups and beneficiaries

Classification of activities

This programme will be composed of the following set of activities:

1. Platform development

- o An AMR surveillance network will be installed and coordinated by LRM, and bioinformatics capacity will be strengthened (1 PhD).

- o CERRHUD's management and research (1 PhD on SRH epidemiology) capacity will be strengthened, an institutional monitoring, evaluation, accountability and learning project will be implemented, the data system will be digitalized, and a digital training platform installed.

2. Education projects

- o LRM will develop needs-based courses (blended/face-to-face) on AMR containment, and an IPC skills lab will be installed.

- o CERRHUD will develop (blended) quality improvement and (operational) research courses.

3. Research projects

- o LRM will conduct operational research on AMR and molecular surveillance of TB isolates.

- o CERRHUD will explore the organization of SRH services in an urban context, map the national health research landscape, and conduct a policy analysis of the national AMR action plan.

o A joint research project (e.g. on nosocomial infections) will be identified.

4. GRIPP

o AMR surveillance data will be reported to the WHO GLASS national focal point, representative and quality-assured AMR and TB surveillance data will be disseminated to the Ministry of Health, and molecular surveillance of resistant TB isolates will contribute to improve TB regimens.

o CERRHUD will elaborate policy briefs, contribute to guidelines, provide intersectoral coordination and link civil society organisations and policy makers in informal settlements.

5. Networking and synergy

o TB and AMR surveillance networks will work synergistically; synergy with national actors (AMCES), Belgian ANGCs and Enabel will be optimised; and networking with African partners will be promoted.

o CERRHUD will initiate a national operational research network on (A)SRH, will affiliate itself to CAMES and will participate in a regional network on SRH and health policy.

Target group(s)

- Institutions: LRM, CNHU clinical bacteriology laboratory, CERRHUD

- Individuals: LRM scientists and support staff (10 men/13 women, sex ratio 0.76); CNHU clinical bacteriology laboratory (7 men/7 women, sex ratio 1.00); CERRHUD scientists and support staff (31 men /13 women, sex ratio 2.5).

Beneficiaries

- LRM: Patients attending LRM and the national TB laboratory network (~ 5551 men/5714 women), and the CNHU clinical bacteriology laboratory (~ 3153men/2838women) each year

- CERRHUD: Communities and individuals focusing on women and children, health workers, health planners within MoH technical departments, researchers (senior and junior); graduated trainers with deep interest in research; with at least 30% of females

- Whole Beninese population (11.8 million in 2019, 5.9 million women)

Title of the reference annex :	TOC_ITM_Benin_22-26
Title of the reference annex :	RA_ITM_Benin_22-26

Description of the Relevance

1. At the **international level**:

- o This programme contributes to SDG 3 “Ensure healthy lives and promote well-being for all at all ages”, SDG 5 “Achieve gender equality and empower all women and girls” and SDG 4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- o The AMR component of this programme is in line with the WHO Global AMR action plan’s strategic objectives 2 “Strengthen the knowledge and evidence base through surveillance and research”, 3 “Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures” and 4 “Optimize the use of antimicrobial medicines in human and animal health”, through the installation of a national AMR surveillance network and the organization of needs-based trainings for health staff.
- o The AMR component is also in line with the African Union Framework for AMR Control 2020-2025, which aims to improve surveillance of AMR and antimicrobial use and delay AMR emergence, limit its transmission and mitigate harm.

At the **national level**:

- o This programme relates to the strategic goals 2 (improved quality, availability and accessibility of health care services) and 5 (education and research) described in the joint strategic framework for Benin (February 2021).
- o It is in line with the national AMR action plan of Benin (2019) that is based on the WHO Global AMR action plan. This national AMR action plan is not yet operational, but through this programme, we will contribute to its strategic goals and conduct a policy analysis to investigate the barriers and possible solutions to facilitate its implementation.
- o A national IPC policy (*Politique nationale d'hygiène hospitalière*) was elaborated in 2006 but is not yet updated to the current WHO recommendations. Through our educational activities, we will contribute to the improvement of IPC at the facility level, with an expected beneficial effect at the national level in the medium-term.
- o It is in line with the National Sexual and Reproductive Health Policy (2018/2022) which aims at (i) Reducing the maternal mortality ratio from 347 to 250 deaths per 100,000 live births by 2022, and (ii) Reducing the neonatal mortality rate from 38 to 25 deaths per 1000 live births by 2022. Our programme will contribute to address several of the 13 priorities presented in the policy, among which the increase of qualified human resources, in particular midwives and paediatricians; the development of a network of 125 Emergency Obstetric and Neonatal Care health facilities and of essential new-born care and the management of neonatal complications; and family planning services to promote access to contraception for adolescent girls and young people.

2. This multi-year programme is based on the gap-analysis of the partner institutes (see TOC) and contributes to address needs at the national level in the domains of AMR, TB, SRH and health policy and systems research. The mapping of the National health research landscape will constitute a first step in addressing the needs for research at the national level.
3. Gender equity is embedded in our courses and capacity building activities involving and providing equitable opportunities to female and male staff. A gender and rights-based approach is also used for the conduct of research, with particular attention to participation and equity, no discrimination and accountability. In a setting where one gender is disproportionately represented, we will look for compensating mechanisms in selection of collaborators, training and course participants, within and beyond the institutes.
4. Regarding the protection of the environment in a laboratory setting, we focus on the correct processing of laboratory waste via autoclave (sterilization/decontamination) and incinerator platforms. Furthermore, we pay attention to the reduction of packaging and reusing of materials where possible and provided its correct reprocessing (cleaning, decontamination, sterilization). We also reduce the use of paper registers in the laboratory by digitalization of the laboratory data system where possible (e.g. implementation of laboratory information system).
5. Educational approaches and teaching methods include peer-learning and South-South interactions as lessons from previous programmes showed these were most effective. In addition, we focus on the “train the trainer” modality to build sustainable local capacity. Lastly, the creation of a digital training platform at CERRHUD, and the development of blended courses on AMR containment, will offer distance learning opportunities which are beneficial at a district, national and regional (West Africa) level.
6. LRM has been ITM’s partner in the previous multi-year programmes, which focused on building capacity and strengthening research skills for the laboratory diagnosis of TB. This institutional collaboration culminated towards the end of the 2017-2021 multi-year programme with LRM being appointed as a supranational reference laboratory for TB. In this new programme, we build on these gains. We will focus on the development of a bioinformatics platform at LRM (1 PhD) which will serve both TB and non-mycobacterial clinical bacteriology purposes (e.g. hospital outbreak investigations). In the 2017-2021 programme, we initiated the capacity strengthening of clinical bacteriology and AMR surveillance at CNHU. The continued strengthening of these activities as well as the creation of an AMR surveillance network, will be the focus in this new programme.

The past and ongoing collaborations between ITM and CERRHUD include European Union funded research projects (FEMHEALTH, ALERT) as well as an ethnographic research (Continuum of sexual and reproductive health in Benin) in the 2017-2021 programme. Moreover, CERRHUD was an active member of the Sexual and Reproductive Health Network during the 2012-2016 programme. These joint research projects have contributed to increase CERRHUDs research capacity which however still needs to be further strengthened. Our partnership in this new program will increase CERRHUDs capacity to conduct context- and needs-based research and will include the development of blended courses. This will allow CERRHUD to better position itself within the national and regional SRH and health policy and system research landscapes.

7. The present programme is strongly linked to the 6 strategic goals of the JSF HES4SD. The programme will fundamentally increase the capacities of individuals (**Strategic Goal (SG) 1**), by training 2 PhDs from LRM and CERRHUD. Through their increased individual capacity, they will have increased their potential to be change agents (**SG 2**), by applying their newly acquired knowledge and skills. In becoming change agents, individuals may assume responsibilities and act as committed global citizens. This allows them to have a positive impact on the performance of organizations they work in (be it in a research, policy or clinical context) as well as on their sector at large. Furthermore, this programme goes beyond individual capacity development and will strengthen the capacities of LRM and CERRHUD (**SG 3**) to allow them to become centres of excellence in bioinformatics for mycobacteria and AMR, and SRH and health policy and systems research, respectively. By strengthening the capacities of LRM and CERRHUD, they are enabled to operate as drivers of change (**SG4**) aiming at a meaningful impact in society. This will be realized via both the co-creation, transfer and application of relevant knowledge (**SG5**), and/or via the science-society interface (**SG6**). This can lead to effective uptake and/or a broader application of new knowledge, applications or services by relevant societal stakeholders (**SG5**), which will be facilitated through formal or informal networks and platforms as connecting hubs of knowledge, expertise and experience, in view of applied solutions and evidence-based policies and practices.

Description of Coherence

Internal coherence:

- The present programme aligns to the goals for International Collaboration and Development (ICD) of ITM’s Institutional Policy Plan (2020-2024). ITM’s overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of populations, thereby contributing to the reduction of poverty and inequity. ITM’s development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy.
- The AMR surveillance network will be modelled to the existing TB laboratory network. Both will be coordinated by LRM and will work in a synergistic way.
- The EDCTP funded SIMBLE project “Clinical diagnostic trial in Western Africa of a simplified blood culture system to

improve healthcare in low-resource settings” includes the installation of a central culture media production unit at LRM. This will be used to produce quality-assured culture media for the AMR surveillance network.

- Within the EU funded project ALERT, CERRHUD is conducting an analysis of quality improvement strategies of maternal and neonatal services; the multi-year programme will build on these results to adapt training materials and help identifying gaps and appropriate policy research.
- The mapping of the National health research landscape will help CERRHUD to better align their research within the national research context.
- CERRHUD will elaborate an institutional policy plan for the period 2023-2027 to which this programme will align.
- ITM adheres to the international standards when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health-related Research involving Humans (2016). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect of this last aspect, any research undertaken will adhere to GDPR principles.

External coherence:

- CERRHUD and LRM conduct research in line with the priorities and orientations of the Ministry of Health, follow ethical regulations in place and the approval of Ethical Committees in Benin and the collaborating research institutions.
- We will work complementary to the Belgian ANGCs MEMISA/LUMOS and MSV (cfr. Synergies). For AMR, we will provide laboratory and technical support, while the Belgian ANGCs will focus on the clinical counterpart to conduct IPC and antibiotic stewardship programmes and support the general hospital data management. For SRH, CERRHUD will support MEMISA in the field of neonatal health to provide a public health perspective to their projects. Increasing the equitable access to quality health services for women, new-borns and families is in line with Belgian Development (DGD and Enabel) mission and “She Decides” initiative and with MEMISA.
- Our programme is coherent with strategic goals 2 and 5 of the common strategic framework developed for Benin (cfr. Relevance).
- AMR surveillance is included in the programmes of DRC, Burkina Faso, Ethiopia, Peru and Cambodia; TB surveillance is included in the Rwanda programme. Within these countries, we work with harmonized procedures, equipment and consumables. Regional activities and South-South interactions are foreseen.
- Our programme aligns with the multi-country research project UrbanMat that will be conducted in Benin, Guinea and DRC. This project includes research training, networking and policy-support to develop a trans-disciplinary approach to comprehensively describe the provision and use of maternal health care and validate a dynamic model to support policymakers in designing a holistic plan to improve the provision, use, and quality of maternal care.

Within the Thematic JSF HES4SD, we share common strategic goals and strive for synergy and complementarity with other actors involved.

Description of Effectiveness

As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. From the evaluations of past interventions, e.g. **the one for the third framework agreement funded by DGD**, it becomes clear that together with our partners, we are capable to deliver and adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between LRM and ITM, the efficiency criterium never scored below B.

1. Here, we describe the realistic and achievable nature of the programme’s results:

LRM:

- **LR1. AMR and TB surveillance networks are operational**
 - The longstanding collaboration between LRM and ITM proved very functional. The functional national TB laboratory network will continue, and quality assurance will be improved within this programme.
 - The AMR surveillance network will be modelled onto the existing national TB laboratory network. As LRM has experience with the coordination of this network and has the required logistical means and contacts, LRM is well placed to set-up and coordinate the AMR surveillance network.
 - The needs-based trainings on AMR for the referral hospitals will be done in collaboration with Belgian ANGCs (cfr. Coherence and Synergies).
 - A culture media production facility, installed at LRM through the EDCTP funded “SIMBLE” project, will render the AMR surveillance network more cost-effective through on-site production and distribution.
- **LR2. Increased capacity of bioinformatics at LRM**
 - This result will be achieved by training a PhD candidate on bioinformatics. The candidate has an impressive portfolio

on project management and has done a pre-doc research stay at ITM during the 2017-2021 multi-year programme to prepare the PhD proposal, write manuscripts and start a basic course in bioinformatics. The analytical work of the PhD (sequencing of TB strains) was done in a separate research project, the PhD itself includes data analysis using the bioinformatics platform installed through this programme.

- From the mid-term evaluation of the 2017-2021 programme, we learned that investing in PhD candidates increases the effectiveness of our programmes, as they prove instrumental in the dissemination of results both within and beyond their institutes. As such, we ensure that the candidate's training will contribute to quality-assured clinical bacteriology and mycobacteriology.
- **LR3. Organization of blended needs-based courses on AMR containment**
 - We will develop blended courses based on the needs of the participating referral hospitals, with online modules complemented by face-to-face sessions. As LRM gained experience in developing online courses during the COVID-19 pandemic, this activity can build upon their expertise and the already existing platform.
 - Collaboration with complementary Belgian ANGCS (cfr. Coherence and Synergies) will facilitate the organization of the needs-based trainings on AMR containment and will help to extend the reach of these trainings. These activities have been described in the JSF for Benin and a MoU is being prepared between ITM and the respective ANGCS (MEMISA/LUMOS, MSV, CDEB) for their joint activities in Benin and DRC.
- **LR4. Operational research on AMR surveillance and TB molecular surveillance using the bioinformatics platform**
 - Operational research on AMR surveillance includes a cost-effectiveness study of the clinical bacteriology business model (cfr. Efficiency), in depth-analysis of resistance mechanisms of AMR isolates and a joint research project with CERRHUD (e.g. nosocomial infections).
 - The molecular surveillance of TB strains using the bioinformatics platform is part of the PhD (LR2).
- **LR5. Dissemination of representative and quality-assured AMR and TB surveillance data to the Ministry of Health**
 - For this result, CERRHUD will provide guidance and expertise to LRM on preparing reports for the MoH. LRM's expert role at the national level for both TB and AMR containment will help to ensure the uptake of this knowledge into policies and guidelines.
- **LR6. Joint TB-AMR national surveillance meetings**
 - As LRM is coordinating both the TB and AMR surveillance networks (in part covering the same hospitals), joint activities (e.g. meetings and conferences) can be organized, facilitating peer-learning and South-South interactions.

CERRHUD:

- **CR1. Optimized management, research and educational capacities**
 - CERRHUD will strengthen its management and logistics capacity throughout this multi-year programme by training staff and designing the institutional policy plan 2023-2027. Previous research collaborations and the DGD multi-year programme 2017-2021 have paved the way for these results to be achieved.
 - CERRHUD's research capacity will be enhanced through a PhD and continuous training and coaching of existing scientific staff. The working environment at CERRHUD will be improved to retain high-level staff. The motivation, engagement and enthusiasm of CERRHUD's director and staff will facilitate the achievement of results. Participative research projects will ensure longer term and more sustainable policy and health systems changes.
- **CR2. Strengthened IT and logistics support**
 - In the context of an increased number of staff and the development of research and training activities, incl. online communication with research partners, the upgrading and enhanced security of CERRHUD's computer installations have been initiated but need to be enhanced. In addition to acquiring hardware, software and computer equipment, CERRHUD plans to carry out a step-by-step digitalization plan. In the first half of the multi-year programme's implementation, CERRHUD plans to optimize the IT system for day-to-day management activities and training provision; then IT security, development and deployment of IT applications, tools and methods as well as CERRHUD's IT infrastructure and energy autonomy will be addressed; finally, the data system will be managed in accordance with GDPR.
- **CR3. High quality and policy-relevant research is conducted**
 - CERRHUD has increased its capacity to conduct research over the years. The long-standing research collaboration with ITM will continue and build on research skills acquired through completed and ongoing European Union funded research projects (FEMHEALTH and ALERT, respectively) and the multi-year programme 2017-2021 funded study on "Continuum of sexual and reproductive health in Benin".
 - To ensure high quality and policy relevant research, CERRHUD will further engage in participatory research. This will create the preconditions for stakeholders' involvement in the research and mapping of the national health research

landscape.

◦ **CR4. High quality educational programme is developed and implemented**

- Through various studies and interactions within the Beninese health system, CERRHUD has been able to get a better understanding of the training needs, particularly on SRH, for political decision-makers, managers at all levels of the health pyramid, and public and private health care providers. CERRHUD can contribute to meeting these needs through blended (e-learning and face-to-face) training. Throughout this programme, training courses (on quality improvement on SRH, literature review and knowledge synthesis) will be developed with the support of ITM (previous experience in SRH and research methods online courses in Guinea), and the expertise that has been built at LRM in developing online courses and setting up the training platform (Moodle). Regional research network including with Guinea can also facilitate training course development and Moodle platform management.

◦ **CR5. CERRHUD's networks are strengthened, and the use and dissemination of evidence and knowledge is optimized**

- Through the set-up of the national network on SRH operational research and participation in a regional network on SRH/health policy, CERRHUD will progressively increase its recognition as a public utility organization, obtain its affiliation to CAMES and its integration into the Regional academic bodies. Interactions with major stakeholders through ongoing scientific support in maternal and neonatal deaths review, in the field of adolescents and SRH, and through intersectoral coordination and linkage between civil society organisation and policy makers will facilitate the development of policy briefs and contribution to guidelines.

2. Within this programme, we will focus on the short-term changes that are within our sphere of control (cfr. TOC visual). To achieve these changes, we foresee activities that are under our direct control and for which we have the required expertise, resources and tools. If this is not the case, we have looked for synergies with other Belgian development actors to achieve these short-term changes. The medium-term changes to which our short-term changes will lead, lie within our sphere of influence. We will contribute to these changes through our proposed activities, but we have no full control over them and depend on others and possibly require more resources to achieve them. The long-term change to which our programme wants to contribute, lies within our sphere of interest. We have a strong desire to achieve this final goal but have no direct influence on it.
3. Baseline information is mainly collected through document review at the level of LRM and CERRHUD, as the partners are also the target groups of the results. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression. At the level of ITM, it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore, we included a mandatory indicator in all country programmes on this aspect.
4. The expected results of the programme consider vulnerable populations such as women, children, HIV positive persons, poor people, etc. We will work with representative private non-for-profit, confessional and community-owned as well as public hospitals, distributed over different regions (urban/rural) in Benin. As an example of the efforts made to "Leave no one behind", Prof. Dissou Affolabi managed to obtain a lower price for blood cultures (25% of the original price) for patients not covered by a health insurance through advocacy at the CNHU management, thereby ensuring access of poor populations to these life-saving diagnostics.
5. The thematic JSF HES4SD identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Collective learning processes, synergy and complementarity with a variety of actors (3) will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Comments on description of effectiveness

Submitted by DGEO-MaartenY on Wed, 10/27/2021 - 16:37

Risk analysis 1

"Not enough skilled staff to implement health policies" is indicated as an extreme risk. Proposed treatment is "training of multiple staff, close supervision, giving regular feedback, development of career plans. Application of decent work conditions". Will this be sufficient according to the ITM? Is this treatment based on past experience or another context?

Submitted by ITG-IMT on Tue, 11/02/2021 - 15:48 in reply to risk analysis 1 by dgeo-maarteny

Response on risk lack of staff

At ITM, we believe working in a holistic manner on training, career planning and decent work conditions is sufficient to limit the risk of staff leaving the institution and the project. By providing training of multiple staff on the same topic, we mitigate the risk of not having anyone left to conduct necessary activities. By working on career planning and decent work conditions, we support the creation of a working environment apt to keep staff on board, and increase loyalty to their employer, hence not only increasing sustainability of the project itself, but also within the institute. [The approach “train all staff at the same topic” has been successfully applied in our ITM FA4 projects – in particular offering training of clinical bacteriology to a mixed audience of clinicians, laboratory staff and nursing teams involved. This approach is also recommended by the WHO Strengthening Laboratory Management Toward Accreditation \(SLMTA\) toolkit \(i.e. “Meet the Clinician” sessions\).](#)

Submitted by DGEO-MaartenY on Wed, 10/27/2021 - 16:38

Risk analysis 2

It is a detail, but out of curiosity: under “Timing”, what exactly is the difference between “continuous” and “2022-2026”?

Submitted by ITG-IMT on Tue, 11/02/2021 - 15:49

Response on “Timing”; - continuous vs. 2022-2026

Thanks for pointing this out. There is no difference in fact, the difference in wording was by accident. We suggest to harmonize the time period to “2022-2026” for all risks.

Description of Efficiency

1. Justification of the budget:

As mentioned in the budget explanation, most of the budget will be spent at the partners’ side where the programme’s activities will take place. A big part of the local budget is dedicated to operating costs (including local research activities) and human resources as these are indispensable for the achievement of the results. At CERRHUD, some budget is foreseen at the start of the programme to make the necessary investments onto which other activities will be built. Apart from this, budget is reserved for travels to ensure the follow-up of the TB and AMR surveillance sites, SRH research, and to allow for national and regional networking. At ITM, next to salaries, most of the budget is foreseen for PhD grants and participation in short courses, as this is part of the capacity strengthening provided to the partner institutes.

2. Justification of the programme in terms of allocation of resources:

- The activities presented in this multi-year programme include the development of a cost-efficient and affordable business model for clinical bacteriology to increase its attractiveness to the hospital management. Cost-effectiveness will be improved by two approaches: (i) on-site production and distribution of bacterial culture media at affordable cost and price settings and (ii) economy-of-scale, i.e. increase of volume by reducing the current (very high) cost charged to the patient, allowing for batch-work, efficiency of tools and consumables (less expired products) and pooled procurement. This business model will serve as an example for other hospitals of the AMR surveillance network.
- Consumables for the AMR surveillance will as much as possible be locally bought, but in case of stock ruptures of critical consumables, a budget is foreseen at ITM to be able to purchase and send consumables to Benin to avoid interruption of activities due stock-ruptures.
- Financial reports, research results and training reports will be prepared as planned by the programme. The experience of previous collaboration projects with ITM will help to respect the deadlines of the programme.
- Part of the budget is allocated for the training of a PhD student on bioinformatics (LRM) and on SRH epidemiology (CERRHUD). This will fill a current knowledge gap at the partner institutes and will strengthen their capacity to perform molecular surveillance of TB strains, do in-depth research on resistance mechanisms and hospital outbreak investigations using molecular tools, and conduct research on health policy systems research and SRH. Even though PhDs are rather costly as such, previous evaluations (see mid-term evaluation 2017-2021) has pointed out their multiplier effect, in terms of spreading knowledge within their organizations. As such, they are not only effective and efficient for individual, but in one go for institutional capacity building thereby ensuring a sustainable impact at the long run.
- Trainings and workshops will be organized using the knowledge and expertise available at a regional level (e.g. through peer-learning and South-South interactions) and will also involve local partners/ANGCs and ITM, therefore no high costs for external experts are required. In addition, more attention will be given to e-learning and blended learning courses, reducing costs for per diems and facilitators.
- ITM does not work with technical assistants in the partner country. Instead, we opt to offer technical assistance and programme management from a distance, with regular exchange visits, hence reducing personnel costs.
- We use harmonized procedures, equipment, materials and consumables for AMR surveillance activities (Ombelet 2018), thereby standardizing our activities over different countries, and making it possible to receive discounts on certain

equipment and products.

Description of the expected Impact

Our programme aims to contribute to the long-term goal “Health services delivered to and used by the Beninese population are responsive and of high quality”. With this programme, we want to capacitate LRM to become an important player in the AMR containment strategy in the country, by contributing to the national action plan for AMR containment, generating AMR surveillance data and building capacity at the district level for AMR containment (including IPC and antibiotic stewardship). This will have an important impact on the affected population, by reducing morbidity and mortality due to AMR and hospital-acquired infections. In addition, we want to consolidate LRM’s function as a supranational reference centre for TB and build their capacity in bioinformatics allowing them to become a centre of excellence in the country.

Over the years, through increased research and training activities, CERRHUD has been involved more regularly with key institutions at the national level be it Ministry of Health and international organisations such as UNFPA and WHO. This will facilitate not only the implementation of the programme but also the translation of research results into policy and guidelines that will have a long-term impact on our target population of adolescents, women, neonates and on the Beninese society at large. Our activities will not be limited to Benin but we will aim to involve regional stakeholders to share knowledge and experiences and to translate obtained knowledge into regional policies and practices.

As mentioned under other sections, working towards our long-term goal of improved health will not only positively impact the physical well-being of the population, it will also indirectly contribute to the alleviation of poverty by decreasing health spending. This in turn has a positive impact on the household budget, which can be redirected to education, nutrition etc. thereby contributing to the general wellbeing of the Beninese population.

Description of Sustainability

1. Programme viability

As mentioned before, for most of the programme our target group and partners coincide. Therefore technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups completely control the intervention. Together with ITM, they co-implement the project. To ensure appropriation of the outcome by our partners, they have been strongly engaged in the writing of this proposal and will remain the key responsible party to its execution.

The financial sustainability of the programme is ensured by different mechanisms. A cost-effective business model for clinical bacteriology will be developed; harmonized procedures, equipment and products will be used for the AMR surveillance activities; local production of culture media will influence the diagnostics market by pooling demand and offer resulting in a decrease in prices. Moreover, additional research funding was obtained by the partners because of the strong basis laid by the previous multi-year programmes (e.g. EDCTP-funded DIAMA and SIMBLE studies for LRM and the European Union ALERT for CERRHUD) (cfr. Partnership strategy).

2. Capacity strengthening

The partners’ capacity will be mainly strengthened through the training of 2 PhDs. The domains of their PhD constitute a current knowledge gap at the partners (bioinformatics for LRM and SRH epidemiology for CERRHUD). In addition, platform development at the partner level (e.g. set-up of an AMR surveillance network, strengthening management capacity at CERRHUD and digitalization) will enable future projects to be built upon these platforms.

Educational activities organized within this programme will aim to strengthen capacity and skills at the district, national and regional (West Africa) level. By training a large number of people, sustainability will be ensured even when staff retention is difficult.

3. Disengagement/empowerment strategy

ITMs partnership trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programmes and taking it up a notch with each new cooperation. By taking into account the needs assessment, we ensure buy-in from both ITM, LRM and CERRHUD and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim is to reach the phase out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds.

4. Multiplier stakeholders

- By training health staff at the district level, their new knowledge will trickle down within the health institutes they work in, thereby multiplying the effect of our actions. By using the “train the trainer” principle, they will be able to capacitate their colleagues and peers.
- The clinical bacteriology laboratories participating in the AMR surveillance network will on the long run be able to offer support, quality assurance and extended testing to the laboratories in their health zones, thereby contributing to quality-assured clinical bacteriology in the country.
- PhDs will strengthen the institutional knowledge as they will pass on their knowledge to other staff members and master students involved in the research projects.
- A communication officer at CERRHUD will disseminate information in an appropriate manner for various target groups.

Description of the Partnership Strategy

1. Involvement of the partners in the programme development:

- ITM has involved its partners in the development/validation of the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HE4SD) process through the general council in which ITM's partners are represented and where the thematic JSF process was discussed.
- The multi-year programme development was based on the priorities and needs defined by the partners. ITM has involved its partners through informal meetings between the ITM and partner promoters, a joint partner meeting (06/05/2021), a kick-off meeting for the five-year programme Benin proposal (18/05/2021), a workshop on the TOC (28/05/2021), a field mission of Unit of Tropical Bacteriology of ITM to LRM and CNHU with a visit to CERRHUD (22-29/05/2021), regular follow-up and feedback meetings during the development of this multi-year programme.

2. This programme involves all 3 departments of ITM (clinical sciences, biomedical sciences and public health) each with their own expertise and capabilities, in order to match the needs of the 2 partner institutes. Both partner institutes have a long-standing partnership with ITM (cfr. Relevance).

- LRM has acquired a lot of expertise in TB diagnostics and related research over the years and is currently recognized as a supranational reference laboratory for TB. LRM coordinates the national TB laboratory network currently consisting of 91 laboratories, and is involved in externally funded studies and international consortia (e.g. EDCTP funded DIAMA project to evaluate new diagnostics for drug-resistant TB (<https://publications.edctp.org/international-partnerships-against-infectious-diseases/diama>) and the SIMBLE diagnostic trial which started mid-2021). With its experience and expertise, and through its dedicated and competent team, LRM is correctly placed to consolidate its supranational reference functions for TB and to contribute to the national AMR action plan by setting-up a country-wide AMR surveillance network modelled to the existing TB laboratory network.
- Over the years, CERRHUD has built research expertise through fruitful research collaboration with ITM (2017-2021 multi-year programme) and other international partners through European Union and Belgian Cooperation funded projects (FEMHEALTH (<https://cordis.europa.eu/project/id/261449/reporting/it>) and ALERT (<https://ki.se/en/gph/the-alert-intervention-research-project>)). In addition, CERRHUD has been able to get new funded projects (UNFPA). CERRHUD is well placed within the national research landscape to take up a larger role in research on SRH and health policy systems research in Benin. In addition, its role at the regional (West Africa) level is growing, as it is a leading partner in international research programmes.

3. As mentioned above (cfr. Sustainability), ITM uses a partnership trajectory approach which aims to strengthen technical sustainability by reinforcing partner capacities step by step. The partnership trajectory starts with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim is to reach the phase-out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds. The level of the partnership is assessed at the beginning of this new cooperation, through a self-assessment tool which helps to identify capacity gaps.

Mutual reinforcement is a corner stone of ITMs partnership strategies. Where our previous programme was subtitled 'Switching the Poles', indicating our work should become ever more South driven, we now go beyond and reach for 'Connecting the Dots', meaning we start from a perspective of mutual knowledge and capacities, connecting the dots between ITM and partner research. Below we give examples of how we put this vision into practice, responding to the concern 'More explanation could be given on how ITM intends to capitalise on shared experience and expertise of the partner in the design of its own policies/strategies, in the roll-out of projects in other countries or in one of its global programmes'.

- Regarding AMR surveillance LRM and ITM reinforce each other in the following ways:

- We capitalize on the national and supranational networking capacity for tuberculosis in Benin (initiated and managed by LRM). We will pilot this kind of networking in other outcomes of the multi-year programmes as well, e.g. for the AMR surveillance activities in Burkina Faso where a result (R5) is included on networking and synergy.
- We planned the pilot of a French-language version of the ITM short course on AMR containment and install a skills lab for

Infection Prevention and Control training. These will be driven by a multidisciplinary team of Benin experts including an infection control expert and a qualified IPC nurse. We are considering to organize these training also on a regional level (French-speaking West- and Central Africa e.g. including Guinea, DRC, Burkina Faso) with engagement by our partners from these countries.

- The newsletter for the AMR surveillance network in Benin can be shared with other countries where AMR surveillance projects are rolled out, including but not limited to French-speaking countries.

- Researchers from ITM are engaged in various outcomes of the ITM programme. This facilitates the sharing of lessons among countries. For instance, regarding research on adolescents health, lessons learnt from Benin will be shared with other partners within the current multi-year programme e.g. with Guinea, but also with other ITM partners and projects e.g. Enabel Adolescents SRH services in Senegal as well.

In pre-COVID times ITM also organised Joint Partner Meetings on a yearly basis, where exchange between partners on specific topics was encouraged.

Description of Synergies

Synergies have been identified with Belgian ANGCs that are active in Benin. We are currently in the process of formalizing these synergies in a Memorandum of Understanding with MEMISA/LUMOS, MSV and CDEB for complementary activities in Benin and DRC, whereby the responsibilities of each partner will be identified both for AMR and SRH activities:

- For AMR, we will collaborate with these actors to strengthen the capacities on AMR containment of the district referral hospitals and to install an IPC skills lab (provided additional funding is available). We will mainly provide laboratory strengthening and support, while the Belgian ANGCs will focus more on the clinical counterpart required for conducting IPC and antibiotic stewardship programmes as well as on support to general hospital data management. Tools and activities of synergy will include sharing of procedures and support documents, joint training workshops (on-site and at ITM), and operational research.
- In the field of SRH, the common topic of interest with MEMISA is related to the reduction of neonatal mortality. CERRHUD will support MEMISA to carry out more in-depth situational analyses to better identify priorities and solutions and to better capitalise on the lessons learned in MEMISA zones of intervention from a public health perspective. In addition, potential synergies with the ENABEL She Decides initiative which works in the field of SRH rights and emergency obstetric and neonatal care in Benin will be explored.

We will work in synergy with other actors that will report AMR data to the WHO GLASS national focal point. The role of the national focal point is to combine all AMR data from the different sources within the country, aggregate and report the data to WHO GLASS on a yearly basis.

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g. synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme.

Description of how individual or collective recommendations and lessons are to be taken into account

In this section, we highlight some lessons learned from the previous and ongoing multi-year programmes which we took into account when writing the current proposal.

It was noted that training multiple people at once helped to avoid knowledge drain due to high turnover of staff. Involving a mixed audience (e.g. nursing staff, clinicians and cleaning staff in IPC courses), using the “train the trainer” principle and a contextualized approach (e.g. visit to a real-life hospital, using an IPC skills lab) increased the effectiveness and long-term benefits of the trainings. South-South interactions and peer learning also had beneficial and sustainable effects. Finally, the importance of organizing regional courses for French-speaking countries was acknowledged as the level of English of local health staff is often insufficient. For these reasons, the educational activities foreseen in this programme will be aimed at a broad target audience, making sure to include people with different backgrounds but also multiple people with the same function to serve as back-ups. In addition, South-South interactions at a national and regional (West Africa) level will be encouraged whereby sharing of experiences and peer-to-peer learning will be key. In addition, the “train the trainer” principle will be used to ensure that local/regional experts are available to give trainings. Finally, regional conferences and workshops on AMR containment will be organized in French.

A second lesson was the importance of digitalization for the improvement of service delivery as well as for learning platforms.

Result reporting of TB diagnostics via SMS to the clinician and the patient increased the turn-around-time of the result, facilitated the reporting procedure and decreased the amount of paperwork. Online supervision allowed for the continuation of the supervision of the TB laboratory network from a distance during the COVID-19 pandemic, but it highlighted the importance to provide internet credit to the laboratories. Using a blended learning approach (partly online, partly face-to-face) as well as fully online courses helped to continue education during the pandemic. For this programme, we will install a digital training platform at CERRHUD and develop blended courses on AMR and quality improvement. We propose to reserve a dedicated budget line for a stable internet connection for short-course participants.

An external evaluation from the previous multi-year programme highlighted some important points for improvement which we took into account when writing this programme proposal: (i) specifically include knowledge translation from research into policy and practice as a mandatory requirement and an outcome indicator to allow for monitoring and evaluation, (ii) include outcome-based (not only output-based) indicators and make them gender-sensitive, (iii) South-South interactions were not always successful (iv) promote collaboration between South partners and several ITM departments, and (v) promote e-learning. The programme has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue and learning pathways. As recommended in the report of the approval dialogue, we particular attention to the valorisation of knowledge. Through its focus on "Getting Research Into Policy and Practice (GRIPP)" (in all components of the ITM programme 2022-2026) ITM will strive to maximize this aspect in its programme and will also establish the preconditions to learn more about the best possible strategies to achieve this (a.o. through indicator development, and as main topic of the mid-term evaluation of the ITM programme 2022-2026). Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

More collective lessons have been provided in a new annex 'Responses December'.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
FACTSHEET_PARTNER_ITM_Benin_22-26-LRM	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Benin_22-26_LRM.pdf
FACTSHEET_PARTNER_ITM_Benin_22-26-CERRHUD	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Benin_22-26_CERRHUD.pdf
RA_ITM_Benin_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Benin_22-26.pdf
COLLABORATION_AGREEMENT_ITM_MEMISA_Benin_22-26	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/COLLABORATION_AGREEMENT_ITM_MEMISA_Benin_22-26.pdf
FrameCollaborationBTC-ITG ALLsigned_20161007	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FrameCollaborationBTC-ITG%20ALLsigned_20161007_2.pdf
FACTSHEET_COLLABORATION_ITM_Benin_22-26_Memisa	Fact sheet per collaboration	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_COLLABORATION_ITM_Benin_22-26_Memisa.pdf
TOC_ITM_Benin_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Benin_22-26_2.pdf
RESPONSES_DECEMBER_ITM_BENIN	Other	https://fundhub.openaid.be/sites/default/files/2022-03/RESPONSES_DECEMBER_ITM_BENIN.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The total budget of 1.764.216,15€ for this programme is divided as follows: 1.009.663,99€ (57,23%) for the local partners, 552.919,01€ (31,34%) for ITM and 201.633,15€ (11,43%) for LOC@ITM.

The local budget comprises 585.020 (57,94%) for LRM and 424.643,99€ (42,06%) for CERRHUD.

- At LRM, the majority of the budget (387.620,00€) will be spent on operating costs (excluding 201.633,15€ of budget located at ITM for consumables to be shipped to LRM) to support the TB and AMR surveillance activities. This also includes the development and organization of blended courses and face-to-face workshops and joint TB-AMR surveillance meetings and scientific conferences. In addition, 17,09% (100.000,00€) will be used for travels and 16,65% (97.400,00€) to top-up local salaries. These costs are equally divided over the 5 years, with a small increase in operating costs when the scientific conferences are planned.

- At CERRHUD, the majority of the budget (48.92%, 207.745,50€) will be spent on local salaries, while 34.70% (147.348,30€) will be spent on operating costs and 16.38% (69.550,19€) on investments. The investments will be made during the first year and will include vehicles and ICT materials. The salaries and operating costs are equally divided over the 5 years.

22,21% of the total budget (391.794,07€, 70,86% of ITM budget excluding LOC@ITM) is dedicated to ITM staff to assure scientific support to the implementation of all programme activities (which is the equivalent of technical assistance provided by cooperants in other development cooperation projects). This amount covers only a fraction of the real time ITM staff dedicates to the programme. In addition, 16,16% of the ITM budget (89.375,00€) is spent on grants for the participation in short courses and for the support of predoctoral candidates competing for a sandwich PhD. Finally, 5,99% (45.000€) of the ITM budget is reserved for international travels to visit the partners, and 3.56% (26.749,94€) for operating costs, e.g. to cover bank costs and for processing bacterial isolates at ITM for quality control purposes.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym CERRHUD

Full name Centre de Recherche en Reproduction Humaine et en Démographie

Budget available

2022	2023	2024	2025	2026	TOTAL
134445.51	68969.27	73984.25	74883.70	72361.26	424643.99

Acronym LRM

Full name Laboratoire de Référence des Mycobactéries

Budget available

2022	2023	2024	2025	2026	TOTAL
103000	125510	106750	121760	128000	585020

List of cooperative partnerships for the outcome**Budget available**

2022	2023	2024	2025	2026	TOTAL
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Comments on budgetary information

Submitted by DGEO-MaartenY on Wed, 10/27/2021 - 16:38

LOC@ITM

Could you please explain [LOC@ITM](#) in some more detail? What exactly does this comprise?

Submitted by DGEO-MaartenY on Wed, 10/27/2021 - 16:42

Budget increase

The budget of the current program corresponds to a 49% increase compared to the previous program. What explains these increased costs? Are they mostly due to the support to CERRHUD or are there other reasons behind this increase?

Submitted by ITG-IMT on Tue, 11/02/2021 - 15:51 in reply to budget increase by dgeo-maarteny

Explanation budget increase

The increase in total budget for the current programme is due to the addition of a second local partner and the inclusion of a PhD scholarship in the ITM budget. By increasing the total budget, we were able to maintain the same local budget for LRM (which is required to conduct the programme activities), while lowering the ITM budget per unit.

- The budget for the previous programme was 1.295.600,71€ in total, which included only 1 local partner (LRM). The local budget was 513.171,13€, the ITM budget was 782.429,58€ (for 2 activities: TB and AMR).

The budget for the current programme is 1.941.900€, which includes 2 local partners (LRM and CERRHUD). The local budget includes 585.020€ for LRM and 424.643,99€ for CERRHUD. The ITM budget is 751.544,01€ but includes 3 activities: TB, AMR and health policy and systems research. In addition, a [LOC@ITM](#) budget is foreseen (see above) to provide the necessary consumables and materials for the extension of the AMR network.

Submitted by ITG-IMT on Thu, 10/28/2021 - 12:03

Explanation Loc@ITM

[Loc@ITM](#) is a budget line on which ITM books all purchases (investments and consumables) by ITM, but shipped to and belonging to the local partner.

Not all our partners are able to make purchases in their own country due to unavailability of items or lengthy bureaucratic procedures.

Where possible ITM always strives to makes its purchases locally. It is only when quality, cost, time and availability issues arise that ITM takes over and purchases and sends items to the partner intervenes to increase time and cost efficiency. Since the expenditure is made on ITM budget, it is, from an accounting point of view, an ITM expenditure. However the expenditure is done entirely for the local partner, it is not a purchase for ITM.

Make Rwandan institutes leaders in infectious disease prevention, diagnosis and control

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Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Make Rwandan institutes leaders in efficient and sustainable infectious disease prevention, diagnosis and control within the African Great Lakes region.		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-13-RW		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Rwanda		
Sector :	12250 - Health - Infectious disease control	Budget share :	42%
Sector :	12262 - Health - Malaria control	Budget share :	18%
Sector :	12263 - Health - Tuberculosis control	Budget share :	40%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Rwanda national level

Lat/Long :	-1.970579, 30.104429
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Outcome summary

Description of the outcome

Through our 5-year Rwanda programme we contribute to sustainable control and reduced burden or elimination of infectious diseases, incl. those that disproportionately affect poor and vulnerable populations. Our interventions focus on facilitating affordable, accessible, high-quality diagnostic services for all.

The programme encompasses the 'leave no one behind' principle and contributes to the Health-, Education- and Equity-related SDG3 'Ensure healthy lives and promote well-being for all at all ages'.

Therefore, we need appropriate, evidence-based clinical case management, and strong capacity for surveillance and prevention of communicable diseases. Two Rwandese partners (RBC and UR/CHUK) and ITM will work together to strengthen the scientific capacity that enables Rwandan scientists to analyse high-quality diagnostics- and surveillance data, so that our partners reach excellence in public health research with a societal impact benefitting the country's populations, and beyond. We will enable RBC and UR/CHUK to become sustainable drivers of change in research, surveillance, control and elimination of tuberculosis, malaria, neglected tropical diseases, and antimicrobial resistance. At the tertiary hospital (CHUK), we develop scalable antimicrobial stewardship strategies that, after roll-out to district hospitals, will contribute to the containment of AMR.

Therefore, the programme supports molecular platforms development at RBC, as well as synergies and networking activities to promote south-south collaboration on diagnosis and molecular surveillance of infectious diseases, and training of technical and health staff, MSc and PhD students, clinicians and veterinarians to be trained. Furthermore, the programme wants robust and sustained connections with healthcare authorities to be in place, to translate research findings into policy and practice. Lastly the programme aims to elaborate a road map to establish an African hub for mRNA vaccine development.

Wording of the outcome

We enable RBC and UR/CHUK, as sustainable drivers of change in infectious diseases and antimicrobial research, to create optimized diagnosis, molecular surveillance and control or elimination of infectious diseases; to implement antimicrobial stewardship strategies and develop a platform for local vaccine production and regulatory oversight, and to inform policy for improved health equality in Rwanda.

Target groups

We target RBC, to strengthen (research) capacity for improved diagnosis and molecular surveillance of infectious diseases and AMR; and UR/CHUK, to strengthen the (research) capacity for antimicrobial stewardship and the control of neglected tropical diseases .

Our target groups on an individual level are staff, MsC and PhD level students at RBC and UR/CHUK, together with health centre staff based where policy and strategy are implemented, as well as patients and vulnerable populations.

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	1
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climate Change - Mitigation :	0
7. Climate Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	0
10. HIV / AIDS :	0
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	Yes
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

Our programme includes activities that link to Agriculture and Food Security through the OneHealth approach and control of neglected infectious diseases, but the outcome of our programme is not aligned to the key objectives described in this strategy paper.

Therefore, we indicated our position as "No alignment".

Education

Our programme includes activities that link to the Education sector, but the outcome of our programme is not aligned to the key objectives described in this strategy paper.

Even though we focus on lifelong learning of technical, scientific and health care staff, this is not linked to the priorities of focus, being primary, secondary and vocational education.

Therefore, we indicated our position as “No alignment”.

Children’s rights

Our programme aims to improve access to quality health services (diagnosis of infectious diseases, surveillance, NTDs control, antimicrobial stewardship) in an all-inclusive manner, leaving no one behind. Especially for malaria, pregnant women and children aged <5 years are at higher risk of (severe) malaria; they will be targeted specifically in our efforts for improved malaria control.

Development education

In our programme, we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the national disease control programs and the Ministry of Health, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own. In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

In our programme, we pay attention to the separation of medical from non-medical waste and the correct processing of laboratory waste via autoclave and incinerator platforms. The risk-based ISO 15189 approach, a standard quality norm in use at RBC, includes risk assessment and mitigation for environmental pollution by biomedical and chemical laboratory waste. The programme will obey regulations on minimal plastic wrapping when importing goods, as set by the Rwanda Environmental Management Authority (REMA) aiming to promote and ensure the protection of the environment.

Gender

Gender equity is embedded in our courses and capacity building activities that involve and provide equitable opportunities to female and male staff. A gender and rights-based approach is also used for the conduct of research, with particular attention to participation and equity, no discrimination and accountability. In a setting where one gender is disproportionately represented, we will look for compensating mechanisms in selection of collaborators, admission and training of course participants, within and beyond the institutes. Specifically, we identified a very strong female student who is completing the ITM Masters in Tropical Medicine and will initiate PhD studies on malaria molecular surveillance.

Especially for malaria, pregnant women are at higher risk of severe malaria; they will be targeted specifically in our efforts for improved malaria control.

Migration

Our programme includes activities that link to Migration by contributing to improved cross-border diagnosis and control of infectious diseases and thus also ensuring access to basic (health) facilities for refugees, with a focus on TB diagnosis in Eastern DR Congo, an instable region with high numbers of refugees and frequent (temporary) migration. However, the outcome of our programme is not aligned to the key objectives described in this strategy paper.

Therefore, we indicated our position as “No alignment”.

Digitalization - Digital for Development D4D

Our programme will generate quality-assured data on diagnosis, (molecular) surveillance and control of infectious diseases, as well as AMR/AMS. In our approach digitalisation of data recording and analysis is key, and an important factor for our results and outcome. Data provide the basis for almost any development and humanitarian intervention, and is the basis of sound science. They allow for objectively describing the situation or the problem that one will address. Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. Data is also needed to keep track of a country’s progress towards the SDGs. (DGD strategy paper D4D).

Detailed information from molecular diagnostic or surveillance platforms generates big data to be analyzed and aggregated, so they can contribute to meaningful results and interpretations, to serve final objectives of improved health. Hence, digitalisation and big data handling are key in our programme, for which we foresee specific budget and seek synergy with Enabel or build on efforts from other actors already involved, such as Savics (Belgium) for the TB component.

Blended courses including online modules and custom-tailored training initiatives will be developed by both UR/CHUK and ITM. The online sections will enable an inclusive approach, reaching a higher number of participants throughout the country, and

creating potential to re-access recorded training material. The COVID-19 period has increased the use of digitalization at national and international levels (South-South and North-South). This is likely to shape the next few years and increase the use of online courses.

Health

Our programme aims to contribute to sustainable control and reduced burden or elimination of infectious diseases, including those that disproportionately affect poor and vulnerable populations. The interventions concentrate on facilitating affordable, geographically accessible, high-quality diagnostic services for all in Rwanda, encompassing the 'leave no one behind' principle and contributing to the Health-, Education- and Equity-related SDG3 'Ensure healthy lives and promote well-being for all at all ages' in particular. This requires appropriate, evidence-based clinical case management, and building capacity for surveillance and prevention of communicable diseases. Our activities are designed to strengthen the scientific capacity that enables Rwandan scientists to analyze high-quality diagnostics- and surveillance data, towards excellence in public health research with societal impact that greatly benefits the country's populations, and beyond.

Private sector

The outcome of our programme does not relate to the key objectives defined in this strategy paper. Therefore, we indicated our position as "Not applicable".

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

A human rights-based approach is based on respect for equity, participation, transparency, accountability and non-discrimination, and focuses specifically on the most vulnerable populations. In this programme we adopt a human rights-based approach, by contributing to ensuring the right to health for all, specifically to make the highest standards of evidence-based care for infectious diseases accessible to all Rwandans. We work at the level of the 'duty bearers' (public actors, health staff - providers and managers -, professional associations, civil society organisations, etc.) by increasing their capacity to help them to fulfil their obligations (as outlined in Article 25 of the Universal Declaration of Human rights) properly and increase accountability. The programme also aims to contribute to empower different groups of 'rights holders' (the final beneficiaries, including women and vulnerable groups such adolescents, the civil society organisations and communities around them) to know, claim and fully exercise their right to quality health care.

Decent and sustainable work

Our programme aims to increase individual capacity among health and research staff that will potentially allow them to conduct their work in a more satisfactory manner and equip them to secure a decent job and progress in their career trajectory. Improved working conditions, creating an enabling environment, ensuring good human resource management within the partner institutions will be addressed in our programme and will in the medium- to long-term lead to retention of qualified staff both at RBC, UR and CHUK. In addition, we work on laboratory safety measures, hence ensuring a safe working environment, amongst others through framework agreements with a South African company for servicing biosafety containment at laboratory and equipment level, complemented by in-house trained engineers at the partner organizations.

Gender

Gender equality is embedded in our programme. The programme will be managed by a gender-balanced team of experts across the institutes (ITM, RBC, CHUK/ UR) and the different components. In terms of education and capacity building, activities will involve and provide equitable opportunities to female and male staff. The activities will increase opportunities for women on the labour market, and for women in science in particular.

A gender and rights-based approach will be used for the conduct of research, with particular attention to participation and equity (including gender equity/equality), no discrimination and accountability. We will ensure both men and women do field research, do interpretation of results, and in case of surveys, ensure both men and women interviewers participate.

In education and research settings of the partners or components of this programme, where one gender is disproportionately represented, we will look for compensating mechanisms in selection of collaborators and students, within and beyond the institutes.

Lastly, the indicators in our results matrix are gender disaggregated, so we ensure to monitor our commitment on gender balanced approaches.

Environment

The potential impact of the programme on the environment includes the production of biohazard and chemical waste, the use of single-use consumables and paper forms in laboratory/hospital settings and international travels.

The potential impact of climate change on the programme includes a rise in temperature and rainfall which will likely aggravate the challenges already faced by the agriculture and forestry sectors. This impact will be mainly indirect through its impact on the socio-economic situation and development of the country, and hence on the people’s risk to infectious diseases. In certain rural areas, extended periods of draughts can be expected. The Rwanda Environmental Management Authority (REMA) amongst others expands the Rwandan forests as a measures to prevent climate change and cope with its impacts (<https://www.rema.gov.rw/index.php?id=10>).

Actions for neutralizing and managing the potentially negative effects include the correct processing of laboratory waste via autoclave and incinerator platforms. The risk-based ISO 15189 approach, a standard quality norm in use in the NRL-TB, includes risk assessment and mitigation for environmental pollution by biomedical and chemical laboratory waste.

Furthermore, the programme needs to obey regulations on minimal plastic wrapping when importing goods, as set by REMA aiming to promote and ensure the protection of the environment. Hence, we pay attention to the reduction of packaging and reusing of materials where possible and provided its correct reprocessing (cleaning, decontamination, sterilization). We aim to reduce the use of paper registers by digitalization of the laboratory/hospital data systems where possible (e.g. through a laboratory information system). Regarding international travel, we will adhere to ITM’s travel policy (currently in a pilot phase) to minimize flying and to pay compensations for carbon-neutralize travel.

Common outcome within a common programme

N/A

Common outcome between distinct programmes

N/A

Areas of complementarity and synergy with the intervention of ENABEL

Enabel, the Belgian development agency, has a long-standing partnership and relationship of trust with the Rwanda Biomedical Center (RBC), exemplified by the deployment of two Enabel staff members embedded at the RBC structure as strategic advisors to the Director General. Enabel thus serves the health sector and also supports local institutions as technical advisor. The agency will assist in the development and rollout of ICT solutions to support the programmes goals, especially regarding AMS, automated reporting of AMR surveillance data, and in the development of new and innovative ways using ICT in education components (‘eTwinning’). In addition, Rwanda/ Enabel / ITM have already started developing initiatives regarding the manufacturing of vaccines and health products.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OUTCOME: Sustainable control or elimination of infectious disease in Rwanda (e.g. RR-TB, malaria, NTDs, zoonoses)
Indicator title :	OC1: Total number of PhD scholarship holders graduated, disaggregated by gender
Indicator description :	Total number of PhD scholarship holders graduated, disaggregated by gender
Baseline :	0
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	1

Formulation of outcome or result :	OUTCOME: Sustainable control or elimination of infectious disease in Rwanda (e.g. RR-TB, malaria, NTDs, zoonoses)
Indicator title :	OC2: Recognition of NRL-TB as Supranational Reference Laboratory by the WHO is on track
Indicator description :	By 'on track' we mean that as baseline they they have the status of Candidate SRL By Y3 they should have received at least 1 training at SRL Cotnou By Y5, recognition should be achieved Value 0: not yet started ; 1 : progress below expectation ; 2 : progress as expected ; 3 : progress beyond expectation ; 4: goals achieved
Baseline :	0
Target Year 3 - 31/12/2024 :	2

Target Year 5 – 31/12/2026 :	4
Formulation of outcome or result :	OUTCOME: Sustainable control or elimination of infectious disease in Rwanda (e.g. RR-TB, malaria, NTDs, zoonoses)
Indicator title :	OC3: Uptake/influence of research supported by the programme in public policies for TB
Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies
Baseline :	2
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	OUTCOME: Sustainable control or elimination of infectious disease in Rwanda (e.g. RR-TB, malaria, NTDs, zoonoses)
Indicator title :	OC4: Uptake/influence of research supported by the programme in public policies for malaria
Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies
Baseline :	1
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	OUTCOME: Sustainable control or elimination of infectious disease in Rwanda (e.g. RR-TB, malaria, NTDs, zoonoses)
Indicator title :	OC5: Uptake/influence of research supported by the programme in public policies for AMS
Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	R1. Optimized (cross-border) diagnosis of TB and other infectious diseases
Indicator title :	R1.1. % of TB samples diagnosed by NRL-TB Kigali, for patients who don't have access to accurate diagnosis in the Eastern Congo region
Indicator description :	% of TB samples diagnosed by NRL-TB Kigali, for patients who don't have access to accurate diagnosis in the Eastern Congo region. The indicator is a percentage, cumulative over the years.
Baseline :	0
Target Year 3 – 31/12/2024 :	100%
Target Year 5 – 31/12/2026 :	100%

Formulation of outcome or result :	R1: Optimized (cross-border) diagnosis of TB and other infectious diseases
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Indicator title :	R1.2. % of eligible samples of M. tuberculosis cultured and meeting international standards by Eastern DRC lab in Bukavu through support from NRL-TB Kigali
Indicator description :	Indicator is expressed as a percentage. Cummulative over the years. It is about % of TB samples arriving at the Bukavu lab for (RR-)TB diagnosis
Baseline :	0
Target Year 3 - 31/12/2024 :	50%
Target Year 5 - 31/12/2026 :	80%

Formulation of outcome or result :	R2: Strengthened capacity of diagnostic laboratories, interpretation of diagnostic results, bioinformatics and statistics analysis, and principles of surveillance and control through transfer of technology/knowledge
Indicator title :	Number of yearly reports on infectious diseases notifications and AMR
Indicator description :	Based on results from the different activities, RBC will report relevant information to the national disease control programs in a regular manner. This will be done though written reports and when possible though meetings. The indicator is presented as an absolute number, cummulative over time.
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R2: Strengthened capacity of diagnostic laboratories, interpretation of diagnostic results, bioinformatics and statistics analysis, and principles of surveillance and control through transfer of technology/knowledge
Indicator title :	R2.3. Number of scientific publications in peer reviewed journals
Indicator description :	By scientific publication we refer to manuscripts published in peer-reviewed journals and that make a contribution to evaluate the impact of current interventions
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R2: Strengthened capacity of diagnostic laboratories, interpretation of diagnostic results, bioinformatics and statistics analysis, and principles of surveillance and control through transfer of technology/knowledge
Indicator title :	R2.2 Number of technical staff and Master students trained, disaggregated by gender and course type
Indicator description :	Staff, students UR/RBC receive training in aspects related to infectious diseases diagnosis and molecular surveillance. This includes performing molecular techniques, seminars, courses, formal training as Masters... Numbers are absolute and cummulative over the years.
Baseline :	0 (0:0) Technical staff ; 0 (0:0) MsC
Target Year 3 - 31/12/2024 :	2 (1:1) Technical staff ; 2 (1:1) MsC
Target Year 5 - 31/12/2026 :	4 (2:2) Technical staff ; 4 (2:2) MsC

Formulation of outcome or result :	R2: Strengthened capacity of diagnostic laboratories, interpretation of diagnostic results, bioinformatics and statistics analysis, and principles of surveillance and control through transfer of technology/knowledge
Indicator title :	R2.4 Number of participants to exchanges on NTDs, zoonoses and OneHealth, dissegreated by gender and exchange type
Indicator description :	Expressed in absolute numbers, cummulative over the years Exchanges may take the form of online and F2F meetings, workshops, courses, ... ;
Baseline :	0

Target Year 3 – 31/12/2024 :	6
Target Year 5 – 31/12/2026 :	10

Formulation of outcome or result :	R3: Implementation of quality antimicrobial stewardship assured
Indicator title :	R3.1. Number of technical staff and Master students trained, disaggregated by gender and course type
Indicator description :	Staff, students, UR/CHUK/ receive training in aspects related to clinical medicine and microbiology, antimicrobial resistance and stewardship. This includes on the spot training, seminars, courses, formal training as Masters...; indicator is an absolute number, cumulative over the years, disaggregated by gender
Baseline :	0 Technical staff ; 0 MsC
Target Year 3 – 31/12/2024 :	1 Technical staff ; 2 (1:1) MsC
Target Year 5 – 31/12/2026 :	2 (1:1) Technical staff ; 3 (2:1) MsC

Formulation of outcome or result :	R3: Implementation of quality antimicrobial stewardship assured
Indicator title :	Number of peer reviewed scientific publications on AMR
Indicator description :	By scientific publication we refer to manuscripts published in peer-reviewed journals and that make a contribution to evaluate the impact of current interventions
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	2

Formulation of outcome or result :	R4: Platform in place for stakeholder engagement and exchange on vaccine development in Rwanda
Indicator title :	Number of participants to exchanges on vaccine development in Rwanda
Indicator description :	Expressed as absolute value, cumulative over the years Exchanges may take the form of online and F2F meetings, workshops, courses,
Baseline :	0
Target Year 3 – 31/12/2024 :	6
Target Year 5 – 31/12/2026 :	15

Activities, targets groups and beneficiaries

Classification of activities

This programme will be composed of the following set of activities:

1. Platform development

o RBC will serve as a (supra-)national reference centre for (myco-)bacteriology and (neglected) parasitology with improved digitalized diagnostics platforms, a national AMR surveillance network will be installed, and bioinformatics capacity will be strengthened.

o RBC/CHUK's management and research capacity will be strengthened, while monitoring, evaluation, accountability and learning projects will be implemented, and a digitalized AMS solution will be integrated with the hospital information system.

2. Education projects

o CHUK/RBC will develop needs-based courses (blended/face-to-face) on AMS.

o CHUK/RBC will develop (blended) quality improvement and (operational) research courses.

o We foresee funding for 1 PhD on the malaria component, while exploring opportunities for additional MScs and PhDs in other components.

3. Research projects

o CHUK/RBC will conduct operational research on AMR and molecular surveillance of infectious diseases.

o Joint research projects with CHUK/UR and RBC in diagnosis and molecular surveillance of infectious diseases, and AMS will be identified for master/ PhD theses.

o Getting Research into Policy and Practice (GRIPP) National AMR surveillance data will be reported to WHO GLASS by RBC; CHUK will contribute to national antibiotic and AMS guidelines. Molecular surveillance of malaria and resistant TB isolates will contribute to improve TB and malaria management and control.

o RBC will elaborate policy briefs, contribute to guidelines, provide intersectoral coordination and link civil society organisations and policy makers in informal settlements.

4. Networking and synergy

- o Networking with African partners (SRLs Kampala, Cotonou, NTP DR Congo, international malaria molecular surveillance network) will be promoted.
- o Networking on an elaborated roadmap for vaccine technology

Target group(s)

- Organizations level: RBC (incl. disease control programs and NRLs), UR and CHUK and involved units at ITM
- Individual level: the project will target technical staff at the NRLs, scientists at RBC and UR, clinicians, medical students and health staff at CHUK/UR and peripheral hospitals, and veterinarians. We plan a 50/50 gender balance in all our activities (e.g. individual support for MSc, PhD and short-course students).

Beneficiaries

Nationwide, patients affected by (drug-resistant) infectious diseases such as TB, malaria, NTDs. Improved evidence-based control of infectious disease will be beneficial to the general population at high risk of infection. The project will also be beneficial to poor communities disproportionately affected by infectious disease (i.e. Leave no one behind). People and animals living at human-animal interface will benefit to expanded one health interventions.

Title of the reference annex :	TOC_ITM_Rwanda_22-26
Title of the reference annex :	RA_ITM_Rwanda_22-26

Comments on activities, targets groups and beneficiaries

Submitted by DGEO-DelphineDLV on Wed, 10/13/2021 - 10:45

Liste des abréviations

bonjour,

pourriez-vous svp fournir une liste d'abréviations.

merci

Submitted by ITG-IMT on Mon, 10/18/2021 - 12:32 in reply to liste des abréviations by dgeo-delphinedlv

Liste des abréviations

Abbr.	Description
AB	Antibiotic
ACDC	African Center for Disease Control
ACT	Artemisinin combination therapy
AG	Acute gastroenteritis
AMR	Anti-microbial resistance
AMS	Anti-microbial stewardship
AU	African Union
BSI	Blood stream infection
CHUK	Centre Hospitalier Universitaire de Kigali
CMHS	College of Medicine and Health Sciences
CNS	Central nervous system
DIAMA	EDCTP project "Culture free diagnosis of drug-resistant tuberculosis in Africa"
DRC	Democratic Republic of Congo
EDCTP	European & Developing Countries Clinical Trials Partnership
ENT	Ear-nose-throat
EPH	Elimination as public health problem
FA5	Framework agreement 5
GRIPP	Getting research into policy and practice
GLASS	Global Antimicrobial Resistance Surveillance System
ICT	Information and communication technology
ID	Infectious disease
IPC	Infection prevention control
JSF	Joint Strategic Framework
HAI	Hospital-acquired infection
HIV	Human immunodeficiency virus
HRP-2	Hrp2 gene associated with antimalarial resistance

HSSP	Health Sector Strategic Plan
K13	<i>kelch13</i> gene
MD	Medical doctor
MDA	Mass drug administration
MOE	Ministry of Economics
MOH	Ministry of Health
MOPDD	Malaria & Other Parasitic Diseases Division
mRNA	Messenger RNA
NMS	National Malaria Strategy
NTD	Neglected tropical disease
NTP	National TB program
PAVM	Partnerships for African Vaccine Manufacturing
PHCC	Primary health care center
PLHIV	Person living with HIV
RBC	Rwanda Biomedical Center
RDB	Rwanda Development Board
RMP	Rifampicin
RR	Rifampicin-resistant
RTI	Respiratory tract infection
SDG	Sustainable development goal
SRL	Supranational Reference Laboratory
SOFI	ITM research projects funding by the Flemish Ministry of Economy, Science and Innovation
SSTI	Skin and soft tissue infection
STI	Sexually transmitted infection
STH	Soil-transmitted helminths
TB	Tuberculosis
ToC	Theory of change
UR	University of Rwanda
UTI	Urinary tract infection
Vet	Veterinarian
VLIR	Flemish Interuniversity council
VPDP	Vaccine Preventable Disease Program
WHO	World Health Organisation
WI	Wound infection
Xpert	GeneXpert MTB/RIF

Description of tasks among associate ANGCs

N/A

Description of the Relevance

At the **international level**, this multi-year programme relates to the following policies and guidelines:

- This programme contributes to SDG 3 “Ensure healthy lives and promote well-being for all at all ages”, including SDG 3.3, to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases by 2030, and SDG 4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, by training health staff on the IPC core components and on the appropriate use of diagnostics and antimicrobial chemotherapy and by contributing to national guidelines.
- The core components of this multi-year programme are in line with the WHO Global AMR action plan’s strategic objectives 2 “Strengthen the knowledge and evidence base through surveillance and research”, 3 “Reduce the incidence of infection through effective sanitation, hygiene and infection prevention measures” and 4 “Optimize the use of antimicrobial medicines in human and animal health”, through the installation of a national surveillance networks for infectious diseases and AMR. It is also in line with the African Union Framework for AMR Control 2020-2025, which aims to improve surveillance of AMR and antimicrobial use and delay emergence, limit transmission and mitigate harm from AMR.

At the **national level**, this multi-year programme relates to the Rwandan MoH objective to ensure universal accessibility (geographical and financial) of equitable and affordable quality health services (preventative, curative, rehabilitative and promotional services) for all Rwandans, as described in the Health Sector Strategic Plan IV (2018 to 2024). This multi-year

programme is based on the contextual analysis of the partner institutes (see ToC section) and contributes to addressing Rwanda's needs at the national level in the domains of AMR, TB, malaria and NTDs control.

- **Gender** equity is embedded in our courses and capacity building activities that involve and provide equitable opportunities to female and male staff. A gender and rights-based approach is also used for the conduct of research, with particular attention to participation and equity, no discrimination and accountability. In a setting where one gender is disproportionately represented, we will look for compensating mechanisms in selection of collaborators, admission and training of course participants, within and beyond the institutes. Specifically, we identified a very strong female student who is completing the ITM Masters in Tropical Medicine and will initiate PhD studies on malaria molecular surveillance. Regarding the protection of the **environment** in a laboratory setting, we focus on the correct processing of laboratory waste via autoclave (sterilization/decontamination) and incinerator platforms. Furthermore, we pay attention to the reduction of packaging and reusing of materials, where possible, and provided its correct reprocessing (cleaning, decontamination, sterilization). We also reduce the use of paper registers in the laboratory by digitalization of the laboratory data system where possible.
- **Educational** approaches and teaching methods include peer learning and South-South interactions, such as NRL-TB staff receiving training in SRL-associated tasks in Cotonou, as lessons learned from previous programmes showed these were most effective. In addition, we will focus on the "train the trainer" modality to build sustainable local capacity. Lastly, the development of digital training platform and blended courses on AMR containment, will offer distance learning opportunities which are beneficial at a national and (Great Lakes) regional level.

ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration.

This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed.

In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer etc.) and on continued capacity building so partners acquire specific capacities, knowledge, and expertise. Over time this capacity will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as hub for a network. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice.

Indeed, the preparation for this new Rwanda- ITM collaboration started in 2019, with successful research on resistant tuberculosis by a shared PhD student (Dr. Ngabonziza). His Rwandan promotor, Dr. Mazarati) shared the RBC vision of ITM strengthening the capacity in Rwanda on public health research i.e., developing scientific ownership of analyzing and interpreting the wealth of high-quality surveillance data on communicable diseases generated by RBC. He emphasized the need for educational innovations, creating an environment for co-mentoring a new generation of Rwandan scientists co-mentored towards excellence, and increasing the evidence base for innovative disease control. A strong and innovative Rwandan Public Health Research Institute can serve as a regional centre of excellence. Similarly, the long-standing collaboration of ITM clinician scientists with CHUK colleagues will now be consolidated in a more sustainable long-term capacity strengthening approach.

Our programme contributes to the thematic "Joint strategic framework on higher education and science for sustainable development" through strategic goals SG1 "Increased individual capacity"/SG2 "Enabling individuals to act as change agents" by the training of PhDs from RBC and CHUK, SG3 "Increased capacity at higher education and science institution" by capacitating RBC and CHUK to becoming centres of excellence in their respective domains (AMR containment, teaching) and consolidating their expert role in other domains (TB), SG4 "Enabling higher education and science institutions to operate as drivers of change" by positioning RBC and CHUK as centres of expertise at the national and regional level and SG5 "Co-creation, transfer and application of relevant knowledge"/SG6 "Science-Society interface strengthened" through the translation of relevant research findings on TB, AMR and malaria/ NTDs into policies and practices.

More information about the transversal themes gender and environment can be found in annex 'Responses December'.

Description of Coherence

Internal coherence:

- The present program is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan ('20-'24). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on

the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP.

- Our engagement on the TB component is paramount for the NRL-TB laboratory to achieve the status of WHO-recognized Supranational Reference Laboratory as we complement actions of strengthening of technical and scientific skills of NRL-TB for them to gain this level of recognition.
- The AMS component will be initiated at CHUK and will be extended via the partners across Rwandan hospitals. The digitalization of the AMS component will be supported and scaled up by Enabel.
- The antimicrobial susceptibility data from CHUK and other hospitals will be reported to the national AMR surveillance network, coordinated by RBC. RBC will commence reporting AMR surveillance data to the Global Antimicrobial Resistance Surveillance System (GLASS).
- The AMR activities are coherent with international standards and criteria such as ISO 15189:2012, ISO 13485:2016, Good clinical laboratory practice (GCLP, WHO 2009), International Health Regulations (IHR 2005), Global Health Security Agenda (GHSA), European committee on antimicrobial susceptibility testing (EUCAST) and Clinical & laboratory standards institute (CLSI) performance standards for antimicrobial susceptibility testing.
- Data from molecular malaria surveillance will complement classic epidemiological data and inform policy makers and relevant stakeholders via established structures.
- Rwanda and ITM - in complementarity with Enabel - started developing initiatives regarding the manufacturing of vaccines and health products. We will complement these efforts by analysis of the health system and policy requirements for vaccine production and implementation, as well as the regulatory landscape required to make the program relevant and sustainable.

External coherence:

- Within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved.
- RBC, CHUK and UR conduct research in line with the priorities and orientations of the MoH, follow established ethical regulations and seek approval of Ethical Committees in Rwanda and of collaborating research institutions.
- AMR surveillance is included in the programmes of DRC, Burkina Faso, Benin, Ethiopia, Peru and Cambodia. TB surveillance is included in the Benin programme. The data from these various countries will complement each other in order to obtain a better view on global AMR surveillance.
- We initiated collaboration with Dr. Mazarati of the University of Global Health Equity (Medical School of the Harvard University in Rwanda) as technical advisor in both UR and RBC. Based on his comprehensive understanding of the health system in Rwanda, we anticipate valuable inputs to this project, particularly towards the goal of local manufacturing of vaccines.

Rwanda recently signed a partnership with the EU to help upgrade the country's laboratory capacity to help it attract investors that will manufacture Covid-19 vaccines. These funds will also be used to strengthen the Rwanda Foods and Drugs Authority, and to support the acquisition of laboratory equipment for a modern facility that will enable Rwanda to get WHO certification. In this proposed collaboration, ITMs Health Policy Unit and Experimental Immunology Unit will support the Rwandan policy, oversight, and technical know-how around mRNA vaccine production for the country and the region.

Description of Effectiveness

As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programmes. From the evaluations of past interventions, such as the one for the third framework agreement funded by DGD, it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on effective activity monitoring.

Below, we describe the realistic and achievable nature of this programme per concrete result we plan to achieve:

1. **Optimized (cross-border) diagnosis of TB and other infectious diseases**

- The national TB control programmes of Rwanda and DRC have expressed their willingness to provide and receive support to build capacity for improved TB diagnosis in Eastern DRC.

2. **Strengthened capacity of diagnostic laboratories, interpretation of diagnostic results, bioinformatics and statistics analysis, principles of surveillance through transfer of technology/knowledge to strengthen capacity**

- Optimized drug-susceptibility testing for new TB drugs is implemented at NRL-TB
 1. There is a longstanding and ongoing collaboration between the NRL-TB and ITM which proved very functional thus far, resulting in technology transfer of phenotypic and genotypic drug-susceptibility testing, as well as joint research projects (EDCTP and ITM research funding) over the past decade. This baseline expertise at NRL-TB

and past capacity building experience will facilitate the proposed transfer of technology and training activities.

2. Current NRL-TB activities operate under ISO15189 accreditation, whereby staff and the laboratory organisation have experience with implementation of new diagnostic technology in a quality-assured manner.

- Improved knowledge on diagnostic performance of Xpert Ultra/XDR, and other novel diagnostics for drug-resistant TB
 1. Through an ongoing agreement between the MoH and Savics (Belgium), it is foreseen to have nationwide Xpert devices connected at a central level by the end of 2021.
 2. ITM has a long-standing expertise in evaluating (rapid) diagnostic tools, including its implementation in low- and middle-resource countries, amongst others in collaboration with RBC Rwanda.

- Developed platform for malaria molecular surveillance at RBC.

In a first step, we will evaluate the needs and then transfer the technology together with staff capacitation that will include a PhD student candidate that is finalizing her Master thesis at the Malariology Unit at ITM. Training and capacitation of staff will be done with hands-on on pilot studies to evaluate current interventions.

- Increased capacity of bioinformatics at RBC

This result will be achieved by training a PhD candidate from RBC on bioinformatics. ITM has developed bioinformatic pipelines to analyse next generations sequencing data to serve malaria molecular surveillance. A PhD student will be trained in the analysis pipelines that will be then transferred to RBC and integrated in the reference laboratory for malaria. In addition, we aim to organize training that include staff/students from different research centers in the African region also developing platforms for molecular surveillance. The expertise can be expanded across different pathogens and thus multiply benefits in the control of infectious diseases.

- Fully functioning WHO-recognized Supranational Reference Laboratory for TB

The NRL-TB Kigali has been assigned the status of "candidate SRL" by WHO in 2020, with foreseen support from their current supervising laboratory, SRL Kampala. Complemented capacity building activities through this programme from SRL Cotonou and SRL Antwerp, with whom NRL-TB has existing scientific collaboration links, will increase the likelihood of success.

- Networking to explore synergism and potentials for collaboration on NTDs, zoonoses and OneHealth has been completed

The counterparts at ITM and UR had some on-line meetings in which both parties expressed with enthusiasm their willingness to participate in and contribute to this programme to fill the identified needs in Rwanda, which is a good start to establish formal collaborations.

3. Implementation of a quality antimicrobial stewardship (AMS) assured in Rwanda

1. AMS team installed at CHUK

The requirements for installation of a AMS team ((infectious disease (ID) physician, infection prevention control (IPC) professional, pharmacist, ICT professional, administrator) are all within our direct sphere of control. We have the expertise, resources, tools and importantly, the support from the CHUK administration to employ these assets in the highly prioritized development of a successful AMS programme. Digitalization of the AMS activities will be adapted to CHUK's ICT infrastructure. This hospital information system ('Open Clinic') is widely used in hospitals at district level in Rwanda, and aspects relating to scalability of the AMS programme to a national level will systematically be evaluated at all steps of development.

2. Technical staff, Master and PhD students are trained

High-quality educational aspects of the programme that ensure gender equity will be developed with the support of ITM, and integrated with existing and accredited courses (e.g., Hospital-based interventions to contain antibiotic resistance in low-resource settings (AIM) course) in Antwerp or on location. In addition, workshops will be organized by CHUK/UR and ITM in Rwanda, tailored to local needs. These stakeholders have the expertise and experience in teaching (sphere of control) to meet the training demands, and to adapt their programmes to innovative approaches (e.g., E-learning, structured case discussions). Reinforcing research capacity at CHUK/UR to generate high quality data on antimicrobial stewardship (AB susceptibility data, syndrome-based analysis, prescription patterns). At CHUK, medical specialists with advanced scientific training are part of the programme. In twinning projects with ITM, Rwandan scientists will be co-mentored towards excellence, and the evidence base for effective control of AMR will increase. Scientific publications will be written in support of individual and institutional development (sphere of control).

3. **Scaling up of hospital antibiotic guideline(s) and ASM initiative developed at CHUK to national level**(and peripheral hospitals). The publication of national AB guidelines lies in the sphere of control of our programme. The training of young physicians at CHUK and workshops for health professionals is likely to increase awareness and achieve the goals of medium and long-term changes of the ToC. For actual nationwide implementation of AMS, we will engage in strategic relationships with stakeholders at district level. Although the effort of scaling up will be supported by RBC/ NRL (and thus by MoH), this result is also dependent on external factors (e.g. allocation of national funds, health-economic development, etc.)

4. Validated tools and approaches for evidence based interventions are adopted by clinicians, veterinarians and health care workers

- During his DGD funded 'sandwich' PhD at ITM, Dr. Ngabonziza identified the problem of false-resistant results using the WHO recommended rapid diagnostic tools for diagnosis of RR-TB in a programmatic setting. These findings were promptly adopted by the National TB Program, under auspices of the Ministry of Health, leading to evidence-based changes to the diagnostic flowchart of (RR)TB in Rwanda⁷, a reassuring observation in light of our proposed activities and result.

5. Elaborated road map on mRNA vaccine development

- The recent recognition of Rwanda as potential vaccine development hub for the region led to the request to support the Vaccine Preventable Disease Programme at RBC by the ITM Unit on Health Policy. In that Unit, Dr. van de Pas has specific expertise on health systems aspects of Covid-19 vaccine development and strategies. The technical know-how will be supported by the Unit on Experimental Immunology, by Prof. Eva Bartok. This aspect of the proposed collaboration is explorative in nature, as visualized in Figures 1 and 2.

The development of a new vaccine hub takes time and human resource investment. Rwanda expressed interest and commitment to work on this component. Lessons can be learned from other African countries such as Senegal and South-Africa, where vaccine development hubs are being supported by the Belgian Development Cooperation. This type of work requires a flexible approach, as the field of vaccine development is currently in flux. Therefore this component will be regularly re-evaluated.

Within this five-year programme, we will focus on the short-term changes that are within our sphere of control (cfr. ToC visual). To achieve these changes, we foresee activities that are under our direct control and for which we have the required expertise, resources and tools. If this is not the case, we have looked for the synergies with Enabel or actors in the field, so that we can work in a complementary way to achieve these short-term changes. The medium-term changes to which our short-term changes will lead, lie within our sphere of influence. We will contribute to these changes through our proposed activities, but we have no full control over them and depend on others and possibly require more resources to achieve them. The long-term change to which our programme wants to contribute, lies within our sphere of interest. We have a strong desire to achieve this final goal but have no direct influence on it.

Baseline information is collected at the level of RBC and CHUK mainly, as the partners are also the target groups of the results. Baseline information is collected mainly through document review at their level. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

At the level of ITM it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore, we included a standard indicator on this aspect.

Some indicators are progress marker. Their use is a common approach to quantify qualitative indicators. The quantification of indicators is preferred as this facilitates reporting in IATI because qualitative indicators are better visualised in D-portal. As qualitative indicators are better suited to track progress on processes such as policy support, we opted for their use. A baseline value 2 in this case means that there have been some first exchanges with policy makers. Seeing the use of this type of indicators is a good practice in measuring progress along pathways of change, we would like to request to kindly revise the given score.

Description of Efficiency

ITM does not work with technical assistants in the partner country. Instead, we opt to offer technical assistance and programme management from a distance, with regular exchange visits, hence reducing personnel costs. Besides, only a limited part of the staff time of ITM staff is budgeted on the programme.

Trainings and workshops are organized using the knowledge and expertise available at a regional level (e.g. through peer learning and South-South interactions) and ITM, therefore no high costs for external experts are required. In addition, more attention will be given to e-learning and blended learning courses, reducing costs for per diems and facilitators.

Part of the budget is allocated for the training of a PhD student on bioinformatics (RBC) and at a later point potentially on other components of the programme (TB, AMS or NTDs). This will fill a current knowledge gap at the partner institutes and will strengthen their capacity to perform molecular surveillance of malaria (TB), do in-depth research on resistance mechanisms and conduct research on health policy systems research. Even though PhDs are rather costly, evaluations at ITM (mid-term '17-'21) have pointed out their multiplier effect, in terms of spreading knowledge within organizations. As such, they are not only effective and efficient for individual, but also for institutional capacity building thereby ensuring a sustainable impact in the long run.

Mobility is an important factor contributing to scientific capacity building. In this project, budget is allocated to staff exchange in all components. The PhD in the malaria component will be conducted in a "sandwich" format allowing the student to reside about 3 months per year in Belgium. The Belgian University fee allows for additional budget opportunities to travel for training, or participation in congresses or workshops. The PhD candidate has been identified based on her very successful Msc in Tropical

Medicine and will be co-supervised by Prof. Rosanas and the head of the malaria reference laboratory. Such a set up, with robust national surveillance data serving a PhD trajectory, was also the key for success of Dr Semuto's PhD defense earlier this year, who is now honorary senior lecturer at the University of Rwanda while continuing at the TB reference lab at RBC.

Wherever possible, we will share and implement harmonized procedures across ITM, RBC, CHUK and UR, thereby standardizing our activities, limiting staff time required to draft such procedures from scratch, and optimizing involved logistics.

We request 1 million for 5 years of intervention on TB, malaria, AMS, NTDs and vaccine development. This means for each component, we would roughly receive €40,000 per year. Of this €40,000, only €8,000 would go to the scientific support offered by ITM, since for each component, a person with specific scientific expertise is appointed to follow-up. This financial contribution to ITM staff will not cover all time invested in the partnership. Additional engagement in the programme will be covered by institutional funding. When broken down like this, it becomes apparent that the requested budget is rather limited.

Update March 2022: Regarding vaccine development and production, the public private partnership has become a reality now; Rwanda government, BioNtech and Pfizer are building the vaccine plant starting January 2021. A new vaccine center will be started, in which our partners and ITM will play a role from the beginning. ITM will further connect with Rwandese stakeholders, propose an outline of activities and budget to Enabel for ITM's contribution to Team Belgium for supporting manufacture and use of pharmaceutical products in Africa.

Description of the expected Impact

Our programme aims to contribute to the long-term goal of "Sustainable control or elimination of infectious diseases including (RR-)TB, malaria, NTDs and zoonosis, and emerging antibiotic resistance in Rwanda".

With this programme, we want to capacitate RBC to become an important player in improved diagnosis and molecular surveillance of infectious diseases, as well as drug-resistance monitoring, hence contributing to the infectious diseases control and AMR containment strategies in the country.

Paralleled with efforts on antimicrobial stewardship at the CHUK and subsequent roll-out towards peripheral hospitals, this will have an important impact on the affected population, by reducing morbidity and mortality due to AMR and infectious diseases more general. Ensuring an all-inclusive approach with optimized use of accessible and affordable diagnostics, the programme thus is in line with the countries SDG to "Ensure healthy lives and promote well-being for all at all ages" (leave no one behind).

Building RBC's capacity in bioinformatics can make them centres of excellence in the country, with potential to become a key player in the Great Lake region. We also strive for the establishment of the NRL-TB's function as a SRL for TB. Hence, our activities will not be limited to Rwanda but we will aim to involve regional stakeholders to share knowledge and experiences and to translate obtained knowledge into regional policies and practices.

As mentioned under other sections, working towards our long-term goal of improved health will not only positively impact the physical well-being of the population, it will also indirectly contribute to the alleviation of poverty by decreasing health spending. This in turn has a positive impact on the household budget, which can be redirected to education, nutrition etc. thereby contributing to the general wellbeing of the Rwandan population.

Description of Sustainability

ITM's partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programmes, and taking it up a notch with each new cooperation. By taking into account the needs assessment, we ensure buy-in from both ITM, RBC and CHUK and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim is to reach the phase out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds.

1. Programme viability

For most of the programme our target group and partners coincide. Therefore technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner. This also goes for social sustainability, since our target groups completely control the intervention. Together with ITM, they co-implement the ToC. To ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal and will remain the key responsible party to its execution.

The financial sustainability of the programme is ensured by different mechanisms. A cost-effective, comprehensive and attractive approach to AMS will be developed, based on the diagnostic routine of the CHUK and RBC laboratories and the implementation of digitalized antimicrobial prescription tools, AMR monitoring and regular feedback to key stakeholders, i.e. prescribers.

2. Capacity strengthening

The partners' capacity will be mainly strengthened through the training of master and PhD candidates. In addition, integration of teaching AMS principles in the medical curriculum, platform development at the partner level (e.g. national AMR network, and digitalization) will enable future projects to be built upon the project's gains.

3. Multiplier stakeholders

- By training of (future) health professionals, sustainability will be ensured by dispersal of new knowledge and attitudes within the health institutes they work in, thus multiplying the effect of our actions.
- By using the "train the trainer" principle, they will be able to capacitate their colleagues and peers

Responding to remarks on sustainability from DGD:

PhD students sign a retention contract with the institution before starting, to ensure that capacity gains are retained within the institution. From our '17-'21 mid-term evaluation in other country programmes, we learned that PhD students reinforce the capacity of their home institution. Also, in our ongoing collaboration with RBC, Claude Semuto Ngabonziza, successfully completed his PhD in 2020 through a DGD scholarship. He now has a post-doc position at RBC and UR, and is the promotor of the current Rwanda project proposal, ensuring strong institutional linkages.

The proposed biomedical PhD student in this project will be part of the malaria component. She was selected based on merit. Her PhD promotors have a strong track record of accompanying successful PhD students.

Mobility indeed is an important factor contributing to scientific capacity building. In this project, budget is allocated to staff exchange (from and to Rwanda) in all components, including medical staff.

Description of the Partnership Strategy

ITM was invited into formalizing a collaboration by Rwandese colleagues at RBC, initially represented by Dr. Mazarati, based on shared supervision of Dr. Jean Claude Semuto Ngabonziza's very successful PhD studies on resistant TB. In these studies, which he defended June 23, 2021, he valorized years of high quality data on TB patients, their diagnosis, and microbiological results. With full support of RBC, obtained results were shared with the NTP and MoH, and had direct impact on TB control in Rwanda and beyond. As 'agent of change', Dr. Ngabonziza stimulated additional Rwanda-ITM collaborations on malaria and AMR, also building on long existing strong links between ITM clinician scientists and CHUK. Hence, for the TB, malaria and AMR/AMS components, the collaboration is already firmly embedded in all institutions. The "binomes" on NTDs, zoonoses, and vaccinology are met with enthusiasm on all sides, yet are in an exploratory phase, to be fully developed during the FA5 programme. These partnerships are visualized in the ToC Figure 2, with mature collaborations shown in solid lines, and exploratory ones in dashed lines.

Dr. Leopold Bitunguhari from CHUK visited ITM in May 2021 to share his vision on the content and format of an optimal collaboration. The partnership on AMR was among several clinically relevant topics proposed by CHUK clinicians, and selected based on ITM expertise in this area.

The partnership with the NRL-malaria (see Figure 2: Malaria, Neglected Tropical Diseases and Other Parasitic Diseases Division of RBC) was recently initiated, building on the supervision by Prof. Anna Rosanas of biomedical scientist Arlette Umugwaneza in the ITM Masters in Tropical Medicine. Arlette will apply for a PhD scholarship in the context of this proposed collaboration.

Dr. Claude Ngabonziza acted like 'independent scientist' well before he formally defended his PhD thesis. He collaborates extensively with the NTP, a very productive partnership in which analysis high quality data translates to evidence based changes in practice. He designed future studies following up on his pertinent PhD findings, and together with ITM colleagues Prof. Rigouts and de Jong successfully proposed these for funding through the ITM internal funding mechanism. In these studies, he extended the collaborations beyond Rwandan borders, with TB scientists in Bukavu, Burundi, and Uganda. Dr. Ngabonziza visited ITM in January 2021 to prepare the key elements RBC would like to see included in the present proposal, complementing the scientific collaboration. The recent designation by WHO of the NRL-TB as candidate SRL is a great recognition of the NRL-TBs potential, yet also requires overcoming multiple gaps towards recognition as full SRL.

These preliminary ideas on both mature and exploratory collaborations were fleshed out at a joint 'Theory of Change' workshop conducted on May 31, 2021. The retained topics of collaboration are driven by Rwandese colleagues, and led to the ToC visualized in Figure 1. Beyond the topics already included beforehand, the head of the NTP, proposed to develop a TB vaccine, preferably using mRNA technology with manufacturing in Rwanda. Following further explorations, this ambitious TB vaccine plan was expanded to a wider capacity strengthening on health systems research, in support of the integration and oversight of an mRNA vaccine production hub in Rwanda for the region.

The proposed programme ITM-Rwanda thus builds on a strong foundation of partners who already collaborated, and has since evolved to solid institutional commitment. Even though the partnerships are built on personal contact and positive experiences, we have full buy-in from the management of both partner institutes, and our planned interventions are along the lines of their mission and vision.

The synergy with other projects, such as ITM SOFI, and the SRL network, enhances the sustainability beyond this intervention. Modeling after Dr. Claude Ngabonziza's PhD and role as 'agent of change' who energizes further research capacity as a post-doctoral scientist in Rwanda, we already identified a strong female PhD candidate who will analyze malaria surveillance data in support of evidence based malaria control, and will continue to look for additional strong candidates.

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council in which ITM's partners are represented and which discussed the thematic JSF process.

In order to continue the identification of potential capacity strengthening needs at the partner level, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

This project will accomplish mutual South/North (and vice versa) reinforcement, where Rwandese partners will benefit directly from technological and organisational transfer of knowledge to increase their diagnostic, treatment and scientific research capacities, while the Belgian partners will gain expertise in the diagnosis and treatment of tropical diseases and maintain their expertise in antimicrobial stewardship, which will serve the travel clinic at ITM and improvement of diagnostics and treatment of infectious diseases in general.

Description of Synergies

Enabel, the Belgian development agency, has a long-standing partnership and relationship of trust with the Rwanda Biomedical Center (RBC), exemplified by the deployment of two Enabel staff members embedded at the RBC structure as strategic advisors to the Director General. Enabel thus serves the health sector and also supports local institutions as technical advisor. The agency will assist in the development and rollout of ICT solutions to support the programme goals, especially regarding AMS, automated reporting of AMR surveillance data, and in the development of new and innovative ways using ICT in education components ('eTwinning'). In addition, Rwanda/ Enabel / ITM have already started developing initiatives regarding the manufacturing of vaccines and health products.

The Systems and Policy Unit of the Public Health department, who will be involved in the vaccine development component, is already involved in **Team Europe Initiative (TEI)** on Local Manufacturing of Vaccines and Health Products.

We anticipate collaboration with **Flemish Universities**. For the AMR and TB components we have already established close

relations with Prof. Emmanuel André at the Department of Microbiology and Immunology at KU Leuven, where also ITM Prof. Jan Jacobs has a part-time appointment. He has previously supported microbiological capacity strengthening in Kigali and coordinates similar efforts in Benin, aiming to further strengthen this south-south collaboration.

We also foresee collaboration with the **University of Global Health Equity**, a hinge of the Medical School of the Harvard University in Rwanda where Dr. Jean Baptiste Mazarati, nestor of the ITM-RBC collaboration, is part of the faculty. Dr. Jean Baptiste will be involved in this project as a technical advisor in both UR and RBC. Based on Dr. Jean Baptiste's comprehensive understanding of health system in Rwanda, we anticipate valuable inputs to reach our goals.

AMR surveillance is included in the **programmes of DRC, Burkina Faso, Benin, Ethiopia, Peru and Cambodia**. TB surveillance is included in the Benin programme. Within these countries, we work with harmonized procedures, equipment and products. Regional activities and South-South interactions will be pursued.

Furthermore, the current programme addresses the development of capacity on genomic surveillance using next generation sequencing platforms and bioinformatic analysis. The program will work on constructing networks with **other DGD country programs** with malaria molecular surveillance as part of their activities. This will be done online and in person through workshops, seminars and training, which aim is to foster communication and collaboration between partners facing similar challenges and that could benefit of sharing expertise and troubleshooting. In this terms, we aim to build programs that are not an island but that link, benefit, support and create alliances and synergies with existing networks. In this context, the program will connect to **existing programs and networks in Africa** that are aiming to increase surveillance and next generation sequencing capacity in Africa to respond to infectious diseases: **DELGEME** Developing Excellence in Leadership and Genetics Training for Malaria Elimination in Sub-Saharan Africa; **PDNA** Pathogens genomic Diversity Network Africa; **APGN** African Pathogen Genome Network (funded by CDC); **WANETAM**, West Africa network of excellence for clinical trials in TB, AIDS, and Malaria. With these links we create opportunities for RBC to develop into a molecular surveillance hub in Africa.

Regarding synergy-commitments in the **JSF HES4SD**, complementary to the other synergies identified, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme.

Description of how individual or collective recommendations and lessons are to be taken into account

Given that the Rwanda programme is new within the ITM-DGD framework, no lessons can be drawn from ongoing activities. Hence this five-year programme will have a learning phase, especially for those components that are at the dawn of collaboration, such as malaria, NTDs/zoonoses and vaccine development. Nevertheless, in this section, we highlight some lessons learned from other previous and ongoing ITM programmes, as well as experiences from prior (scientific) collaborations with Rwandan partners, which we took into account when writing the current programme proposal.

First, it was noted that in AMS and diagnostics capacity building efforts, training multiple people at once helped to avoid knowledge drain due to high turnover of staff. In addition, involving a mixed audience (e.g. nursing staff, hygiene experts, clinicians and cleaning staff), using the "train the trainer" principle (involving training staff that were previously trained) and using a contextualized approach (e.g. visit to a real-life hospital) increased the effectiveness and long-term benefits of the trainings. South-South interactions and peer learning also had a beneficial and sustainable effect. For these reasons, the capacity strengthening, and educational activities foreseen in this programme will be aimed at a broad target audience, making sure to include people with different backgrounds but also multiple people with the same function in order to serve as a back-up. In addition, South-South interactions at a national and regional (Great Lake region; interaction with SRLs Kampala and Cotonou for TB) level will be encouraged (e.g. through meetings, workshops, study visits, etc.) whereby sharing of experiences and peer-to-peer learning will be key. In addition, the "train the trainer" principle will be used to ensure that local/regional experts are available to give trainings/workshops.

Also, having a proactive focal person for each of the components and activities is crucial to be successful in achieving set goals. An important lesson learnt by a colleague clinician who recently faced a failing AMS activity at CHUK, was that no focal person in the clinical microbiology laboratory was identified to complement his clinical skills and expertise. Therefore, we ensured to identify these key persons already for the TB, malaria and AMR/AMS components during the preparation phase of this programme, partially building on existing collaborations, while for the NTDS/zoonoses/OneHealth and vaccine components, interest of collaboration has been expressed with identification of lead persons, but identification of such proactive focal persons needs to be completed in the 1-2 years explorative phase of the programme.

Our recent scientific collaboration on TB with RBC (EDCTP-DIAMA; ITM-SOFI-INNOR3TB) highlighted the importance of having a dedicated PhD student to advance operational research and build capacity in generating and analyzing quality data (DGD-funded PhD Jean Claude Semuto Ngabonziza June 2021). Therefore, we already have budget allocated to allow for a bright

student to pursue a PhD within the malaria component, and we foresee to identify more students for a PhD track on TB and AMR/AMS.

The programme has integrated the recommendations and lessons identified through the JSF, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue, this programme gives particular attention to the valorisation of knowledge. Through its focus on “Getting Research Into Policy and Practice (GRIPP)” we strive to maximize this aspect, and will establish the preconditions to learn more about the best possible strategies to achieve this, a.o. through indicator development, and as main topic of the mid-term evaluation in 2024. Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
RA_ITM_Rwanda_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Rwanda_22-26.pdf
FACTSHEET_PARTNER_ITM_Rwanda_22-26_RBC	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Rwanda_22-26_RBC.pdf
FACTSHEET_ITM_Rwanda_22-26_CHUK	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Rwanda_22-26_CHUK.pdf
FACTSHEET_COLLABORATION_ITM_Rwanda_22-26_ENABEL	Fact sheet per collaboration	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_COLLABORATION_ITM_Rwanda_22-26_ENABEL.pdf
TOC_ITM_Rwanda_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Rwanda_22-26_1.pdf
FrameCollaborationBTC-ITG ALLsigned_20161007	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FrameCollaborationBTC-ITG%20ALLsigned_20161007_0.pdf
References_ITM_Rwanda_22-26	Other	https://fundhub.openaid.be/sites/default/files/2021-07/References_ITM_Rwanda_22-26.pdf
RA_ITM_Rwanda_22-26_UpdateMarch	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2022-03/RA_ITM_Rwanda_22-26_UpdateMarch.pdf
RESPONSES_DECEMBER_ITM_RWANDA	Other	https://fundhub.openaid.be/sites/default/files/2022-03/RESPONSES_DECEMBER_ITM_RWANDA.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The requested budget for this programme (1.000.000,00€) covers mostly human resources to support platform development and capacity building.

- Of the total budget 26,18% is allocated to ITM, 67,04% to the local partners and 6,78% to LOC@ITM.

- Personnel costs are foreseen on the local budget (23,90% of total budget) for laboratory staff involved in the platform development to increase capacity in (molecular) diagnostics and surveillance of infectious diseases and AMR, as well as project management and coordinating staff. Personnel costs of ITM scientific staff to support and coordinate planned activities are also included (18,78% of total budget).
- Operational costs (19,83% of total budget) include costs for consumables (laboratory and field activities, e.g. sample collections, surveys), costs for workshops (e.g. NTDs, vaccine development), and costs related to surveillance and field activities, such as local transport, per diems and incentives for health centre staff to participate in the sample collections for the surveillance and research activities.
- Travel costs (13,45% of total budget) are foreseen for international travel to (establish and) consolidate (new) collaborations, to support training activities (at ITM and Rwandan institutes), and to coordinate field and laboratory activities.
- Grants costs (19,64% of total budget) will cover for a PhD study to build scientific capacity in the malaria component.
- An investment cost (4,4% of total budget) is foreseen in the first year to support the molecular laboratories at RBC as part the platform development to allow for strengthened molecular diagnosis and surveillance, and to install IT systems for digitalisation of data in hospitals.

The planned budget for the NTDs/zoonoses/OneHealth and mRNA vaccine development components for the first 2 years of the programme, is considered as seed funding for exchange visits and workshops, allowing to explore for potential collaborations and define activities that would contribute to achieve the medium-term goals in their respective domains. Hence, details for funding these components in year 3 to 5 of the programme will depend on and be adapted to the outcome of this explorative phase.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym RBC

Full name Rwanda Biomedical Centre

Budget available

2022	2023	2024	2025	2026	TOTAL
98043	64543	62543	62043	46700	334872

Acronym UR/CHUK

Full name University of Rwanda / University Teaching Hospital of Kigali

Budget available

2022	2023	2024	2025	2026	TOTAL
85485	63200	62200	62200	62200	335285

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Strengthen research and education capacities in the partner institutes (INRB, CRSK, ESP) in DRC

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Strengthen research and education capacities in the partner institutes (INRB, CRSK, ESP) to become centers of excellence and promoters of long-term change towards the improvement of population health in DRC		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-1-CD		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Congo (the Democratic Republic of the)		
Sector :	12110 - Health - Health policy and administrative management	Budget share :	40%
Sector :	43082 - Other Multisector - Research/scientific institutions	Budget share :	40%
Sector :	11420 - Education - Higher education	Budget share :	20%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

General objectives

N/A

Geographic location of the outcome's intervention zone

République Démocratique du Congo

Lat/Long :	15.274355, -4.432204
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Outcome summary

Description of the outcome

Improving the health of a population is a visionary goal. Particularly in DRC, which is disproportionately affected by health problems and poverty. The longstanding partnership between ITM and its Congolese partners, Institut National de Recherche Biomédicale (INRB), Centre de Recherche en Santé de Kimpese (CRSK) and Ecole de Santé Publique (ESP) and their unique expertise has taught us that the resilience of a health system contributes to making it more responsive, accessible, and efficient. Thereby improving people's access to quality health care, as well as the system's preparedness and ability to respond to emerging diseases.

We work through a participatory and equal partnership aim to strengthen individual and institutional capacities. One of the basic conditions of this partnership is the need for co-creation, the shared responsibility of our three partners, and their embeddedness in the relevant networks. Hence, synergies are vital to reach this goal on both a national and an international level. By taking advantage of this possibility, that early stakeholder identification in this process can be the premise of a shared and participatory action strategy.

At the core of our activities, the development of different platforms (administrative, technical, clinical, epidemiological,

interdisciplinary One-Health...) will contribute to increasing individual competences in research methodologies in various fields (biomedical, clinical, epidemiological, public health and social sciences). This will allow our partners to grow into centres of excellence; being able to provide their specific expertise to produce valid research results and translate them into evidence-based policies that address specific health problems through the development of services for society and allowing the strengthening of quality of services, as well as the amplification of the availability of services such as diagnostic tools. Reaching towards a situation that honours the principles of equity.

Wording of the outcome

We strengthen research and education capacities in the partner institutes (INRB, CRSK, ESP) so they become centres of excellence and promoters of long-term change towards the improvement of population health in DRC.

Target groups

Our target group is the junior and senior staff of our partners at INRB (satellite partner: Labovet), CRSK and ESP (satellite partner: CCSC), involving various research and laboratory units (technical, master PhD, professors) as well as management units, fellows, students, young scientists. More generally, different components of the DRC government (MoH, national disease control programmes...), the entire DRC-populations and a wider group of African recipients will benefit from this project.

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
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Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	1
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	1
6. Climat Change - Mitigation :	1
7. Climat Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	0
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

N/A

Education

The programme focuses on education, but not on primary, secondary or vocational education as is priority in the strategy paper.

Children's rights

The vulnerability of children is often a first symptom of the vulnerability of a health system because they are among the first victims of a system that fails to provide the resources needed for their well-being. An example of this is the persistent lack of pediatric dosing of certain drugs that still transform children into little men and women without recognizing their peculiarities and needs. In this perspective, our program intends to support the objectives of protection, provision and participation of children of the "Strategic Note - Respect for the rights of children in development cooperation". In this regard, in fact, a maternal

health project is included in the ESP Urban Health portfolio, in which the maternal and child health center in Lubumbashi will be an example of how we intend to contribute to the strengthening of the capacities of vulnerable people to exercise their right to health. The intent is to develop a trans-disciplinary approach to comprehensively describe the delivery and use of maternal health care (prenatal, delivery, postnatal) to identify a dynamic model that is able to describe the state of the art and is also able to predict implementation approaches that can improve access to maternal, newborn and child health services. Mental health research on long cohorts on services such as family planning, maternal and neonatal escape surveillance will also be continued, and work will be done to develop maternity wards of excellence (in referral hospitals) to strengthen the skills of providers of essential and emergency obstetric and neonatal care in urban settings.

Special attention will also be paid to the pediatric population in the context of immunization strategies and their impact on their health status. Also, within the acute fever studies led by INRB and CRSK, the pediatric population is included, so that better care can be provided during the study, but also after the study when adapted treatment guidelines will be designed.

Development education

The main focus of our program is to strengthen the institutional capacities of our Congolese partners and, based on individual capacity building, to strengthen promising young researchers and staff at the partner institutions. Experience has taught us that providing training support allows Congolese researchers to subsequently conduct research independently and face a competitive external research funding environment. The possibility to strengthen individual capacities in research methodologies in various fields (biomedical, clinical, epidemiological, public health and social sciences) will contribute to SDG 4 to ensure inclusive and equitable quality education and lifelong learning at postgraduate, master, doctoral and post-doctoral levels. Our program involves the formation of learning sites intended as autonomous research, learning and training facilities, locally embedded in specific (geographical) contexts (districts, areas, villages, hospitals, health centers) for the development of a long-term process of engagement, collaborative research and mutual learning with all stakeholders (policy makers, administration, practitioners, communities, researchers) and where socially relevant knowledge is co-created in a participatory way based on the values of respect, ownership and equity. We believe that the development of high quality health research will answer specific and priority health questions but also generate (scientific) evidence and policy messages on the topic of health and its impact on society. These messages are not only translated to governments in our country of operation, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus is on the global impact of health and how the well-being of populations in our partner countries is closely aligned with our own. We integrate our findings into our courses, causing a multiplier effect through our students and faculty at ITM, Antwerp.

Environment and climate change

The current COVID-19 pandemic has highlighted the interdependence between human and animal health, biodiversity and the environment: for example, many respiratory diseases due to indoor air pollution or in the workplace (mining, agriculture,...) have taught us that the living and working conditions of populations have a significant impact on their vulnerability and morbidity. Our program aims to contribute to a better understanding of disease and to inform disease prevention and control policies. All our partners will be involved according to their specific tasks: the INRB-LaboVet collaboration will promote the One Health approach developing transdisciplinary approaches that recognize the biocultural constitution of health; ESP with UNILU will promote a public health perspective for strategic orientation towards urban ecosystem research domains for a better understanding of the complexity of health in the urban context; CRSK as a reference center in operational research will develop models and longitudinal research suitable for disease surveillance and environmental issues. All 3 partners will address key elements that impact the interaction between health and the environment: population density that affects the environment in urban areas and consequently also the occurrence of infectious diseases, climate change that increases the occurrence of vector-borne diseases, deforestation that induces closer contact between wildlife and humans, potentially causing a spill-over of zoonotic infections. In addition, the impact of program activities on the environment will be safeguarded through environmentally sound interventions for vector control (rational use of insecticides to preserve biodiversity), renewable and environmentally friendly energy infrastructure, proper waste treatment and reduction and reuse of lab materials based on proper reprocessing procedures, electronic data collection avoiding paper use and online meetings and workshops to reduce travel pollution.

Gender

Gender mainstreaming will be addressed in our program at several levels and in a systematic way. First, the promotion of a gender perspective in health policy will be protected in our program through the collection and publication of data that will be disaggregated by gender and age. For example, research on risk factors for transmission and acceptability of infectious disease control actions will include data collection on the role of gender and pregnancy. In addition, integrating quantitative data with qualitative methods that intersect gender with other social categories, including ethnicity, class, religion, and sexuality, will provide a better understanding of the complexity of different contexts and gaps between people's needs, thereby providing more specific and effective health policy recommendations. In this context, ESP and the Lubumbashi Maternal Health Center will play an active role in a multi-center project to develop a transdisciplinary approach to maternal health care delivery that extends to the field of mental health. All partners will promote the incorporation of a gender perspective into capacity building and education plans, such as recruitment, international researcher mobility, and scientific publication. Because increasing the number of marginalized individuals is only one component of the process, their equitable access to key positions, such as

fellowships, PhDs, panels, recruitment committees, and principal investigators in projects, will be safeguarded by allowing their inclusion at the decision-making level and promoting a participatory gender mainstreaming, based on better identification of explicit and implicit barriers.

Migration

N/A

Digitalization - Digital for Development D4D

The digital revolution provides us with a unique opportunity to search for, collect, analyze and use data and to disseminate the resulting usable information. Consistent use of (mega)data allows us to objectively describe the situation or problem we want to solve and, when transformed into timely, accurate and useful information, also allows us to provide relevant and targeted strategic direction to a development policy or intervention. Such data, moreover, when transparent, also allows for adequate monitoring of the implementation and interventions provided by specific policies by enabling the assessment of their results and impact and also enhancing the sharing and participation of beneficiaries in all processes. In this perspective, one of the priorities in our program is the digitization of health data within CRSK, ESP and INRB as well as the digitization of surveillance and research data, a priority also shared by Enabel. To provide some examples, data collection tools will be implemented in our activities as well as digital platforms that will allow an adequate interpretation and sharing of data also facilitating the connectivity among partner institutions. ESP will promote the strengthening of digitization and IT capabilities in the field of education also thanks to the possibility of establishing synergies with the VLIR and ARES partners and with the University of Lubumbashi. The intent is to capitalize on digital platforms and promote better integration of the educational programs provided, including distance and lifelong learning methods.

Health

The long-term goal of our program is the improvement of population health in DRC. We know this is a visionary goal, all the more so in DRC which is disproportionately affected by health problems and poverty. At the same time, however, ITM's long-standing partnership with its Congolese partners, INRB, CRSK and ESP, and their unique expertise has taught us that the resilience of a health system helps make it more responsive, accessible and efficient, thereby improving people's access to quality health care, as well as the system's preparedness and ability to respond to emerging diseases. Our strategy is therefore based on a participatory and equal partnership among partners that aims to strengthen individual and institutional capacities. At the core of our activities, the development of different platforms (administrative, technical, clinical, epidemiological, Interdisciplinary One-Health with a focus on antimicrobial resistance and the control and prevention of neglected tropical diseases,...) will contribute to increase individual expertise in research methodologies in various fields (biomedical, clinical including sex and reproductive health, epidemiological, public health and social sciences). At the same time, this will allow our partners to grow into centers of excellence, providing their specific expertise to produce valid research results and translate them into evidence-based policies that address specific health problems through the development of services for society and allowing the strengthening of the quality of services as well as the amplification of the availability of services, such as diagnostic tools, reaching towards a situation that honors the principles of equity and health for all. Our program therefore intends to participate in and promote the development of human capital capacity, both quantitative and qualitative, in DRC that can generate a virtuous cycle towards the existence of a results-based health system for long-term commitment.

Private sector

N/A

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

Although the humanitarian situation in DRC was already alarming, in 2020 repression and violence escalated (HRW) and degraded the human rights situation. Against that backdrop, the vision of our program is in line with the "MEET" principles promoted by the Belgian development cooperation in strengthening the supply of care, improving its governance and supporting demand. The scientific and institutional capacity-building of our partners, at the core of our program over the next 5 years, will contribute towards the creation of a health system that is more responsive, accessible and efficient in DRC. Indeed, the potential to create centers of excellence in science, training and the translation of policies will allow the development of services to society, more specifically, quality improvement as well as amplification of the availability of services, such as to diagnostic tools. This will be a small step forward towards a situation honoring the equity principles. Citizens will thus be able to benefit from the right to health and quality care in a system that will be more accessible in harmony with Article 25 of the Universal Declaration of Human Rights. In this process, the preservation of the most fragile and vulnerable groups will be safeguarded through specific strategies: the adoption of a gender-perspective and the support to the maternal and child health center in Lubumbashi are some examples. At the same time, collaboration between our partners and institutional health promoters will enable the implementation of health policies, preventive and curative, thus creating useful support for duty

bearers in fulfilling their public health obligations and contributing to strategic objective 6 'strengthen governance at all political levels and improve respect for human rights' of the JSF RDC 2022-2026.

Decent and sustainable work

Even though Decent Work is not ITM's core business, ITM does adhere to a number of principles which are part of the definition of Decent Work as given by the Decent Work JSF, such as Productive and freely chosen employment which provides an income sufficient to cover family needs. It includes social protection and respects fundamental rights at work, including freedom of association and the right to participate in collective bargaining agreements (CBAs). We aim for equal treatment of all workers without making any distinctions based on sex, age, origin, political or religious beliefs. On the work floor, health and safety provisions are in place. As we have institutional management support activities, we will advocate the same values as present at ITM.

Gender

In the previous programs, gender mainstreaming (GM) has not been specifically addressed: although some activities presented gender-sensitive approaches, results were mostly fragmented and the approach to GM was not systematic. One reason is that measuring equality is not easy, gender-appropriate tools need to be integrated with social factors, and quantitative approaches are not sufficient. Considering that gender has long been invisible in global data, our aim is to collect, publish and act on data disaggregated by gender and age, promoting the gender perspective in health policy. As an example, research on risk factors of transmission and of acceptability of control actions of infectious diseases will include data collection on role of gender and pregnancy. Moreover, the integration of quantitative with qualitative methods that intersect gender with other social categories including ethnicity, class, religion, sexuality will allow a better understanding of the complexity of different contexts and gaps between the needs of people, thus providing more specific and effective recommendations in health policies. In this context, the maternal health center in Lubumbashi will play an active role in a multi-center project to develop a transdisciplinary approach to the provision of maternal health care that extends to the field of mental health. All partners will promote the incorporation of a gender perspective in capacity building and education plans, such as in recruitment, international mobility of researchers, and scientific publishing. Since an increase in number of marginalized subjects in staff is only one component of the process, their equitable access to key positions, such as fellowships, PhDs, expert groups, recruitment committees, principal investigators in projects, will be safeguarded enabling their inclusion at the decision-making level and promoting participatory GM, based on a better identification of explicit and implicit barriers.

Environment

The impact of the environment on the program:

Population density influences the environment in urban areas and consequently also the appearance of infectious diseases.

Climate change increases the appearance of vector-borne diseases, on which we will focus part of the program.

Deforestation induces a closer contact between wild animals and humans, potentially causing a spill-over of zoonotic infections. The One Health platform in the program will evaluate importance of influence of environmental, human, social, pathogen mutation and animal behavior risk factors. All three factors above are causing increased use of antimicrobials in animal health and agriculture, and its consequence on environment and human antimicrobial resistance patterns will be included in the project.

The effect of water quality on the population health is indirectly studied when evaluating importance and determinants of food- and waterborne diseases.

The impact of the program activities on environment and remediating actions:

Environment friendly interventions for vector control will be tested, and if insecticide-based, this will use insecticide resistance results of former program, to not (or the least possible) disrupt the local biodiversity.

Travel will be reduced, as much as possible and replaced by online meetings and workshops and troubleshooting by the local ITM team.

In case of equipment installations, renewable and environment-friendly power infrastructure will be installed as much as possible.

In the laboratories, specific attention will go to correct processing of waste (autoclave and incinerator), reduction and re-use of lab materials based on correct re-processing procedures. (explicitly included in the action plan of CRSK)

Possibilities of waste recycling (in collaboration with UNIKIN) will be studied, systems put in place and users trained

For all data collection: there will be a shift to the use of (online) tools on tablets, with less paper used.

Common outcome within a common programme

N/A

Common outcome between distinct programmes

N/A

Areas of complementarity and synergy with the intervention of ENABEL

Enabel in DRC concentrates on strengthening health systems with a particular focus on support to the MoH at the central level of the Direction des Etudes et de Planification, but also, more importantly, at the decentralized levels (Division Provinciale de la Santé and Zones de Santé). Building more resilient health care systems is a key concern to improve people’s access to quality health care, but also in view of enhancing the system’s preparedness and responsiveness to new emerging diseases. Enabel is active in both rural and urban provinces but has a special interest in supporting the development of systems in rapidly growing urban environments characterized by mixed health systems with a dominant private sector. Adequately capitalizing field experiences, via “demonstration projects/learning sites” is key for their subsequent policy support activities to enhance evidence-based decision-making by the health authorities.

The possible synergies with ITM’s program (2022-2026) at the level of the Ecole de Santé Publique (ESP) in Lubumbashi, and the Centre de Connaissances Santé au Congo (CCSC) are thus evident. Exploratory talks (May 2021) with Enabel executive technical staff in Kinshasa and Kisangani confirmed this mutual interest for collaboration. Enabel was particularly interested in supporting the organization by ESP of a national conference on urban health in Lubumbashi end of 2022 - possibly even co-fund it. Linkages with the Kinshasa-based CCSC in terms of translating evidence into policy and practice (GRIPP) were referred to as a promising area of joint work in the coming years. And last but not least, Enabel expressed its interest in ESP’s work in the field of integrating mental health in (public) primary care services. This interest concretized in the recent allocation (June 2021) of a PhD fellowship (PRECOB program) to one of the main researchers of the urban mental health integration project.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	Strengthening of the partners – INRB, CRSK, ESP- institutional and scientific capacity in research, education and policy translation and becoming centers of excellence <i>For the INRB, the aim is to strengthen its role as National Reference Laboratory and center of expertise in tropical infectious diseases. Apart from its institutional role in the education of master and PhD students in public health, the ESP aims to become a subregional pole of excellence in multidisciplinary research, innovation and policy support on health and urbanization. CRSK aims to become a reference center in operational research, being very close to the field, in order to be able to develop models and longitudinal research suitable for disease surveillance and tackle environmental issues.</i>
Indicator title :	OC1 - Uptake of research in public policies (disaggregated per partner).
Indicator description :	Scale self-assessment 0 - no knowledge to transfer; 1 - knowledge has been disseminated ; 2- first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies (disaggregated per partner) Qualitative indicator, progress over the years. SoV: Self-assessment ; policy briefs; meeting & audit reports
Baseline :	0 : 0 : 0
Target Year 3 - 31/12/2024 :	1 : 1 : 1
Target Year 5 - 31/12/2026 :	4 : 4 : 4

Formulation of outcome or result :	<p>Strengthening of the partners – INRB, CRSK, ESP- institutional and scientific capacity in research, education and policy translation and becoming centers of excellence</p> <p><i>For the INRB, the aim is to strengthen its role as National Reference Laboratory and center of expertise in tropical infectious diseases. Apart from its institutional role in the education of master and PhD students in public health, the ESP aims to become a subregional pole of excellence in multidisciplinary research, innovation and policy support on health and urbanization. CRSK aims to become a reference center in operational research, being very close to the field, in order to be able to develop models and longitudinal research suitable for disease surveillance and tackle environmental issues.</i></p>
Indicator title :	OC2 - Uptake new technologies / platform tools/ innovations / solutions / application of knowledge by health services/staff/local communities (disaggregated per partner).
Indicator description :	<p>On the basis of the technological and methodological skills acquired through the platforms development, the partner institutions will be able to transfer these skills independently. Based on self-assessment: 0 - no uptake; 1 - knowledge has been disseminated; 2 - knowledge has been put into practice; 3 - co-creation</p> <p>Qualitative indicator, indicating progress over the program.</p> <p>SoV: Self-assessment ; communication with target groups; reports/company documents</p>
Baseline :	0 : 0 : 0
Target Year 3 – 31/12/2024 :	1 : 1 : 1
Target Year 5 – 31/12/2026 :	2 : 2 : 2

Formulation of outcome or result :	<p>Strengthening of the partners – INRB, CRSK, ESP- institutional and scientific capacity in research, education and policy translation and becoming centers of excellence</p> <p><i>For the INRB, the aim is to strengthen its role as National Reference Laboratory and center of expertise in tropical infectious diseases. Apart from its institutional role in the education of master and PhD students in public health, the ESP aims to become a subregional pole of excellence in multidisciplinary research, innovation and policy support on health and urbanization. CRSK aims to become a reference center in operational research, being very close to the field, in order to be able to develop models and longitudinal research suitable for disease surveillance and tackle environmental issues.</i></p>
Indicator title :	OC3 - Number of new projects/grants acquired by the supported departments
Indicator description :	<p>It will include proposals submitted and the acquired internal and external fundings, demonstrating partners' capacities to carry out sustainable research. (Submitted/Internally funded/Externally funded)</p> <p>Quantitative indicator, cumulative over years, absolute number, ascending.</p> <p>SoV: Number of grants obtained and information provided in winbooks</p>
Baseline :	0 : 0 : 0
Target Year 3 – 31/12/2024 :	10 : 5 : 2
Target Year 5 – 31/12/2026 :	14 : 7 : 4

Formulation of outcome or result :	<p>Strengthening of the partners – INRB, CRSK, ESP- institutional and scientific capacity in research, education and policy translation and becoming centers of excellence</p> <p><i>For the INRB, the aim is to strengthen its role as National Reference Laboratory and center of expertise in tropical infectious diseases. Apart from its institutional role in the education of master and PhD students in public health, the ESP aims to become a subregional pole of excellence in multidisciplinary research, innovation and policy support on health and urbanization. CRSK aims to become a reference center in operational research, being very close to the field, in order to be able to develop models and longitudinal research suitable for disease surveillance and tackle environmental issues.</i></p>
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Indicator title :	OC4 - Level (%) of student satisfaction with quality and relevance of study programme / module (disaggregated by gender)
Indicator description :	Joint indicator. Baseline value is currently at 0 because new courses need to be developed. Total percentage given will be the average of all the given course modules. Scale used: 1 - not satisfied; 2 - a little bit satisfied; 3 - medium satisfied; 4 - satisfied; 5 - very satisfied. Qualitative indicator, indicating satisfaction of students as an average over the years. SoV: Post-training satisfaction evaluation survey of participants
Baseline :	0
Target Year 3 - 31/12/2024 :	65%
Target Year 5 - 31/12/2026 :	65%

Formulation of outcome or result :	Strengthening of the partners – INRB, CRSK, ESP- institutional and scientific capacity in research, education and policy translation and becoming centers of excellence <i>For the INRB, the aim is to strengthen its role as National Reference Laboratory and center of expertise in tropical infectious diseases. Apart from its institutional role in the education of master and PhD students in public health, the ESP aims to become a subregional pole of excellence in multidisciplinary research, innovation and policy support on health and urbanization. CRSK aims to become a reference center in operational research, being very close to the field, in order to be able to develop models and longitudinal research suitable for disease surveillance and tackle environmental issues.</i>
Indicator title :	OC5 - Number of activities done between existing and newly developed national, regional and international collaborations (Synergies)
Indicator description :	Networking refers to the exchange of relevant research results via online or F2F meetings and/or staff mobility for further education and training as well as the co-creation of research protocols. Quantitative indicator, cumulative over years, absolute number, ascending. SoV: Yearly reports on network activities
Baseline :	0
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R1 - Professionalized training (INRB/ESP)
Indicator title :	R1.1 - Training unit support to course & curriculum development is on track
Indicator description :	Qualitative indicator, quantified by following scale: 0=no training unit in place; 1= training unit in place; 2= 3 year course development plan/curriculum elaborated; 3= 75% of courses of 3 yr course development plan realized with support of the program SoV: INRB and ESP Training evaluation reports
Baseline :	0 : 0
Target Year 3 - 31/12/2024 :	2 : 2
Target Year 5 - 31/12/2026 :	3 : 3

Formulation of outcome or result :	R1 - Professionalized training (INRB/ESP)
Indicator title :	R1.2 % of courses working with digitalized Learning environment
Indicator description :	Number of courses with digitalized learning environment/total number of courses, expressed as a percentage, disaggregated by partner institute. Quantitative indicator, ascending.
Baseline :	0 : 0
Target Year 3 - 31/12/2024 :	30% : 50%
Target Year 5 - 31/12/2026 :	100% : 100%

Formulation of outcome or result :	R1 - Professionalized training (INRB/ESP)
Indicator title :	R1.3 - Learning Management & Quality Assurance System on track
Indicator description :	Qualitative indicator, expressing progress over the program, disaggregated per partner 0= neither learning management or quality assurance system installed; 1= equipment available and procedures developed; 2= staff trained; 3= systems and procedures implemented; 4= accreditation file submitted; 5= accreditation obtained SoV: Partners year report and satisfaction evaluation surveys of participants
Baseline :	0 : 0
Target Year 3 - 31/12/2024 :	1 : 2
Target Year 5 - 31/12/2026 :	3 : 4

Formulation of outcome or result :	R2 - Improved research practices (INRB/CRSK/ESP)
Indicator title :	R2.1 - Number of capacity strengthening fellows that finalised the two years training program (disaggregated by gender)
Indicator description :	This indicator refers to all fellows that are supported by the ITM and the 3 partners, disaggregated by gender. Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Fellow school reports
Baseline :	0
Target Year 3 - 31/12/2024 :	9 (4 f :5 m)
Target Year 5 - 31/12/2026 :	14 (7f:7m)

Formulation of outcome or result :	R2 - Improved research practices (INRB/CRSK/ESP)
Indicator title :	R2.2 - Number of joint (and disseminated) publications (disaggregated by partner)
Indicator description :	We refer to scientific publication manuscripts published in peer-reviewed journals and that make a contribution to evaluate the impact of current interventions Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Pubmed / Medline online platforms
Baseline :	0 : 0 : 0
Target Year 3 - 31/12/2024 :	8 : 2 : 2
Target Year 5 - 31/12/2026 :	14 : 5 : 4

Formulation of outcome or result :	R2 - Improved research practices (INRB/CRSK/ESP)
Indicator title :	R2.3 - Number of PhDs (disaggregated by gender) which are on track
Indicator description :	On track is defined as Y1 - PhD initiated; Y3: 2 - PhD on track; 3 - PhD ready for defense Quantitative indicator, ascending, absolute number, cumulative over the years Disaggregated by gender and partner institute SoV: Feedback reports from PhD committee at ITM, PhD thesis document and diploma
Baseline :	3 : 3 : 0 (INRB/CRSK/ESP) Equal gender division
Target Year 3 - 31/12/2024 :	5 : 5 : 2 Equal gender division
Target Year 5 - 31/12/2026 :	7 : 7 : 4 Equal gender division

Formulation of outcome or result :	R3 - Platform technology and methodology transfer (INRB/CRSK/ESP)
Indicator title :	R3.1 - Proportion of platform technology and methodology transfers on track (INRB/ESP)

Indicator description :	Technology transfer refers to the dissemination of technology knowledge (validation and maintenance of technical equipment, SOPs, guidelines,...) towards partners and a wider public. We define 'on track' as implemented in Y3 and fully operational by Y5. Fully operational means that the technology works and is regularly maintained. We express the proportion as a percentage. SoV: Partners year report
Baseline :	0
Target Year 3 – 31/12/2024 :	50%
Target Year 5 – 31/12/2026 :	75%

Formulation of outcome or result :	R3 - Platform technology and methodology transfer (INRB/CRSK/ESP)
Indicator title :	R3.2 - Number of workshops and trainings
Indicator description :	This indicator refers to the yearly workshops and trainings promoted by our partners. Quantitative indicator, ascending, absolute number, cumulative over the years. SoV: Partners year report
Baseline :	3
Target Year 3 – 31/12/2024 :	12
Target Year 5 – 31/12/2026 :	20

Formulation of outcome or result :	R4 - Knowledge transfer to policy (INRB/CRSK/ESP)
Indicator title :	R4.1 - Number of policy briefs and other dissemination products (incl. more interactive forms such as dissemination workshops) aimed at other knowledge users (not scientific papers; users to be defined)
Indicator description :	Number of policy briefs and other dissemination products (incl. more interactive forms such as dissemination workshops) aimed at other knowledge users (not scientific papers; users to be defined) Quantitative indicator, ascending, absolute number, cumulative over the years; SoV policy briefs/summaries
Baseline :	0 : 0 : 0
Target Year 3 – 31/12/2024 :	1 : 1 : 1
Target Year 5 – 31/12/2026 :	4 : 3 : 3

Formulation of outcome or result :	R5 - Strengthened institutional management (INRB/CRSK/ESP)
Indicator title :	R5.1 - Existence and use of organisational plan on administrative and logistic management; disaggregated per partner
Indicator description :	Qualitative indicator, quantified through following scale: 0= no plan available; 1= an organisational plan is developed; 2= 50% of actions of organisational plan are implemented (disaggregated INRB/CRSK) SoV: partners year report
Baseline :	0 : 0
Target Year 3 – 31/12/2024 :	1 : 1
Target Year 5 – 31/12/2026 :	2 : 2

Formulation of outcome or result :	R5 - Strengthened institutional management (INRB/CRSK/ESP)
Indicator title :	R5.2 - Approved transparent activity-based budgets with detailed follow up notes
Indicator description :	Qualitative indicator, quantified through following scale: 0= winbooks not functional; 1= winbooks installed and functional; 2= yearly report and follow-up with winbooks; 3= quarterly follow up of budget; 4= quarterly and project specific follow up of budget (disaggregated INRB/CRSK/ESP) SoV: Financial report
Baseline :	1 : 1 : 1

Target Year 3 – 31/12/2024 :	3 : 3 : 3
Target Year 5 – 31/12/2026 :	4 : 4 : 4

Formulation of outcome or result :	R5 - Strengthened institutional management (INRB/CRSK/ESP)
Indicator title :	R5.3 - Existence and implementation of Communication strategy plan about capacity building being developed
Indicator description :	Qualitative indicator, quantified through following scale: 0= no plan available; 1= a communication plan is developed; 2= 50% of actions of communication plan are implemented (disaggregated INRB/ESP) SoV: partners year report
Baseline :	0 : 0
Target Year 3 – 31/12/2024 :	1 : 1
Target Year 5 – 31/12/2026 :	2 : 2

Formulation of outcome or result :	R5 Strengthened institutional management
Indicator title :	R5.4 Attention paid to gender in administrative and logistic services (% of women in the administrative and logistic services (disaggregated INRB/CRSK))
Indicator description :	Attention paid to gender in administrative and logistic services (% of women in the administrative and logistic services (disaggregated INRB/CRSK)) SoV: Partner pay-roll
Baseline :	30% /10%
Target Year 3 – 31/12/2024 :	30% / 20%
Target Year 5 – 31/12/2026 :	40% / 25%

Formulation of outcome or result :	R6 - Synergies built (INRB/CRSK/ESP)
Indicator title :	R6.1 - Level of active cooperation partners in funded partnerships (with/without MoU)
Indicator description :	Qualitative indicator, quantified through following scale: 0: not yet started ; 1 : progress below expectation ; 2 : progress as expected ; 3 : progress beyond expectation ; 4: goals achieved SoV: Yearly reports on network activities
Baseline :	0 : 0 : 0
Target Year 3 – 31/12/2024 :	2 : 2 : 2
Target Year 5 – 31/12/2026 :	4 : 4 : 4

Formulation of outcome or result :	R6 - Synergies built (INRB/CRSK/ESP)
Indicator title :	R6.2 - Number of joint projects or proposals developed by network partners
Indicator description :	Quantitative indicator, ascending, absolute number, cumulative over the years. Networking refers to the exchange of relevant research results via online or F2F meetings and/or staff mobility for further education and training as well as the co-creation of research protocols. SoV: Yearly reports on network activities, protocol approved by EC
Baseline :	0 : 0 : 0
Target Year 3 – 31/12/2024 :	3 : 1 : 1
Target Year 5 – 31/12/2026 :	4 : 2 : 2

Formulation of outcome or result :	R6 - Synergies built (INRB/CRSK/ESP)
Indicator title :	R6.3 - Level of external visibility and through social media and internet presence; conferences; workshops; webinars; other knowledge sharing events; other platforms; advocacy (indicator to be operationalised)

Indicator description :	We are referring to the participation of our partners in national and international scientific environments. Qualitative indicator, quantified through following scale: 0: not yet started ; 1 : progress below expectation ; 2 : progress as expected ; 3 : progress beyond expectation ; 4: goals achieved SoV: Partners year report
Baseline :	0 : 0 : 0
Target Year 3 – 31/12/2024 :	2 : 2 : 2
Target Year 5 – 31/12/2026 :	4 : 4 : 4

Formulation of outcome or result :	R1 - Professionalized training (INRB/ESP)
Indicator title :	R1.4:
Indicator description :	Gender-balance in training activities (% of women in training unit / % of women trained on digitalization and learning management systems) SoV: Partners pay-roll and training reports
Baseline :	20% / 30%
Target Year 3 – 31/12/2024 :	25% / 40%
Target Year 5 – 31/12/2026 :	35% / 50%

Formulation of outcome or result :	(R3) Platform technology and methodology transfer
Indicator title :	R3.3: Gender-balance in training activities (% of women trained)
Indicator description :	Gender-balance in training activities (% of women trained) SoV: Training reports Expressed in percentage, per year
Baseline :	30%
Target Year 3 – 31/12/2024 :	40%
Target Year 5 – 31/12/2026 :	50%

Activities, targets groups and beneficiaries

Classification of activities

Platform development is a fundamental axe, going from laboratory technical over epidemiological knowledge and interdisciplinary One health collaboration, to a Center of excellence for urban health and a learning site for co-creation. These platforms serve as base for educational and research projects.

Support to education projects can be structural, such as curriculum development, teaching methods, adapted learning management systems, PhD grants and scholarships for Masters in the support to the post-graduate of ESP. At INRB, the set-up of a training unit will be supported to facilitate the organization of short courses within the program, or the ones planned by other projects. Besides, (1) the individual fellowship program “Marleen Boelaert” initiated in 2021, aiming at improving the professional track of young staff during maximum 2 years; (2) PhD grants, within the country program and the ITM sandwich scheme; (3) access to MPH and short courses at ITM, will continue.

Main long-term goal of capacity building is the improvement in research capacity of institutes. Therefore, research projects, serving as base for learning by doing and following adapted pedagogical methods (ITO speed, evaluation of quality, feedback, ...) remain prominent. Within this research, societal relevance with operational impact primes. We plan 5 overall topics: (1) Urban Health; (2) One Health; (3) Operational research using an HDSS; (4) Clinical and lab research; and (5) impact evaluation of complex public health actions.

Addressing the gap in previous programs on getting research into policy and planning (GRIPP), we include 3 approaches: (1) involve policy and decision makers in all stages of research; (2) provide communication support; (3) involve the Centre de Connaissances en Santé DRC, specialized in writing policy briefs.

Synergies on different levels will remain between partners of Outcome 1, with PNLTHA (OC2), with other (Belgian) actors in DRC and other ITM/DGD country partners.

Target group(s)

- INRB (& partner Labovet), CRSK and ESP (& partner CCSC): junior and senior staff of different research and laboratory units (technical, scientist and Professor level); support & management units; PhD students and fellows. Target is about 50 staff and 20 fellows at INRB; 20 staff and 5 at CRSK and 20 staff and 2 fellows at ESP. % females targeted by the program are approximately 30% at INRB and ESP and 10% at CRSK.

- Students of short courses and formal teaching programs, targeting 40% females

Beneficiaries

- The DRC health system with all its actors, Ministry of Health and certain disease control programs which (could) adapt their strategies in function of new evidence provided by the program
- Students in the case of INRB and ESP where teaching and training platforms are set up (Approx. 40% female)
- The DRC population in general as receivers of health services
- A larger group of beneficiaries of networks given that research results can be generalized to other contexts outside DRC or Africa

Title of the reference annex :	TOC_ITM_RDC-OC1_22-26
Title of the reference annex :	RA_ITM_RDC_OC1_22-26

Description of tasks among associate ANGCs

N/A

Description of the Relevance

The present program is strongly linked to the 6 strategic goals of the JSF HES4SD. The collaboration with DRC has existed already for more than 20 years and it deserves to be continued seen the persistence of an insufficient number of trained health and scientific staff in this vast country, but also because of the importance of (re-)emergence of infectious diseases, which DRC is not able to control because of non-existence of good diagnostic and control tools. Other factors are out of our sphere of control, such as deficient health funding and low accessibility of health structures. In this light, our program aims at increasing capacities of individuals (**SG 1**) and promoting partnerships with a gradual transition from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration (see further also). Partners' staff will be targeted with scholarships, short-term trainings, courses, and specific educational programs. The new curriculum and a learning management system will be implemented, and staff will be trained to use new teaching materials. Next, a system of permanent quality assurance (monitoring, evaluation and continuous training of educational staff) will be implemented. This will allow ESP to aim to get the CAMES accreditation for its educational programs. For the strengthening of ESP's digitalization and ICT capacities in the field of education, synergies will be sought with the upcoming VLIR-UOS program and the past ARES programs at UNILU to capitalize on the digital platforms developed under these programs. Such synergy avoids inefficiencies and opens possibilities for better integration of educational programs. The experience built at ESP will then be transposed to the INRB, which is just starting the set-up of an educational office with their own training offer. Indeed, the structuring of links between the three partner institutes is of fundamental importance for the definition of global and multi-sectoral strategies and for the application of operational solutions.

The ambition to increase capacities of individuals and their involvement in partner organizations (+ stakeholders), will raise their potential to be agents of change (**SG 2**). By applying their newly acquired knowledge and skills, they will take responsibility and act as engaged global citizens with a positive impact on the performance of the organization in which they work (whether in a research, policy or clinical context) as well as on their sector in general. Through and beyond individual capacity development, this program will strengthen the capacities of our partners (**SG 3**) by a sliding capacity scale. ITM approaches partnerships along the lines of a partnership trajectory. In a **first phase** the focus is on **building and consolidating platforms** (technological, methodological, knowledge transfer etc.) and on **continued capacity building**. In this phase, all three partners intend to enhance their capacities in health research to contribute to the common strategic **target 4 of the JSF-DRC 2022-2026** ("to improve access to quality health care and promote the right to health for all"). The proposed path would specifically focus on **Approach L** of the JSF-DRC ("Knowledge management: capitalization, support to health research/education institutions, action research and advocacy in health") which can be directly linked to the JSF-DRC target 3, with emphasis on those highlighting learning and coordination mechanisms including 3.c & 3.d. Moreover, our program frames within a selection of the main actions mentioned in the **National DRC Health Development Plan 2019-2023**, namely "providing new evidence, based on innovative research, in order to support, enhance and strengthen: the administration of essential reproductive health care for mothers, new-borns, children and adolescents, the routine vaccinations and the national capacity to respond to major epidemics."

Over time partners will consolidate specific capacities, knowledge and expertise enabling their role as drivers of change (**SG4**) and aiming at a meaningful impact in society. This capacity will gradually allow further transition towards a **second phase** with emphasis on **joint research/education** and **equal partnerships** linked to developed platforms and/or to strengthened capacity to acquire external funding. Particular attention will be paid to networking, co-creation, transfer and application of relevant knowledge (**SG5**), and/or via the science-society interface (**SG6**) thus enabling partners to use their constructed knowledge to create the conditions for bringing research into policy and practice. Translation of operational research results into policy require networking, alignment and exchange with, on the one hand, stakeholders such as the Ministry of Health, Direction Générale de Lutte contre les Maladies (DGLM) and Health District managers. As an example, ESP's ambition to become a center

of excellence in urban health has the full support of the current Rector of UNILU and is in line with the methodological approach for health system strengthening envisaged by the Ministry of Health to test strategies to improve the management and performance of health zones. On the other hand, networking with other actors in the field of health will also be encouraged and actively endorsed for collaboration and exchange of knowledge such as in **Approach K of the JSF-DRC**: Exchanges, participation and joint learning within national (Hub Santé, PHRDC, FABAC Santé, etc.) and international (Medicus Mundi International, Be-Cause Health, People's Health Movement, etc.) networks and platforms active in health. The newly funded program will in addition give attention to organisational improvement in partner institutions by administrative, financial and logistics management capacity development. Recruitment process of staff and students will be based on gender equity: in case of equal competences, women will be favored as a way to contribute to the geographic JSF target of gender equality. Moreover, gender mainstreaming will be specifically addressed by partners by going beyond simple and fragmented gender-sensitive approaches ensuring that gender-appropriate tools are systematically integrated into activities. As an example, gender perspective in health policy will be promoted by disaggregating data by gender and age, and quantitative and qualitative methods will be integrated to intersect gender with other social categories for a better understanding of the complexity of different contexts and the gaps between people's needs. Of course our own project targets are also gender disaggregated.

Finally, the current Covid-19 pandemic has highlighted the interdependence between human health, animal health, biodiversity and the environment (the loss of habitat for wild animals plays an important role in this respect). In terms of the environment, among the JSF-DRC targets, it was recalled that living and working conditions of populations have a significant impact on their vulnerability and presence of diseases and health problems. Within the urban health project of Lubumbashi and the One Health platform to be developed at INRB and Labovet, this program will offer new insights that will be relevant to prove the need for the maintenance of biodiversity and local ecology for a better health.

Description of Coherence

Internal coherence:

The present five-year program is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programs and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP and in DRC, it is aligned with 3 of the 4 IPP priority themes. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health-related Research involving Humans (2016). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, biospecimens or personal data. Any research undertaken also adheres to General Data Protection Regulation principles.

There exists coherence between ITM-DRC partners INRB, CRSK and ESP. The 2022-2026 DGD program is aligned with the partner institutional priorities: INRB as national reference laboratory and expert center on tropical infectious diseases, being associated with LABOVET as national reference laboratory for veterinary science; ESP as center of excellence in health service organization and health policy, being associated with CCSC focused on getting research into policy and practice, and CRSK as operational research center. Hence, all partners have a complementary focus and will be linked through: (1) CCSC providing support to other partners for translation of new knowledge into policy and practice, by elaborating policy briefs and organizing joint meetings with researchers and policy makers, (2) CRSK extending its expertise on social sciences aiming to build capacity on human behavior studies embedded in epidemiological and One Health research, (3) INRB setting-up a Clinical Research Center, which can support CRSK clinical studies.

More on internal coherence and the use of the local office to strengthen coherence between ITM interventions is added in a new annex - "Responses December".

External coherence:

Our program is complementary to and supports the JSF DRC - objective 4 'improve access to health care' and its focus on the 'valorization of human capital'. More specifically through improving diagnostic methods and evaluating the feasibility of its use in decentralized laboratories, we increase the availability of health services; through the provision of new evidences in an array of infectious diseases and urban health, we give input to efficiently strengthen quality of health care provided; and through the evaluation of determinants of uptake of disease control strategies and of antimicrobial resistance causes, we give more insights in the determinants of health, which is the 4th axis of the 4th objective of the JSF DRC. The participation of ITM in the Hub Santé, the meeting and exchange platform between Belgian NGOs involved in the health sector, where collaboration opportunities are discussed and created, is important to keep and strengthen links, but also align with the plans of the JSF DRC. Our complementarity with ENABEL and academic partners is explained in the sections below.

Within the preparation of the current DGD program, special attention has been paid to creation of coherence not only within

country with local actors, but also across ITM-DGD-partners. These multi-country collaborations make that there will be a critical mass on the topic among ITM and all its partners, which enhances the impact on health, capacity building and provision of new knowledge.

Description of Effectiveness

As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration between ITM and its partners to set project goals increases the ownership and feasibility of achieving our goals. Indeed, ITM and its partners have a strong track-record when it comes to achieving results through its programs: evaluations of past interventions, such as that for the third DGD-funded framework agreement, clearly show the partnership's ability to deliver and adapt our strategies in a timely manner with adequate monitoring of activities. In the performance scores for the collaboration between Congolese partners and ITM, the effectiveness criterion never scored below B. Considering the rather challenging context, this supports our claim of effectiveness.

The 3 partner institutes are striving for strengthening their institutional and scientific capacity in research, education and policy translation. ITM wants to accompany this process through a participatory partnership by endorsing each partner to pursue their own specific roles to produce education, valid research output and GRIPP activities.

Investments in human resources, technical facilities, and management remain key steps for further institutional strengthening of partners. Previous DGD programs have enabled improved research capacity, especially at the individual level, while also generating greater appeal to new stakeholders and funding. During the new program, the focus will be further on institutional capacity building, as both are necessary to achieve sustainable centers of excellence with which ITM can develop future institutional collaboration.

To track program progress, key performance indicators are used at the outcome and result level of the overall program, but also at the partner level. Baseline information is collected mainly through document review at their level. In addition, a capacity assessment will be conducted at the beginning of the program to identify key capacity gaps and will be repeated at mid-term and in the final year of the project to identify progress and weaknesses. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

At the level of ITM, it was decided to focus the mid-term evaluation on the GRIPP aspect. These indicators are included in the table in the 'description of expected results' section. The ToC will also be an annual assessment tool to see if the change pathways and our assumptions about how change happens are valid. The indicators given in the results matrix are linked to our ToC sphere of control (short term changes) and at the outcome level to the sphere of influence (mid-term level). By monitoring them we will know whether we are on the right track. In addition, for those assumptions which are not supported by evidence, we consider formulating learning questions to which we will look for answers at midterm and during final evaluation. More specifically each partner will strive for capacity strengthening as follows:

INRB

Four main areas have been identified by mutual agreement for the next 5 years. Three areas focus on the development of individual capabilities in research and practices at selected field sites in urban Kinshasa and the rural sites of the provinces of Kwilu and Kongo Central. 1) Specific diagnostic tools and clinical research sites have been identified to form the basis of capacity building for acute fevers and priority pathogens and having new research built on it, among them PhD research. This will result in highly trained staff to ensure specific laboratory analysis and impacting proper diagnosis of acute fevers. 2) During the previous DGD-funded program, a group of data-managers were trained in epidemiological research skills to assure and facilitate management and secure storage of data. This crucial element will help epidemiologists to maintain and analyse high quality data to be used for evidence-based policy making. The capacity strengthening of epidemiological research will focus on methodological workshops and guidance of PhD researchers. 3) A new One Health platform will be established. For the development of such multidisciplinary, ITM can capitalise upon the lessons learned from the recent establishment of the interdepartmental EcoHealth group at ITM. Staff and researchers are closely guided to perform high quality collaborative (PhD) research. Experience obtained during the previous DGD-programs has shown that close guidance of the researchers helps them to develop their skills. Not only will these researchers be encouraged to obtain their PhD, but also trained how to translate research results into policy briefs. With its expertise in knowledge management and translation for policy making built up in a previous EU-funded project RIPSEC, the CCSC (cf. ESP) will play a key role in this training. We assume that they will remain at INRB and LABOVET and contribute to the institutional goal of becoming a center of excellence. 4) The 4th area focusses on the strengthening of institutional capacity to create a favorable environment for individual capacity building, research and education. In the 3 first axes, technical and knowledge platforms will be developed or strengthened to set the basis for research and capacity building activities with the aim to consolidate their performance and extend their use.

ESP

Through the new DGD-program, ESP will continue to strengthen its institutional capacities in the domain of post-graduate

education, which it started under previous DGD-programs, and in doing so, to contribute to the individual capacity building of both female and male public health professionals, policy makers and researchers (cf. scholarship program based on positive discrimination principles). To ensure a high-quality education, a learning management and quality assurance system will be implemented. ESP aims to get the CAMES accreditation for its educational programs. In the field of research and service delivery ESP will adopt a new focus in this DGD-program: multidisciplinary research on urban health. It intends to move forward in the process of change on research and service delivery by the strengthening of 3 interconnected platforms – CSART (learning site), CESUL (multidisciplinary research centre) and CCSC (GRIPP), and the development of activities and projects within these platforms: multidisciplinary research projects, co-production of knowledge, networking, policy advise and influencing... The output of these activities and projects will nurture the education. Some of the platforms already exist but need further consolidation in terms of financial management and governance (CSART, CCSC), while others will be developed during this program (CESUL). ITMs mandate is composed of the academic triad of research, education and service delivery. Because of this second component, ITM can lend support for the development of high quality education systems. Next, for the new research and service delivery focus on urban health the DGD program can capitalizing on ITM's existing national and international partnerships for training, funding and participating stakeholders. At UNILU research on the urban ecosystem is already well-established, however, conducted in silos. With the creation of the CESUL and the establishment of a PhD scholarship program and a research and innovation fund under this new the DGD-program, ESP will sustainably promote the required multidisciplinary character of urban health research.

CRSK

Through this new DGD-program, the pluri-disciplinary team on site will continue to be trained on research methods and guided by the principles of 'learning by doing' to conduct epidemiological and community intervention studies, qualitative research, and clinical trials. Complementarities and synergies with INRB will be encouraged and reinforced, for instance complex analysis on samples, collected at CRSK, will be performed at INRB with accompanying capacity building if applicable. Capacity development will be achieved by the same principle as at INRB, by close guidance, co-creation and co-implementation of scientific protocols with ITM. Besides performing research, through the partnership with ITM, researchers will be encouraged to compete and apply for scholarships and research funding inside ITM, such as fellowships, sandwich PhD and Master Public Health, but also within the ITM network, for example scholarships through other universities.

Finally, the HDSS-platform, put in place during the previous DGD-program is unique, being the only Health Demographic Surveillance site in DRC. This system for population data is a crucial medium for the further development of the CRSK, and therefore, data that are collected need to be reliable and of high quality. CRSK as a young institute, needs further support and training to manage the HDSS-platform in an efficient way.

The final goal of the overall programme-(sphere of interest) is to improve the health situation of the Congolese population. Through improving diagnostic capacities in reference laboratories, providing knowledge on effectiveness of disease prevention and control tools, gaining new insights within health service organisation in urban health environments and training academic and public health human resources, we contribute to this overall goal, but cannot achieve it on our own. To increase impact, partners need the collaboration of other stakeholders and consider the assumptions explained in the ToC. The connectedness among different stakeholders will continue to be pursued from the beginning, such as involving the disease control program managers from the start of the projects so that capacity building is geared towards their needs, but also research subjects are addressing needs and problems to reach disease control. Time will be taken to include this complexity, interconnect the challenges and to bring results up to scale. Communicable diseases, maternal and mental health are also addressed, especially in the urban health project –these health problems are affecting disproportionately the poorest segments of the population. By advancing knowledge and know-how, we implicitly are giving tools to support these poorest population. There is of course a gap between identifying determinants of risk and definition of most efficient control tools on the one side and the implementation of this knowledge in control programs on the other side. Through involvement of disease control program managers in the different steps of this program, we hope to decrease this gap. We are however aware that other actors need to come in, to implement control interventions in the whole population, with attention to the most marginalized ones. The MoU we are elaborating with other Belgian NGO's such as MEMISA brings us closer to operationalisation of activities, which is mainly a responsibility of the governmental and non-academic actors.

The JSF HES4SD identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's ToC through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the JSF's ToC. As highlighted in the JSF, there is no one-to-one link between the three approaches and the 6 Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined-Goals.

Description of Efficiency

Within the program we strive for efficiency for which we base ourselves on lessons learned from the past. We will continue with the fellowship scheme, put in place in 2021 in the CREDO project, in an adapted more efficient manner. Therefore, a mid-term evaluation, analyzing the functioning of the fellowships, will be done in the second half of 2021. The lessons learnt of this evaluation will feed into the implementation plan of the coming years. Secondly, the number of fellows will be reduced in order to create more time-efficiency for supervisor support. Both local fellows as sandwich PhDs might seem expensive, but they generate great impact on the individual and institutional capacities (FA4 mid-term evaluation on education and scholarships). In order to allow more collaboration and sharing of human resources and equipment across activities, we bundled activities within over-arching themes, as for example 4 themes for INRB. As much as possible, the same field sites will be used, so that we can share transport. Within the HDSS sites data-collection for studies are as much as possible coinciding with the yearly round of HDSS demographic survey, allowing us to use the same transport, human resources and saving time.

We organize as much as possible local purchases, through the local ITM office or partner institutes, except if it is more expensive or time-to-destination-consuming than purchasing goods in Belgium. At ITM in Antwerp, the purchase and shipment service handles all project orders, hence through this expertise, processes can go relatively smoothly (but a high workload at some moments remains a major challenge).

Economic aspects in DRC are difficult to foresee, because of specific conditions, such as corruption and inefficient public services (e.g. bureaucracy and corruption of customs services cause alternatives as door-to-door services to be more efficient, although more expensive). Within the program, we aim to use the expertise built in the previous years to handle these problems as efficiently as possible.

An important part of the time spent by ITM researchers in Antwerp for capacity building and supervision is not financed under this outcome, but by ITM institutional funds, as this is one of our core-activities. However, a minimal support of 20% of budget for these human resources is needed to be able to provide context-tailored capacity building.

In order to carry out project management closely and to create more flexibility, adapted to the context, a local team has been put in place in 2020, consisting of 1 representative, 1 senior scientist, 2 financial and 2 logistics staff. In addition, there are specific project-linked functions. The task of this team is to accompany local partners in both content and management aspects of the current research and education projects, to create a communication platform with other stakeholders, as well as optimize exchange between different services of ITM in Antwerp and services of the partners by being able to react more quickly to developments. As this team is better aware of local conditions and characteristics, it has a tailored approach, which is important for attracting external competitive funding for research projects that build on the capacities developed during previous and current DGD programs. The SARS-COV2 joint research in 2020 with INRB, ITM, GIZ and ENABEL can serve as an example. The local team makes it possible to optimize the expertise of ITM and to provide real added value based on a reinforced complementarity with partners and networks, such as the Hub-Santé. A new statute (Accord Siege) to operate in a clear framework of cooperation with the Congolese government, supported by the Belgian embassy, is under preparation, to simplify administrative and logistical practices. We are convinced that a small team, can ensure efficient methodological and technical guidance for the partners with limited resources in terms of time, effort and financial investment.

Description of the expected Impact

Our program is expected to have an impact on Congolese researchers in partner institutions. We know from previous programs that researchers who received support are now able to conduct research independently and can be contestants within a competitive external research funding environment. We are committed to increase gender-balanced individual capacities in research methodologies in various fields: biomedical, clinical, epidemiological, public health and social sciences. Also, in order to provide a favorable working environment in the long term for researchers, we invest in institutional strengthening (administration, logistics, support staff for infrastructure and technical maintenance). Good support services are essential for the institutions' growth towards being centers of excellence, addressing within their portfolio specific health-related questions formulated by DRC stakeholders, or bringing innovative technologies within their country, respecting the environmental preservation targeted within our activities. This program will contribute to SDG 4 to ensure inclusive and equitable quality education and lifelong learning at postgraduate, masters, doctoral and post-doctoral levels. The process of translating scientific findings into policy briefs will receive specific attention to promote the transition from research into policy and practice, bearing in mind that political commitment from government and other decision-makers is needed to progressively change disease control strategies. The participatory approach by early inclusion of stakeholders in the development of this project aims to create a virtuous circle in which their engagement will allow them to become agents and drivers of change able to provide services to society, the latter intended not as an exclusive recipient but as an embedded community able to contribute to the right to health for all (SDG3).

More details on impact on the Congolese population can be found in annex 'Responses December'.

Description of Sustainability

ITMs partnership trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making

a thorough analysis of the needs and priorities we can address capacity gaps first at the lowest level in institutional capacity strengthening programs and take it up a notch over the years in possible future programs. By carrying out the needs assessment, we ensure buy-in from both ITM and DRC partners and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration with an equal level playing field for joint research with a societal impact. The final aim is to reach the phase out, when partners are fully equipped to obtain external research or education funding. As regards technical sustainability, our aim is to pursue this path in harmony with its social and environmental implications. Firstly, the development of the clinical, laboratory and research platforms towards the long-term goal of improving the health status in DRC is based on co-creation and shared accountability of our 3 partners. Lifelong learning, PhD and master programs, innovative teaching and research approaches, a learning management system, development of learning sites, are educational and research capacities that are enabling the sustainable development and international recognition of the partner institutions. This will allow to obtain highly specialized staff -having themselves a multiplier effect. The developed platforms and poles of excellence will be the most suitable places to implement the skills acquired, thus generating capacity exchange between newly trained human resources and their institutions. Furthermore, the One Health approach promoted by the INRB-LaboVet collaboration and the development of the Centre of Excellence for Urban Health at the University of Lubumbashi (ESP) in synergy with other Belgian academic actors and Enabel, will preserve the topic of ecology within the stakeholders' agenda both in terms of identification of disease ecologies (the interaction of the behavior and ecology of hosts with the biology of pathogens as relating to the impact of diseases on populations) but also in terms of environmental health (e. g. compliance with the Nagoya protocol). As mentioned in other sections, as the program target group and partners coincide, technical, social and institutional sustainability have strong overlap. As technical sustainability includes management by and long-lasting support to the partners, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups completely control the intervention together with ITM. As regards financial sustainability, previous experience has shown that the nature of interventions varies according to the institutions and their needs. However, the scenario for action remains common to all 3 partners: minimal structural support from the government, a research sector largely financed by external funds and the institutions' internal difficulties in terms of administration. Nevertheless, the COVID-19 pandemic has brought some changes, for example INRB has been recognized in its role as reference laboratory both by international partners and the government. In addition, during the last year of implementation of the current program, another step forward has been taken by all partners by adopting a financial accounting software allowing consolidation of accounts and stricter budgetary control. The financial sustainability of our program focuses on strengthening the administrative, financial and logistics management towards a more efficient and transparent system. This in combination with a flexibility line to enable prompt reaction in case of contingencies will increase sustainability of our action.

Description of the Partnership Strategy

The partnerships between ITM and INRB, ESP and CRSK are longstanding. Each of the partners is critical to achieve the identified results, as they all have their unique expertise (cfr. Coherence). The management of these partnerships matches our capacities, and recently we have invested in a local office, ensuring closer follow-up of our collaborations. The collaboration between INRB and ITM dates from 1998 on a sleeping sickness research project; between ESP and ITM it started later through collaborations with ITM alumni, and included an education pillar, besides research and capacity strengthening. CRSK is the most recent partner, namely since 2017, when it was officially founded. This partner was known to ITM through a research collaboration on schistosomiasis, cysticercosis and Buruli ulcer with the Institut Médical Evangélique de Kimpese (IME). Besides those partnerships, there is also collaboration through them with universities, local ministries, field sites, hospitals, communities and students.

The partners participated very actively in the development of this new five-year program. At the level of the JSF-HES4SD, ITM involved its partners in the development/validation of the thematic JSF process through the general council, in which ITM's partners are represented and which discussed the thematic JSF process. At the DRC country level, face-to-face partner consultations were organized by the ITM local team and promoters of the former DGD program during field trips to discuss the content and criteria of the new DGD program, which was then also explained in a joint partner meeting early May. As the partners differ significantly in terms of core activities and geographical location, it was decided together between partners and ITM to organize the elaboration of the detailed ToC and program separately with each individual partner.

ESP was in the driving seat deciding on new topics, ToC and budgets during two multi-day workshops in Lubumbashi together with ITM staff. Both workshops were chaired by the ESP project coordinator with a vivid participation of ESP junior and senior staff. Concept notes were developed and shared with the Rector of UNILU and the Belgian Consul in Lubumbashi to assure their feedback and support. Later, these concept notes were shared with ITM staff to explore willingness and possibilities to participate in these proposals. The concept notes were also shared with ITM's partners (Memisa, Enabel, ULB-ESP, UAntwerpen-IOB) to assure coherence with their programs and discuss possible synergies. Further developments in the ToC, budget and log frame were discussed during 2-weekly meetings between ESP management team and ITM promoters.

For INRB a first consultation of ITM staff interested to be involved, together with INRB colleagues, was done in January/February to map project ideas. An important factor was the matching of local needs and expertise available at ITM. In May, the set-up of the 2022-2026 DGD program was explained and a discussion with INRB colleagues led to the identification of 3 main common

priority themes, besides an institutional strengthening axis, addressing administration, finance, logistics and project management. Afterwards each binome (INRB and ITM colleague) worked out activities and its budget. Early June, an online workshop, facilitated by ITMs development office, was organized to elaborate the ToC. During the entire process, all documents were accessible both for INRB and ITM colleagues for refinement and comments.

The development of the new CRSK program converged with the CRSK consortium (CRSK itself is a synergy initiative of 4 DRC institutions) exercise to develop its strategic plan for the coming years. This process was guided by an independent consultant and included a context, stakeholder and SWOT analysis, mission and vision reformulation and the budgeted strategic plan as such. The ITM promotor of CRSK as well as the local ITM representative participated in this exercise. The products from these workshops formed the basis for the development of the CRSK ToC and activities under this new program.

Based on the above input gathered, the ITM team developed a draft of the generic theory of change for DRC. The participation of the local ITM office assured that the plans developed for the 2022-2026 program corresponds to the maximum with the local context and the JSF DRC 2022-2026.

Within ITM's perspective on partnerships, and as explained above, we work in an equal partnership where the voice of each partner is heard. The starting point of discussions on capacity strengthening is a thorough analysis of the needs and priorities of partners, done together with the partner. The nature of interventions varies according to the institutions and their expressed needs. During the discussions on the new 2022-2026 program, we always took into consideration what had been realized in former programs. If there were existing platforms developed by the former program, the current program builds on them and aims to deepen and extend the expertise built. In the partnership, ITM will bring in some of its technical expertise in terms of research management, ICT support, financial and administrative management to build capacity within partners, but mainly ITM will introduce its scientific expertise to support the platform development and the research capacity building. Next, synergy development and networking will have an important place in the process of partners to become centers of excellences able to attract additional funding and recognition, which increases its sustainability.

Description of Synergies

One of the underlying conditions for INRB, ESP and CRSK to become recognized and sustainable Centers of Excellence in their respective domains is their embeddedness in relevant national and international networks. Hence, synergies are vital to reach this goal. Early identification of stakeholders in the change process is a premise for the construction of a shared participatory strategy for action. The benefits of stakeholder's collaboration and synergies have already been demonstrated during former programs in terms of research capacity building. For example with the Field Epidemiology Training program and the DGLM; with UNIKIN; with ARES supported actors; with Enabel and GIZ; and between ESP, INRB and the University of Rabat on "Institutional Strengthening for Evidence-Based Health Policies in the Democratic Republic of Congo" (RIPSEC), funded by the European Union, resulting in the creation of CCSC. A collaboration with CEDESURK, preferred partner for digitalization at universities of VLIR-UOS and ARES, was set-up under the CREDO program and will be continued in the new DGD program.

Complementary to the other synergies identified in this chapter, the program will indirectly contribute to the synergies identified in the JSF HES4SD. This will mainly imply contributions to the JSF as a permanent platform for exchange, coordination, concertation and collaboration. Several commitments formulated in the JSF are more institutional and related to the policy level (e.g. synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country program. Together with the other actors of the thematic JSF HES4SD we build on a shared history of effectively mobilizing the enormous potential of higher education, research and scientific cooperation for sustainable development in DRC. In this frame, we will work together to make this potentially accessible to other Belgian, local and international partners in different ways: as partners in a multi-actor partnership; as scientific advisors to projects, partners or policy bodies of other partners; as a platform for sharing cutting-edge scientific results, information, expertise and experience and for exploring possibilities for synergies and complementarity.

At the level of ESP, possibilities are explored to form synergies with VLIR-UOS and ARES partners on two levels. Firstly, for the strengthening the digitalization and ICT capacities of ESP in the field of education, synergies will be sought with the upcoming VLIR-UOS program (2022-2026; Challenges and opportunities for a sustainable socio-ecology of in the Katangese Copperbelt Area), the past ARES program (2016-2021; Programme d'appui institutionnel avec l'Université de Lubumbashi); and the former joint VLIR-ARES program UniversiTIC (2009 - 2017) at UNILU to capitalize on the digital platforms developed under these programs. Such synergy avoids duplication and opens possibilities for a better integration of the ESP educational programs in UNILU. In the project of the creation of the CESUL at ESP both the ULB-ESP and the UAntwerpen-IOB expressed commitment in principle to participate in the organization of the multi-day national conference on urban health in Lubumbashi in 2022 both in terms of content and budget. The ULB-ESP is also interested in participating to the CESUL itself, which will be further explored at the end of 2021. Synergy with other partners, such as University of Liège - CEDEM, UNIKIN, UNIKIS and UCB in the academic steering board of CESUL are being explored. The synergies of ULB and possible other VLIR and ARES partners provide opportunities to attract future collaborations in the CESUL (Research projects, PhD scholarships...). Such collaborations can contribute to the sustainable anchoring of the topic of urban health within ESP and the UNILU as well as provide opportunities for involved researchers to develop sustainable scientific career paths.

Our program is complementary to and supports the JSF DRC – objective 4 ‘improve access to health care’ and its focus on the ‘valorization of human capital’. The participation of ITM in the Hub Santé, a meeting and exchange platform between Belgian NGOs involved in the health sector where collaboration opportunities are discussed and created, is important to keep and strengthen the links, but also align with the plans of the JSF RDC and to explore possible synergies. In the last years, several themes were put forward in the Hub Santé with potential links to ITM and partners for the 2022-2026 program: (1) Digitalization of health data (also high on the agenda of Enabel) – within CRSK, ESP and INRB, digitalization of surveillance and research data are supported and training is provided; (2) Integration of Mental Health in First Line Health services - is now an integral topic of the ESP Urban Health portfolio and exchange and collaboration with other Belgian partners is already ongoing; (3) Urban health (also high on the agenda of Enabel) –as ESP is aiming to become a Centre of Excellence in Urban Health; (4) Gender – in the program a maternal health project is included in the ESP Urban Health portfolio; (6) Environment –within INRB portfolio, environmental-friendly control tools will be aimed for in the evaluation of control tools for arboviruses and CRSK included measures for waste management in their strategic plan; (7) Epidemics – the capacity building program at INRB will focus on emerging and re-emerging diseases causing outbreaks, collaboration with other Belgian health actors is a logic consequence; (8) knowledge management and translation – the inclusion of CCSC in the ESP program provides the possibility to support the other Hub Santé partners, for example the proposition of MEMISA to support the documentation and capitalization of their experiences to aim for translation of knowledge into policy. Two possible partnerships are already discussed to a more advanced stage. Firstly, the Kinshasa office of Enabel expressed its interest in participating in the organization of the National Conference on Urban Health in 2022, more specifically in financing the participation of policy makers and in participating in the scientific organizing committee. Furthermore, they will be invited to participate in the steering committee of CESUL. Secondly, a MOU is being elaborated between Memisa, Artsen Zonder Vakantie, Ketten Van Hoop België and ITM to seek win-win situations and complementarity aiming for better coherence, synergy and efficiency of health systems strengthening interventions to improve the quality and availability of care for the well-being of vulnerable populations.

Synergies on international level with other ITM-DGD partners are also being promoted within the current program. Already identified themes are: sustainable cities, next genome sequencing, Urban maternal Health and analysis of routine data for improved control strategies; alongside the program others can be identified.

Another synergy of the program is CRSK, which is a consortium of 4 partners, taking up the mission to realize health research for a better health of the DRC population. The consortium is composed of: The Protestant University of Congo, the Pharmacovigilance Unit of UNIKIN, the Evangelic Medical Institute of Kimpese (IME) and the NGO SANRU (Primary Health care in Rural Areas). In the DGD Rwanda-ITM program, diagnostic support for TB patients in Eastern DRC (Bukavu) will be included, per agreement with the National TB Programs of Rwanda (Head- Dr. Migambi) and DRC (Head- Dr. Kaswa).

A continuous synergy within the ITM – DRC collaboration, is the inclusion of two partners within the second DRC outcome on “sleeping-sickness” together with PNLTHA.

In portal onder Synergies' zin toegevoegd: More concrete synergy activities with ENABEL and Memisa in annex 'Responses December'.

Description of how individual or collective recommendations and lessons are to be taken into account

Former programs highlighted the need for adaptive management. Therefore some adaptations were made in the current proposal: (1) having a restricted number of ‘expected results’ with interrelated inter-disciplinary activities, and variable intensity of activities over time, and (2) set-up of a ‘flexibility fund’ for INRB, reserving 5% of budget to enable to set up research activities in response to epidemics. A light procedure will be used to do quick assessments and take decisions. The currently existing local ITM office will be continued to provide needed support and be reactive following contextual evolutions. In the past, projects being often too individual-based, there was a risk of failure due to absence of individual because of studies abroad or re-direction towards outbreak. Current activities will be assigned to a group and been interlinked with other research topics.

Weaknesses of partners in logistics management are being addressed by the inclusion of a logistics support in the local ITM team with the role to organize logistics services and train staff of partner institutions.

Synergy with other public DRC institutions is not always easy, hence in the current program we include such collaborations with ‘complementary actors’ from the start of the program, such as the capacity strengthening of MoH staff in field sites for improved analysis and use of routine data to better target control interventions.

We noticed that too few young scientists get research opportunities, and that it is difficult to identify the right strong PhD candidates. Hence, in the CREDO project we started with a ‘fellowship scheme’, to let young professionals experience research and have their capacities strengthened participating in a specific research project. We will continue this in our program, which will allow us to identify over the 2-year fellowships young academics with a growth potential, ready to start a PhD.

Evaluations of former programs ([see FA3-II evaluation](#)), expressed lack of attention to valorization of knowledge and translating

evidence, generated in the program, into policy and practice of DRC health sector. Therefore, we identified to work with CCSC, an institution created with ITM support in the RIPSEC program and linked to ESP with a mandate to summarize evidence and preparing policy briefs for the national health authorities. A modality will be worked out, for CCSC to give such support to the other partners. Through its focus on GRIPP, ITM will strive to maximize this aspect in the program, and will establish the preconditions to learn more about the best possible strategies to achieve this (a.o. through indicator development, and as main topic of the mid-term evaluation of the ITM DGD program 2022-2026. Furthermore, as recommended in the JSF, Strategic Dialogue and learning pathways, this program has also foreseen a specific context analysis (complementary to generic one in JSF), risk management and stakeholder analysis.

To be able to attract external competitive research funding, the existence of high-level technological platforms and know-how are important. This was shown for the antibiotic resistance platform. Besides the platforms realized in the CREDO program, the current program will extend to methodological platforms and will be supplemented with the installment of a 'project management office' at INRB.

To become an internationally recognized actor, partners need be involved in international exchange and collaboration networks. In the previous program a tri-lateral project between Cuba, DRC and Belgium existed, in which INRB entomologists were trained by internationally recognized Cuban experts. This will be now extended to a larger network based on the same principle: to learn from each other's experiences and strengths and identify together how expertise can be shared in an efficient and sustainable way. Past evaluations showed us that this type of South-South exchange works well to enhance learning. (FA3-II).

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
FrameCollaborationBTC-ITG ALLsigned_20161007	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FrameCollaborationBTC-ITG%20ALLsigned_20161007.pdf
RA_ITM_RDC_OC1_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_RDC_OC1_22-26.pdf
TOC_ITM_RDC_OC1_22-26_MARCH	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2022-03/TOC_ITM_RDC_OC1_22-26_MARCH.pdf
Country_Map_ITM_RDC_OC1_22-26	Country map showing the location of the intervention zone	https://fundhub.openaid.be/sites/default/files/2021-07/Country_Map_IRM_RDC_OC1_22-26.pdf
FACTSHEET_ITM_RDC OC1_22-26_CRSK	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_RDC%20OC1_22-26_CRSK.pdf
FACTSHEET_ITM_RDC OC1_22-26_ESP	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_RDC%20OC1_22-26_ESP.pdf
FACTSHEET_ITM_RDC OC1_22-26_INRB	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_RDC%20OC1_22-26_INRB.pdf
RESPONSES_DECEMBER_ITM_OC1_RDC	Other	https://fundhub.openaid.be/sites/default/files/2022-03/RESPONSES_DECEMBER_ITM_OC1_RDC.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The OC1 operational budget (total budget minus ITM staff and minus ITM local office) is distributed as follows: 64,56% for activities with partner INRB, 22,53% partner CRSK and 12,91% partner ESP.

The division between budget categories is 5 % for investments, 22% for HR and 73 % for operational costs.

The investment costs are low, because in 2020-2021 the CREDO project invested in laboratory equipment and research infrastructure, hence in the current program, capacity building on the use of these platforms will require mainly consumables and time of human resources. Also in the category of operational costs is included the costs linked to field studies, which form an important part of the research capacity strengthening projects.

In DRC, ITM has a local office with 3 to 4 scientists and supporting staff for administration, finance and logistics. This office serves both OC1 and OC2 DGD programs, but also other ITM projects in DRC. It is co-financed by OC1 for 1.5 million EURO in total over the 5 years.

25,37% of the budget is dedicated to ITM staff to assure scientific support to the implementation of all program activities. (The equivalent of technical assistance provided by cooperants in other development cooperation projects). This amount covers only a fraction of the real time ITM staff dedicates to the program.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome**List of partnerships for the outcome**

Acronym CRSK

Full name Centre de Recherche en Santé de Kimpese

Budget available

2022	2023	2024	2025	2026	TOTAL
319550	351400	328200	230200	158300	1387650

Acronym ESP

Full name Ecole de Santé Publique-Université de Lubumbashi

Budget available

2022	2023	2024	2025	2026	TOTAL
169568	154908	155408	161308	158808	800000

Acronym INRB

Full name Institut National de Recherche Biomédical

Budget available

2022	2023	2024	2025	2026	TOTAL
534690	520530	496070	438240	392890	2382420

List of cooperative partnerships for the outcome**Budget available**

2022	2023	2024	2025	2026	TOTAL
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Support to Interruption of Transmission of Human African Trypanosomiasis (HAT) by 2030

Contacts

Contact details for the outcome's ANGC reference person in Belgium

Name :	EPCO Hasker
Telephone :	+32 324 76 07 26
Email :	ehasker@itg.be

Contact details for the outcome's ANGC reference person or their representative in the field

Organization :	ITM
Name :	Inge Van Cauwenberg
Telephone :	+243 97 45 71 632
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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Support to Interruption of Transmission of Human African Trypanosomiasis (HAT) by 2030		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-2-CD		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Congo (the Democratic Republic of the)		
Sector :	12250 - Health - Infectious disease control	Budget share :	100%

Other CSOs/IAs involved

N/A

Strategic target involved

5. Co-creation, transfer and application of relevant know...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

General objectives

N/A

Geographic location of the outcome's intervention zone

République Démocratique du Congo

Lat/Long :	15.274355, -4.432204
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Outcome summary

Description of the outcome

The present intervention supports the control of Human African Trypanosomiasis (HAT or sleeping sickness) in DRC, which mainly affects the rural poor. The intervention will contribute to Belgium's international commitment, which, together with BMGF, took the lead in 2017 to eliminate sleeping sickness. Combined with other interventions in support of HAT control, this support should lead to the interruption of HAT transmission by 2030. In contrast to other interventions in the multi-year program between ITM and DGD, research will be limited. However, the expected impact on the population is high and the lessons learned could also be useful for the Congolese health system.

Following the declining prevalence of the disease in the last years, strategies must be adapted to allow further progress. The introduction of more targeted and diverse approaches applied through this intervention, will increase the chance to detect remaining hotspots of transmission and increase insight in the remaining disease transmission. Innovative strategies that are adapted to specific contexts will enable to achieve a better coverage, which is a key element in ensuring that elimination of transmission can be reached. At the same time, quality assurance will be reinforced.

Wording of the outcome

The objective of this intervention is to assure access to quality care concerning human African Trypanosomiasis (HAT), for all people in DRC at risk by 2026 This should enable interruption of HAT transmission by 2030, which is the general objective of all interventions in support of HAT control in DRC and the goal of the WHO roadmap for HAT.

Target groups

The project targets the Congolese institutions PNLTHA, INRB and CRSK, and existing staff, ensuring that men and women get equal chances to become agents of change whilst benefitting from capacity development activities. To a lesser extent, also other directions of MoH and provincial health authorities as target groups.

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 1. End poverty in all its forms everywhere	SDT :	By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	0
10. HIV / AIDS :	0
11. Children's Rights :	0
12. Disability :	0

13. Nutrition :	0
1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	No
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	No

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Education

In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

In our programme we focus on interinstitutional cooperation with university actors. Through the provision of scholarships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Development education

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate. Sleeping sickness is transmitted by tsetse flies which require specific conditions for survival. Changing environment may have an influence on the density of flies, with a potential impact on the flies. However is this intervention, no activities will be conducted that can have an impact on the tsetse fly population.

Gender

The programme will approach gender equality applying a gender mainstreaming approach (cf. Gender strategy). Respecting gender values and principles will be the guiding principle for all decisions and activities conducted within the framework of the HAT program. Gender balance will be taken into account at all levels in the partner institutions: staff involved in the project, beneficiaries of training, services, etc. At no time will discrimination be made on the basis of gender. Positive discrimination in favor of the female gender will be encouraged in the recruitment procedures in case of equal competencies.

In the selection of staff of PNLTHA, INRB and CRSK, that benefit training sessions or that eligible for obtaining a fellowship, an MSc or PhD degree, the gender issue will be part of the selection criteria. The JSF has identified the challenge to ensure gender balanced & inclusive selection of competent scholarship candidates, as a major risk. In the past, this balance was an important point of interest within the partnership with PNLTHA, INRB and CRSK and will remain so.

In DRC, women and children already tend to use more the health facilities than the male population. Also, the introduction of oral treatments is expected to have an impact, as this will remove some barriers of accessibility to treatment closer to home.

As stipulated in the JSF HES4SD, the focus will also be extended to equity and diversity. In the present program, screening

activities will focus on active screening through mobile teams. Action research will be applied to identify the most appropriate approaches to ensure that the population most at risk is reached. PNLTHA records disaggregated data for the population that participates in such voluntary HAT screening by mobile teams for gender. There are indications that young adult males are the group that participates least in these screening sessions, while they might be at higher risk because of their occupations.

Digitalization - Digital for Development D4D

Digitalization is an important asset to obtain the expected outcome. Data provide the basis for almost any development and humanitarian intervention. They allow for objectively describing the situation or the problem that one will address.[...] Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. [...]Data is also needed to keep track of a country's progress towards the SDGs. (DGD strategy paper D4D). In our intervention, we use data to select appropriate strategies, to improve monitoring, to apply quality assurance and for decision making.

Health

The intervention and the HAT program are the most important program of the international HAT community. Through its partner institutions PNLTHA, INRB, CRSK and collaboration with other directions of MoH, it aims to strengthen the health system of DRC. Accessibility of quality diagnosis and treatment of the disease are the main outcome of the intervention. The integration of gHAT , a neglected disease is integral part of the overall strategy, even if this is not specifically tackled in the present intervention

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

The program will fully take into account that the right to health and health care is a universal human right, as defined in the Universal Declaration article 25:

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Elimination of disease can only be reached if the principles are based on leaving no one behind. Therefore, the population at risk in remote areas will be a specific target for activities conducted in the framework of this program. Through appropriate active screening approaches, even those living in remote areas should be reached.

Ethics is high on the agenda of ITM and is integrated in the partnership development with the Congolese partner institutions. ITM has been mandated by MoH for data sharing of HAT but this is handled with care with respect to GDPR. In 2021, ITM conducted training sessions to strengthen ethics review capacities in collaboration with UNIKIN and the National Ethics Committee of DRC. Participants included representatives of UPC and IME, which are partners of CRSK.

Through the HAT program, we strengthen the capacity of duty bearers to ensure the right to health for all by supporting their national program on HAT elimination.

Decent and sustainable work

ITM adheres to the principles of decent work put forward in the JSF, i.e.:

- productive and freely chosen employment;
- which provides an income sufficient to cover family needs;
- which includes social protection;
- which respects fundamental rights at work, including freedom of association and the right to participate in collective bargaining agreements;
- which includes equal treatment of all workers without making any distinctions based on sex, age, origin, political or religious beliefs;
- which includes health and safety provisions in the workplace.

In the framework of gHAT control, attention for safety and decent insurance mechanism is of particular relevance, considering the geographical distribution of remote affected villages. ITM also applies health and safety provisions for laboratory work, and encourages the partner institutions to apply similar processes.

Gender

Respecting gender values and principles will be the guiding principle for all decisions and activities conducted within the framework of the HAT program. Gender balance will be taken into account at all levels in the partner institutions: staff involved

in the project, beneficiaries of training, services, etc. At no time will discrimination be made on the basis of gender. Positive discrimination in favor of the female gender will be encouraged in the recruitment procedures in case of equal competencies. In the selection of staff of PNLTHA, INRB and CRSK, that benefit training sessions or that eligible for obtaining a fellowship, an MSc or PhD degree, the gender issue will be part of the selection criteria. The JSF has identified the challenge to ensure gender balanced & inclusive selection of competent scholarship candidates, as a major risk. In the past, this balance was an important point of interest within the partnership with PNLTHA, INRB and CRSK and will remain so.

In DRC, women and children already tend to use more the health facilities than the male population. Also, the introduction of oral treatments is expected to have an impact, as this will remove some barriers of accessibility to treatment closer to home. As stipulated in the JSF HES4SD, the focus will also be extended to equity and diversity. In the present program, screening activities will focus on active screening through mobile teams. Action research will be applied to identify the most appropriate approaches to ensure that the population most at risk is reached. PNLTHA records disaggregated data for the population that participates in such voluntary HAT screening by mobile teams for gender. There are indications that young adult males are the group that participates least in these screening sessions, while they might be at higher risk because of their occupations.

Environment

The implementation of the KLIMOS toolkit screening guide adapted to ITM, revealed that the impact of the intervention on the environment and climate will be minimal. Attention will be paid on the treatment of waste in INRB and CRSK, but relevant activities to tackle this issue will be conducted outside this intervention.

Vector control is not part of the activities of this intervention but part of the broader program coordinated by ITM. With respect to biodiversity, the program does not intend to eliminate tsetse flies but only to temporarily reduce the tsetse density to interrupt transmission of T.b. gambiense. It is expected that following the end of vector control activities, the fly density will increase again.

Until recently vector control activities in the framework of HAT control have been limited. However, there are indications that the overall density of tsetse flies in DRC is declining (independently from vector control), but evidence based data are lacking. A possible explanation could be that environment is changing impacting the conditions (including temperature, humidity) required for tsetse flies to flourish. The impact of this effect could be a further decline of HAT transmission.

Common outcome within a common programme

N/A

Common outcome between distinct programmes

N/A

Areas of complementarity and synergy with the intervention of ENABEL

Enabel has an important health program in DRC. It is closely involved in the ongoing health system reform process in DRC and is active in provinces that are endemic for HAT. Between 2000 and 2013, Enabel's predecessor BTC was the implementation agency for the support of HAT control in DRC, before this task was transferred to ITM.

In the framework of Belgium taking the lead in the elimination agenda, Enabel joined ITM in preparing an additional project, referred to as "HAT+" project. Enabel was meant to be the partner in charge of the integration of activities in the primary health care system. This should allow the switch from a mainly vertical approach through mobile teams and a parallel network of diagnostic and care centers specifically for HAT (managed by PNLTHA) to a more integrated approach with more efforts to detect HAT cases through screening via the fixed general primary and secondary health care structures. Following diplomatic tensions between Belgium and DRC, the signing of the subaward between ITM and Enabel was delayed and, when finally signed, the start-up of activities was slow. It is expected that Enabel will continue to implement HAT activities in the following years in DRC, through the HAT+ project through a subaward with ITM.

There is a direct link with the results achieved via Enabel, because each confirmed HAT case detected through the primary health care system (passive screening) should trigger reactive screening, which is part of the present intervention.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	Access to quality care of gHAT for all people at risk
Indicator title :	OC1 - Percentage of endemic & historic HAT foci that are covered by active screening
Indicator description :	Percentage of endemic & historic HAT foci that are covered by active screening. Percentage is ascending over the course of the program. SoV: Reports PNLTHA - electronic database

Baseline :	30
Target Year 3 - 31/12/2024 :	60
Target Year 5 - 31/12/2026 :	80

Formulation of outcome or result :	R1 - Effective coverage of all provinces at risk for HAT is ensured in DRC
Indicator title :	R1.1 - Number of people screened annually (disaggregated by province, area of residence, screening strategy)
Indicator description :	Number of people screened annually (disaggregated by province, area of residence, screening strategy) Quantitative indicator, absolute number, cumulative over time, ascending. SoV: reports PNLTHA - electronic database
Baseline :	700000
Target Year 3 - 31/12/2024 :	900000
Target Year 5 - 31/12/2026 :	900000

Indicator title :	R1.2 - Number and % of positive tests (serological, confirmation) by province and area of residence
Indicator description :	Quantitative indicator, showing progression over time, descending percentage of positive tests. SoV: reports PNLTHA - electronic database
Baseline :	0,5% CATT+
Target Year 3 - 31/12/2024 :	<0,5% CATT +, of which <5% confirmed
Target Year 5 - 31/12/2026 :	<0,5%CATT+, of which <3% confirmed

Indicator title :	R1.3 - % of detected cases treated for HAT (as per guidelines)
Indicator description :	Percentage of cases, ascending, average over the years. SoV: reports PNLTHA - electronic database
Baseline :	100
Target Year 3 - 31/12/2024 :	100
Target Year 5 - 31/12/2026 :	100

Formulation of outcome or result :	R2 - A quality assurance system on gHAT is operational in DRC
Indicator title :	R2.2 - % of gHAT seropositive and confirmed cases documented by picture or video, as per algorithm (by province)
Indicator description :	Percentage of documented, confirmed cases through algorithm, per province, ascending, average over the years. Baseline = 0 because not yet applied. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	60
Target Year 5 - 31/12/2026 :	90

Formulation of outcome or result :	R2 - A quality assurance system on gHAT is operational in DRC
Indicator title :	R2.2 - % of samples collected as per quality assurance protocol (by province)
Indicator description :	Percentage of samples, ascending, average over the years. Baseline = 0 because not yet applied. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	50
Target Year 5 - 31/12/2026 :	80

Indicator title :	R2.3 - % of false positive or false negative results identified by internal quality assurance
Indicator description :	Percentage of false results, average over the years. Baseline = 0 because not yet applied. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	TDB - no target, trend to be followed
Target Year 5 - 31/12/2026 :	TDB - no target, trend to be followed

Formulation of outcome or result :	R3 - The management and logistic capacities of PNLTHA are strengthened
Indicator title :	R3.1 - Weeks of stock-outs of screening tests per year in PNLTHA Kinshasa
Indicator description :	Weeks of stock-outs of screening tests per year in PNLTHA Kinshasa. Currently no accurate data available, but lessons learned show stock-out. Aim is to have no stock-outs anymore. Quantitative indicator, descending over the years. SoV: reports PNLTHA - electronic database
Baseline :	Observation - stock-outs exist - no accurate data available
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	0

Formulation of outcome or result :	R3 - The management and logistic capacities of PNLTHA are strengthened
Indicator title :	R3.2- weeks of stock-outs of confirmation tests per year in PNLTHA Kinshasa
Indicator description :	Weeks of stock-outs of confirmation tests per year in PNLTHA Kinshasa. Currently no accurate data available, but lessons learned show stock-out. Aim is to have no stock-outs anymore. Quantitative indicator, descending over the years. SoV: reports PNLTHA - electronic database
Baseline :	Observation - stock-outs exist - no accurate data available
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	0

Formulation of outcome or result :	R3 - The management and logistic capacities of PNLTHA are strengthened
Indicator title :	R3.3 - Percentage of all staff performance assessed through performance based system
Indicator description :	Percentage of all staff performance assessed through performance based system. Quantitative indicator, average over the years, ascending. Baseline = 0 because the performance system is not yet in place. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	60
Target Year 5 - 31/12/2026 :	100

Formulation of outcome or result :	R4 - INRB is an efficient national and international reference center for HAT diagnosis
Indicator title :	R4.1 - Number of HAT tests conducted per year, by type (trypanolysis, ELISA, PCR)
Indicator description :	Number of HAT tests conducted per year, by type (trypanolysis, ELISA, PCR) Quantitative indicator, absolute number, cumulative over years, ascending. Baseline = 0, we start count for the program period. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	5000
Target Year 5 - 31/12/2026 :	10000

Formulation of outcome or result :	R4 - INRB is an efficient national and international reference center for HAT diagnosis
Indicator title :	R4.2 - Number of training sessions for laboratory staff conducted per year
Indicator description :	INRB is an efficient national and international reference center for HAT diagnosis. Quantitative indicator, cumulative over years, absolute number, ascending. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	12
Target Year 5 - 31/12/2026 :	17

Formulation of outcome or result :	R4 - INRB is an efficient national and international reference center for HAT diagnosis
Indicator title :	R4.3 - Number of mAECT tests produced and dispatched per year
Indicator description :	Number of mAECT tests produced and dispatched per year Quantitative indicator, cumulative over years, absolute number, ascending. SoV: reports PNLTHA - electronic database
Baseline :	6000
Target Year 3 - 31/12/2024 :	12000
Target Year 5 - 31/12/2026 :	12000

Formulation of outcome or result :	R5 - CRSK is developed as a regional diagnostic center for HAT
Indicator title :	R5.1 - Number of HAT tests conducted per year (by type)
Indicator description :	Number of HAT tests conducted per year (by type) Quantitative indicator, cumulative over years, absolute number, ascending. SoV: reports PNLTHA - electronic database
Baseline :	0
Target Year 3 - 31/12/2024 :	4000
Target Year 5 - 31/12/2026 :	8000

Activities, targets groups and beneficiaries

Classification of activities

The main activity types to reach the overall goal can be summarized as follows:

- Support to control activities to eliminate disease

The support to HAT control activities will focus on the implementation of active screening of population at risk.

- Platform development

The platform development implemented in the previous framework agreements with PNLTHA, INRB and CRSK will be further developed and serve as base for quality assurance, operational research, action research and strategy development. The platforms include data management, regional and reference laboratories.

- Research

Research activities conducted within the framework of this outcome, will focus on action research. The platforms developed in the previous decade within the Congolese partner institutions will be an important asset.

- Getting research into policy and practice

The control and research activities will be used to provide feedback for the assessments of HAT control policies not only in DRC but also for the policies of WHO.

- Synergy

Networking will be further developed between Congolese partner institutions, international organizations (WHO, DNDi, Find,), actors of multilateral and bilateral cooperation (e.g. Enabel, EU) and NGOs.

- Education

Possibilities will be offered to promising young scientists for training, to obtain postgraduate degrees and to boost their careers (e.g. fellowship).

Target group(s)

The project targets the institutions of PNLTHA, INRB and CRSK. It will target existing staff and ensure that men and women get equal chances to become agents of change, benefitting from capacity development activities. To a lesser extent, also other directions of MoH and provincial health authorities are considered as targeted groups.

Beneficiaries

The ultimate beneficiaries will be the total population at risk for HAT in DRC, i.e. the rural poor, including those in the most remote areas.

As increased capacity of laboratories established in the framework of HAT control could also facilitate the diagnosis of other diseases, the HAT program could also benefit a population not infected by HAT.

Title of the reference annex :	TOC_ITM_DRC_OC2_22-26
Title of the reference annex :	RA_ITM_DRC_OC2-22-26

Description of the Relevance

In contrast to most other interventions of the new multiyear program between ITM and DGD, the present project focuses on direct support of disease control, rather than research activities. Research will be limited to action research. The consequence is that the ambitions and potential impact are much higher.

Support to the elimination of HAT, is in line with the Sustainable Development Goals (SDG) to end poverty and inequality. It supports SDG 3 "Ensure healthy lives and promote well-being for all at all ages" and focuses on target 3.3 "Infectious diseases". The latter stipulates to end by 2030, the epidemics of AIDS, tuberculosis, malaria and neglected diseases, and to combat hepatitis, waterborne diseases and other communicable diseases. HAT is one of the NTDs and as one of two main donors of gHAT control, Belgium plays an essential role in reaching target 3.3.

As the HAT control activities directly affect the rural poor, the project also adheres to Goal 1. "End Poverty in all its forms everywhere". The selected strategy of the project should enable to reach even the most difficult accessible areas.

Also Goal 17 "Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development" is certainly relevant. ITM plays a major role in facilitating the collaboration between Congolese stakeholders, international agencies and academic institutions to increase the probability of reaching the ambitious outcome.

The intervention contributes to realize international commitments of Belgium, which has signed the 2012 London Declaration on NTDs and has taken the lead in the elimination of HAT, in 2017. The project also contributes to the implementation of the MoU of 2018 between Belgium and BMGF, aiming at the provision of complementary and matched funding. At the official launch of the new WHO Road Map for NTDs in January 2021, Belgium renewed its commitment to lead the HAT elimination agenda and to guarantee production and availability of HAT diagnostic tests (<http://bit.ly/Launch-NTDRoadmap2030>). In her policy statement to the Belgian parliament at the beginning of her tenure (doc 55 1610/018, beleidsverklaring internationale solidariteit), Minister Kitir stated that accessibility to health care and support to health systems are key. She ensured partners that HAT remains a priority of her agenda. Hence, this project contributes to international visibility of Belgium.

In previous years, the combination of support projects enabled an acceleration in the decline of gHAT prevalence in DRC. In 2019, only 613 gHAT cases were reported for about 3 million people screened and the proportion of gHAT cases reported from DRC is declining compared to cases reported from surrounding countries (Fig. 2). In the period 2016-2020, gHAT cases have been reported in 189/516 health districts (compared to 219 in 2015). The number of affected health sub districts and villages is now declining rapidly, as are the numbers of cases reported per village, in villages still considered endemic. Hence the gHAT program is considered as on track.



The strategic orientations of the new project fully adhere to the WHO guidelines of HAT control, recently expressed in the WHO Road Map for Neglected Tropical Diseases (NTD) for the period 2021-2030. The specific target of WHO is the outcome of this program, i.e. Interruption of HAT transmission by 2030. It takes into account the guiding principles to accelerate progress and is based on the recommended strategies. It is in line with the new shift in approaches to addressing NTDs, putting more emphasis on impact orientation, holistic approaches and country ownership. The activities proposed are in line with the HAT control strategy of DRC, which is fully based on the guidelines of WHO. They only cover part of the strategy but this gap will be compensated via other HAT support projects coordinated by ITM (e.g. integration in the primary health care system). On the other hand, this intervention is the main support to INRB for its HAT activities as national reference center. The results of activities will be used to provide feedback to the policy makers of DRC. It is in line with the MoU of 17 Sep 2019 between Belgium and DRC, stipulating that the support to NTDs will increase through the projects led by ITM.

The DRC (health) authorities fully support the HAT elimination agenda, and have expressed this at numerous occasions (e.g. high level meetings at WHO, francophone summit in Erevan,...). The funding for HAT control activities in DRC and other affected countries mainly comes from Belgium and BMGF. The contribution of DRC is limited to payment of salaries and existing office and health facility infrastructure. Considering the huge challenges in the health sector of DRC, it is logical that DRC focuses on health priorities with a larger current disease burden and not on the few hundreds of new cases of HAT reported annually,

despite the possibility of resurgence. This means that HAT control is dependent on external funding.

Although women and children are not considered the population most at risk for gHAT, also this group will have easy access to appropriate diagnosis and treatment. The digital tools developed allow the collection and analysis of sex-specific data. The project will assure that female staff of PNLTA, INRB and CRSK are empowered. The project will not have an impact on the environment nor the climate. In contrast, the changing environmental context (e.g. wood cutting) and climate may have an impact on the tsetse fly densities and potentially on the transmission of disease.

The approach is in line with the strategy of ITM and the Thematic JSF HES4SD. In the partner institutions, ITM invests in human resources, technical platforms, collaborations, and management so that they are better armed to conduct program monitoring and research autonomously and propose evidence-based solutions to health priorities in DRC. These enhanced capacities of the partner institutions will impact health policies in the DRC. The research supported by ITM focuses on relevant and current health problems in order to propose efficient solutions for the control of communicable diseases and other priority health problems. The strategic orientations and activities are expected to contribute to all strategic goals defined in the joint strategic framework for “Higher Education and Science for Sustainable Development”, which are part of the framework agreement between ITM and DGD, i.e.:

1. Increased individual capacity
2. Enabling individuals to act as change agents
3. Increased capacity of Higher Education and Science Institutions
4. Enabling Higher Education and Science Institutions to operate as drivers of change
5. Co-creation, transfer and application of relevant knowledge
6. Science-society interface strengthened

To reach these goals, attention will be paid to a variety of domains, including technical issues, strategy and service delivery challenges and enablers.

ITM has developed partnerships with PNLTHA, INRB and CRSK for more than 20 years, whereby capacity development at all levels (individual, organizational and institutional) always was an integral part of the support. In the following years the collaboration will be further developed in line with evolving roles and mandates of these institutions. As the elimination becomes closer, the expertise needs of PNLTHA will change and lead to less but more specialized staff. The tasks requested from INRB and CRSK will also change in line with the changing context and strategies. Hence also the capacity development support to these institutions should change.

Description of Coherence

The HAT program has a tradition to constantly look for internal and external coherence.

External coherence with other HAT interventions is ensured by coordination mechanisms at national and international level. There is exchange between the national programs of affected countries, led by WHO, involving PNLTHA, INRB and ITM. All relevant organizations are represented in the expert groups set-up by WHO (e.g., Diagnostic Technical Advisory groups). At national level, HAT partner meetings alternatively organized by WHO, PNLTHA and ITM serve as discussion forum and coordination mechanism for the actions of the different actors (including research indirectly influencing control activities). Lessons learned in one HAT support intervention are taken in to account in other interventions. A good example is the use of digital tools, developed through financial support of BMGF, but currently also expanded to the mobile teams supported by Belgian and WHO funds.

ITM ensures a clear division of labor between the different HAT interventions it coordinates (see annex). This enables geographical coverage of the different strategies.

Some issues cannot be tackled only via HAT interventions coordinated by ITM. This is the case for the expansion of passive screening. Several implementation organizations already expressed interest to integrate HAT within their activities. In previous years challenges such as availability of tests, impeded progress, but this issue should be resolved by now. Although this project will mainly focus on active screening, the effectiveness of passive screening implemented by other HAT interventions will influence the performance of reactive screening, a strategy that is integral part of the present project. On the other hand, if coverage by passive screening cannot be rapidly increased, active screening should fill the gap.

As mentioned above, investments in digital tools increased the potential of HAT data management. An important challenge for the coming years is to ensure compatibility between the data management system for HAT and the national health information system (SNIS) for primary health care. The SNIS of DRC uses the District Health Information System 2 (DHIS2). This tool, developed in Norway and supported by WHO, is recognized as state-of-the-art for national health information systems. The health districts have been equipped with satellite internet connections but in practice this system does not yet work as was foreseen. It is obvious that the digital information of the HAT program should be linked to the DHIS2, but there is still some way

to go.

Internal coherence is ensured by the set-up of mechanisms to ensure better use of developed capacity and equipment. Examples in the recent past include the logistic support from PNLTHA to INRB to combat COVID-19, and support of CRSK to PNLTHA for HAT surveillance in Kongo Central province. The laboratory capacity of INRB and CRSK can also benefit other (emerging) diseases.

The program will contribute to support the HAT sample biobank set up by WHO at the *Institut Pasteur* in Paris. This biobank is available for researchers to facilitate the development and validation of diagnostics. However, with declining prevalence, it becomes harder to replenish this biobank.

The present five-year program is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programs and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy.

Within the thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved.

Description of Effectiveness

The objectives are very ambitious because very few infectious diseases have been eliminated in the past. The monitoring activities of recent years indicated that the HAT elimination process is on track, but effectiveness remains a major concern. The elimination initiative requires a pragmatic and flexible approach that takes into account the rapidly changing epidemiological context, allowing for the rapid integration of new and innovative techniques and strategies. Experience with elimination of other diseases has shown that a holistic approach is most opportune, i.e. a strategy that uses all available tools for improvements in diagnosis, treatment, vector control and surveillance, although the precise impact of these strategies is not (yet) known. However, which approaches to combine should be adapted to the local context taking into account the many parameters that play a role (e.g. geographical accessibility, degree of endemicity, quality and accessibility of health structures, security, etc.).

The continued focus on improved data management is an essential part of the elimination strategy which should allow to make evidence based decisions, to quickly adapt strategies and take into account the local context. Scientific understanding will be a continuous concern to be able to appropriately react to new challenges, including not targeted effects. Special attention will be paid to diagnostics not only to ensure that they are available but also that the right tests are used in the right circumstances.

Feasibility of interruption of HAT transmission will also depend on whether the diagnostic results are reliable. To successfully complete the endgame of HAT elimination, we should make sure that all HAT cases are detected and that under-diagnosis is avoided. But we also should prevent over-diagnosis. Even if once a non-toxic single dose treatment is available, treating false positives may not be an issue anymore, it still is a problem with the treatments currently being used. But more important for the future, further actions taken to contain a presumed outbreak are costly and should not be triggered by false alarms. This stresses the need for a well-functioning quality assurance (QA) system of diagnosis.

A quality assurance (QA) system of diagnosis is the sum of all activities and procedures undertaken to improve the quality and usefulness of diagnostic results. It includes training of personnel, purchase and maintenance of equipment and reagents, the analytical process, reporting and interpretation of results (WHO, 1996). QA has been gradually introduced at PNLTHA and is an iterative process. In the end, a QA system of diagnosis should increase reliability of reported presence or absence of parasites in humans, but the system intends to take into account all steps of the process, starting from purchase of diagnostics until their use in the field and in the laboratory. The QA system of HAT diagnosis comprises four elements: i) Quality Control (QC), ii) Internal Quality Assessment, iii) External Quality Assessment (EQA) and iv) Standard Operation Procedures (SOP). PNLTHA, INRB, CRSK and ITM all have an important role to play in the implementation of the QA system for diagnostics. ITM designs together with the other partners the QA system and will ensure external quality control for tests performed or manufactured at INRB. INRB, as HAT reference laboratory, will be responsible for HAT diagnostic training and external quality control of tests performed in the field or CRSK. CRSK will perform external quality control on field samples. PNLTHA will coordinate implementation of QA by all mobile teams, contribute to trainings and perform quality control as expert reader of the the video and pictures uploaded by the field teams.

The results obtained in the framework of HAT also have an effect on other diseases. A strengthened presence of ITM in DRC will accelerate the establishment of joint research projects, as well as the strengthening of the partners' capacities. The in-country presence will allow us to exchange more efficiently and flexibly with partners who have profound expertise in emerging diseases (e.g. Ebola) and as a result to act more effectively in a time when rapid action counts more than ever.

The monitoring of the specific results included under this component of the gHAT elimination effort are presented in the section

on the description of results. Baseline information is collected at the level of PNLTHA and other partners, through their databases.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. In casu the partnership with PNLTHA, INRB and CRSK to eliminate gHAT. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals

Description of Efficiency

In an elimination context, the concept of "efficiency" is somewhat tricky. Experiences in other diseases have shown that in order to be effective, some overlap of approaches is required to ensure that no cases are missed, that treatment is effective and that vectors do not get the chance to infect new individuals.

However, this reflection should not impede the implementation of a "rationalization process", already started but which could be improved. In particular in the framework of the BMGF support new approaches have been tried out to reform the active screening by mobile teams. Innovations included the introduction of motorcycles instead of 4 wheel drive cars, a reduction of the number of staff, modification of the skills required of screening teams etc.

Through its projects, ITM will further invest/support timely analysis of epidemiological data to guide adaptation of approaches to adequately and efficiently continue control and monitoring as long as needed (i.e. rationalization and review of needed human and other resources will be an iterative process throughout the program),

Rationalization will not only be key at organizational level but also at institutional level because following the rapid decline of HAT prevalence, the context has changed. Therefore ITM will play the role as honest broker between all Congolese organizations and directions of MOH involved. A particular challenge will be to accompany PNLTHA in a gradual downsizing exercise of total number of staff and the application of performance based financing. In return, the remaining staff will have to perform more specialized tasks.

Efficiency and making better use of available resources was an important incentive for signing the MoU between Belgium and BMGF. ITM will continue to facilitate complementarity between different projects and initiatives it coordinates. Coordination with other relevant partners and HAT interventions (both support to control and research) will be high on the agenda: ITM will continue to organize HAT partner meetings jointly with PNLTHA and WHO.

Description of the expected Impact

Impact is expected at local, provincial, national and international level.

The elimination of transmission of gHAT would be a major achievement of the health system and could give a boost to reach other goals. It certainly would have an enormous impact on the well being of the rural poor of areas that have been victim for decades. Accessibility to state of the art treatment at local level of infected individuals will have a direct impact on the well-being of the individual, his/her family and the community. The impact of eliminating a disease that is stigmatized by mental disorders and high mortality, would be an important boost for the health system.

The HAT control strategy has already thoroughly changed over the last decade, whereby the experiences in DRC played a leading role for innovations described in the WHO roadmap. Valorization of knowledge and innovation will further influence the WHO policies and guidelines for the HAT elimination agenda. The implementation of new strategies, combined with appropriate action research can lead to new insights. The results of the action research and operational research conducted in DRC will also impact other African countries that are still affected by HAT. Hence the program can considerably contribute to reaching target 3.3 of SG3.

Description of Sustainability

Sustainability of results is a major concern for any HAT project, as in the past it was observed several times that HAT cases started to rise, as soon as the support stopped. With the current available tools, the context has considerably changed to provide better chances for sustainability. When HAT support ended in the past, the disease returned to the level of a full scale epidemic in a number of years and much higher costs were required to control it, e.g. during the 1990s. In the current context it

is believed that the opportunity has strongly improved to maintain gHAT prevalence at very low levels, even if elimination would ultimately prove too ambitious.

The progress of results has been faster than expected, despite several setbacks (e.g. Covid19, instability, stock-outs, ...) and strategies that have been less well applied than planned. With the arrival of the new drugs and perspectives of overtreatment, the perspectives for further rapid decline are a reality. Despite research there are no indicators that an animal reservoir would play a role in the epidemiology. With available means, the opportunity is there to decrease prevalence much further than ever before, meaning that the R_0 could be below 1, for the entire country.

Technical sustainability: Previously it was near impossible to integrate an effective HAT control program into the primary health care system because of the combination of complex diagnosis and toxic treatments requiring hospital settings. With RDTs and (single dose) oral treatment available, this is no longer the case, in particular if the screen and treat strategy would be applied. This implies that the amount of technical proficiency can be decreased and concentrated in a reduced number of laboratories, which is part of the proposed strategy. The decline of the number of cases implies that the implementation of the traditional WHO screening will result in a rapidly decline of the number of villages to be screened. This enables the development of new strategies to find the remaining hot spots.

This progress also has a direct impact on the **social sustainability**, as it is no longer needed to have a national control program of the current size. At the same time steps are taken to assure that enough proficiency remains to enable appropriate reaction if reemergence would occur. Similarly, this should not mean that in the medium term all mobile teams should be abolished. In the context of DRC, it seems justified that each province would have a mobile team that can react to the different emerging diseases, but this should become part of the primary health care system, in line with the new health law.

As a consequence of this progress, also **financial sustainability** should be feasible, at least to maintain the very low prevalence or post-elimination surveillance. Considering the enormous health challenges of DRC, it cannot be expected that DRC invests more than it actually does (mainly salaries of staff). Hence HAT should become further integrated in health systems and be part of the entire health challenge.

ITMs partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programmes, and taking it up a notch with each new cooperation. By taking into account the needs assessment, we ensure buy-in from both ITM and and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim to reach the phase out, when partners are fully equipped to further control the disease elimination themselves.

Description of the Partnership Strategy

In the elimination agenda of HAT, partnerships at different levels are crucial to obtain the outcome, both within and beyond the current program. Combined these partnerships ensure a holistic approach, a coverage of the entire area at risk in DRC, a division of labor and better use of funding. ITM plays a role as honest broker between the different stakeholders, including the Congolese and the international partners. The overview of the partnerships can be summarized as follows:

At political level

Following the decision of Belgium and BMGF to jointly lead the HAT elimination agenda, a Memorandum of Understanding (MoU) has been signed in 2018, aiming at the provision of complementary and matched funding. ITM coordinates the implementation of the support to HAT control programs of these 2 main donors. In 2019, the Government of Belgium and DRC signed an additional MoU stipulating the intention to increase the investment in NTDs, under the guidance of ITM.

At program level

ITM has a long standing partnership with its 3 selected Congolese partners, i.e. PNLTHA, INRB and CRSK. In the framework of the implementation of the different interventions, ITM has/had subawards with the Liverpool School of Tropical Medicine (LSTM), PATH and Enabel.

It is the intention to broaden the international coalition involved in HAT in DRC. The underlying principle is the need to further integrate HAT control activities in the framework of sustainability. Through CRSK, there is potential to improve the coverage of health facilities involved in HAT control in areas at risk by increasingly involving the institutions of the consortium that are active outside Kongo Central (*Santé Rurale* (SANRU) in involved in > 500 health districts of DRC). Several international partners have expressed interest to integrated HAT activities in their health program. The direct impact of this increased partnership could lead to reactive screening in the villages of origin of the detected HAT cases through the health facilities.

At international level

ITM has a longstanding partner in the group made up of WHO, DNDi, FIND, IRD that support the PNLTHA. In its implementation of BMGF projects ITM is partnering with LSTM. ITM is regularly invited to take part into exchange of experiences and to participate in specific research activities (e.g. collaboration with DNDi in the framework of an EDCTP study on pharmacovigilance, treatment of seropositive individuals, validation of molecular tests, ...)

With the private sector

ITM has regular contacts with companies producing serological tests (Coris, SD/Abbott and apDia) as it provides antigens to these companies. ITM has also conducted *in vitro* testing of their products.

Public-partnerships in the framework of HAT elimination are important additional assets. Since 2000, WHO has had a public private partnership with Sanofi (previously Aventis) and Bayer Health Care for HAT control support. Through this mechanism all HAT medicines are provided to endemic countries free of charge. This partnership has been renewed in 2020 and also includes the new oral treatments. Only the logistics still need to be financed, which for NECT is still a challenge because of the weight and volume of IV infusions. The arrival of oral drugs will very much simplify logistics.

In recent years, gels essential for the production of mAECT have also been donated through a public private partnership with GE Healthcare and in the future with Cytiva, which substantially reduce production costs. Both WHO and ITM have served as intermediary beneficiary before forwarding the gels to INRB.

The Vestergaard company committed to a donation agreement for tiny targets in 2017. The Liverpool School of Tropical Medicine (LSTM), facilitates the purchase of Tiny Targets in a way comparable to the role ITM plays for the purchase of diagnostic tests as explained above.

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council in which ITM's partners are represented and which discussed the thematic JSF process.

Description of Synergies

The support to HAT control activities is mainly limited to 2 donors, Belgium and BMGF, and the 3 main interventions coordinated by ITM. A clear division of labor will be implemented both for the implementation of strategies (see annex) and for geographical coverage. For active screening, the support of the Bill & Melinda Gates Foundation will focus on the former provinces of Bandundu and Kasai Occidental and the present intervention will focus on all other provinces considered at risk for gHAT. Initiatives will be taken to increase synergy and complementarity. This should enable to improve transparency (e.g. common reporting for the different interventions) and efficiency. Innovations tested in one intervention will also be applied in others (e.g. digitalization). Although vector control is not integrated in the present intervention, this strategy can be applied, via the Liverpool School of Tropical Medicine (LSTM) in case a new hotspot of transmission would be detected through one of the strategies applied in the present intervention.

A similar approach will be applied to look for synergy with stakeholders involved in gHAT control via BMGF support. Currently BMGF supports also IRD, PATH, Find, DNDi and WHO. WHO directly supports a number of mobile teams and sentinel sites and DNDi supports some passive and active screening, mainly via their research activities. This additional support will be taken into account during the planning sessions with PNLTHA. In return, through the Belgian support, patients will be identified to be included in the clinical trial to assess safety of acoziborole. The latter is important to enable to conclude the clinical trials with acoziborole as quickly as possible and to submit to EMA.

ITM has signed a subaward with Enabel in the framework of the HAT+ project, which is described in the subsidy bonus section. Currently there are no other Belgian actors directly involved in gHAT control. However, in the framework of the HAT+ project supported by Belgium, it is intended to actively look for new partners to integrate detection and treatment of gHAT in primary health care projects. With support of the Belgian Embassy, HAT will be put on the agenda of the *Groupe Interbailleur pour la Santé*, to encourage new partners to be involved. An asset to further explore is the network of CRSK, uniting *Institut Médical Evangélique* (IME), *Université Protestante du Congo* (UPC), *Santé Rurale* (SANRU) & *Université de Kinshasa* (UNIKIN). Combined these organizations cover nearly the entire territory of DRC. UNIKIN also has longstanding relations through VLIR and ARES. The link between passive screening (other interventions) and the present intervention will be ensure via 2 ways: the implementation of the quality assurance system for diagnostics of the passive screening and the reactive screening in the villages of origin once a HAT case has been detected.

WHO regularly unites the HAT community to discuss progress of the elimination agenda, develop new control strategies and guide the national HAT control programs of the African continent. This is complemented by a number of expert committees and some *ad hoc* events to focus on specific topics. ITM is represented in all these committees and uses the experience obtained

through interventions and research to influence the new guidelines. In addition ITM, PNLTHA and WHO regularly organize meetings for all interested HAT partners in DRC. Currently the other main non-congolese actors involved in gHAT in DRC are the Liverpool School of Tropical Medicine (LSTM), the Foundation for Innovative Diagnostics (FIND), the Drugs for Neglected Disease Initiative (DNDi), the *Institut de Recherche pour le Développement* (IRD) and the Program for Appropriate Technology in Health (PATH). The Institute of Disease Modeling (IDM), Warwick University and Swiss TPH are primarily interested in mathematical modeling of sleeping sickness elimination in DRC.

ITM also tries to use information and tools developed outside the HAT context. A practical example is the results of mapping of DRC (e.g. maps developed by UCLA), which are integrated in the digital tools developed for gHAT.

Besides the operational synergies, we will also look for organizational and logistical synergies between all actors involved in gHAT control and research. Logistics in the context of DRC is a huge challenge and explains why ITM has invested in its own capacity to improve logistics.

Table 1: Division of Labor between the projects in support of gHAT control in DRC (annex: DOL_ITM_DRC-OC2_22-26)

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this program will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, consultation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country program.

Description of how individual or collective recommendations and lessons are to be taken into account

The new intervention takes into account the lessons learned from the previous phase and from other gHAT interventions managed by ITM. The new strategies for active screening as described above are the result of assessments made of the evolving context and in line with the new 2030 Road Map for Neglected Tropical Diseases (NTD), fully supported by Belgium. Also the increased attention for quality assurance, the need of regional laboratories and different approaches to training are direct consequences of the results of previous interventions. However further change is expected not only based on the arrival of new tools, but also as the result of continuous action research assessing conducted activities, leading to fine-tune the hypotheses and the strategies.

The impact evaluation of the third multi-year program between DGD and ITM, reported tensions between PNLTHA and INRB at the time (Hera, 2020). Reference was made of competition for laboratory tests and quality control/assurance of decentralized laboratories. Also the differences between the support provided and the vision of the previous director of PNLTHA was highlighted in particular with regard to the search for more cost-effective strategies. These problems have been solved to a large extent. The PNLTHA director has been replaced and the collaboration between PNLTHA and INRB has considerably improved and extended to other Congolese partners (see higher). The new quality assurance system for diagnostics has been developed in close collaboration between ITM, PNLTHA and INRB.

The programme has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue, this programme gives particular attention to the valorisation of knowledge. Through its focus on “Getting Research Into Policy and Practice (GRIPP)” (in all components of the ITM programme 2022-2026) ITM will strive to maximize this aspect in its programme, and will also establish the preconditions to learn more about the best possible strategies to achieve this (a.o. through indicator development, and as main topic of the mid-term evaluation of the ITM programme 2022-2026). Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
FrameCollaborationBTC-ITG ALLsigned_20161007	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FrameCollaborationBTC-ITG%20ALLsigned_20161007_3.pdf
DOL_ITM_DRC-OC2_22-26	Other	https://fundhub.openaid.be/sites/default/files/2021-07/DOL_ITM_DRC-OC2_22-26.pdf
RA_ITM_RDC_OC2_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_RDC_OC2_22-26.pdf

Title of the annex	Type of document	File
COUNTRY-MAP_ITM_DRC-OC2_22-26	Country map showing the location of the intervention zone	https://fundhub.openaid.be/sites/default/files/2021-07/COUNTRY-MAP_ITM_DRC-OC2_22-26.pdf
TOC_ITM_RDC_OC2_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_RDC_OC2_22-26.pdf
FACTSHEET_ITM_RDC OC2_22-26_INRB	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_RDC%20OC2_22-26_INRB.pdf
FACTSHEET_ITM_RDC OC2_22-26_CRSK	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_RDC%20OC2_22-26_CRSK.pdf
FACTSHEET_ITM_RDC OC2_22-26_PNLTHA	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_RDC%20OC2_22-26_PNLTHA.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The OC2 operational budget (total budget minus ITM staff and minus ITM local office) is distributed as follows: 83,5% for activities with partner PNLTHA, 9 % with partner INRB and 7,5 % with partner CRSK.

The division between budget categories is 1 % for investments, 25,5 % for HR and 73,5 % for operational costs. The OC2 budget is focused on operation costs, as the purchase of test material has become increasingly more expensive over the years. The budget is compatible with the budget of other HAT-projects, thus creating the right dynamics needed to obtain the result.

In DRC, ITM has a local office with 3 to 4 scientists and supporting staff for administration, finance and logistics. This office serves both OC1 and OC2 DGD programs, but also other ITM projects in DRC. It is co-financed by OC1 for 1.5 million EURO in total over the 5 years. For OC2 specifically, a dedicated HAT coordinator and dedicated HAT logistician is foreseen. About 14 % of the budget is dedicated to ITM staff to assure scientific support to the implementation of all program activities. (The equivalent of technical assistance provided by cooperants in other development cooperation projects). This amount covers only a fraction of the real time ITM staff dedicates to the program.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym PNLTHA

Full name Program National de Lutte Contre la Trypanosomiasis

Budget available

2022	2023	2024	2025	2026	TOTAL

2022	2023	2024	2025	2026	TOTAL
660000	665000	665000	665000	665000	3320000

Acronym INRB

Full name Institut National de Recherche Biomédicale

Budget available

2022	2023	2024	2025	2026	TOTAL
105000	105000	105000	105000	105000	525000

Acronym CRSK

Full name Centre de Recherche en Santé de Kimpese

Budget available

2022	2023	2024	2025	2026	TOTAL
166848,25	135736,30	153856,75	93438,75	77620,50	627.500,55

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Improve research capacity in infectious disease to inform policy & control strategies (Burkina Faso)

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Improved research capacity in infectious disease surveillance to inform policy & control strategies.		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-4-BF		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Burkina Faso		
Sector :	12250 - Health - Infectious disease control	Budget share :	100%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Burkina Faso

Lat/Long :	12.359146981004, -1.5266835858811
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Outcome summary

Description of the outcome

The Clinical Research Unit of Nanoro (CRUN) and ITM have a longstanding partnership that gradually moved from an initial phase of capacity strengthening, towards the current institutional collaboration with an emphasis on joint research and education. A second collaboration with Centre Muraz started during the previous program, targeting vulnerable populations with a focus on sexual and reproductive health. The program brings together the next areas of expertise: malaria, antimicrobial resistance and antibiotic use, and sexual and reproductive health. Each component will work closely together according to the same common results. The strengthening of the transversal social sciences component at CRUN will allow us to include the socio-economic context. To reach policy and practice, we will work on the following specific results: First, platforms for surveillance of diseases and health seeking behaviour will be strengthened or developed to generate quality data. Second, research will be conducted and published using the findings generated from the platforms. Next, policy notes and workshops will be written and organized on a regular basis to involve the relevant stakeholders in the process. Fourthly, education and trainings will be developed to strengthen the core staff of the involved institutions. Lastly, synergies and networks will be exploited to mobilize staff and maximize the exchange of training, research and surveillance findings in a South-South context.

Wording of the outcome

The goal of our programme is to improve research capacity in infectious diseases and surveillance to reach and inform policy makers and improve current health practices and control strategies in Burkina Faso.

Target groups

Each component will enhance the institutional and individual research capacity by supporting at least one PhD trajectory and several Master students. We will work closely with laboratory staff, but also with pharmacies and clinical staff in rural health

centres. The core staff of the involved institutions will be strengthened.

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences
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Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	1
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	2
10. HIV / AIDS :	1
11. Children's Rights :	2
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	No

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Education

In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an highly appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

In our program we focus on interinstitutional cooperation with university actors. Through the provision of scholarships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

In this program we aim to improve the case management and surveillance of infectious diseases in affected populations and evaluate malaria interventions targeting children under 5 are at high risk of malaria disease (objectives 35, 36, 37 in the current

health strategy). In addition, our activities in reproductive health include sexual and reproductive health communication, information and campaigns will benefit women and their children (objectives 40, 41). Our program will also raise awareness among the population in general but to mothers in particular to use health-care services to take care of the health of their young children.

Development education

In our program we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate. (strategy note) Our program contributes to better knowledge about the diseases and healthcare delivery, and aims to inform policies to anticipate and prepare better, not only to address the specific diseases but also to deliver good quality healthcare for all in the midst of crises brought about by these diseases.

Within CRUN, attention will be paid to the quality of the working environment; proper waste management including waste segregation, recycling and proper disposal will be ensured and implemented.

Within ITM, attention will be paid to join cargo shipments of consumables and materials to decrease ecological footprint.

Gender

Our program will include female staff, and students at Master and PhD level to be trained in different disciplines related to infectious diseases (social sciences, AMR, malaria and SRH). Training will be performed in different formats as explained in other sections and will use case studies/hands-on material relevant to health in Burkina Faso. We aim to increase the number of female staff at CRUN that will become actors of change and that can contribute to increase women representation at the decision-making level.

In addition, our program has one component fully dedicated to reproductive health that in addition will target one of the most vulnerable population groups, i.e. female sex workers. The aim is to provide prevention strategies against sexual infectious diseases.

Digitalization - Digital for Development D4D

In our program, we use data of different kinds of data and origin. For AMR and malaria surveillance, different platforms will be developed using the HDSS in CRUN as a basis for data gathering. Methods for the use and application of different surveillance software (e.g., WHONET software for reporting of AMR) and thus different modules will be taught. After all, data provide the basis for almost any development and humanitarian intervention. Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. These platforms also allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. Finally, data is also needed to keep track of a country's progress towards the SDGs.

Health

Our program aims to increase capacity at CRUN and Centre Muraz to respond to health challenges due to a high prevalence of infectious diseases in the country. We do so by increasing technical and human resources capacity for case management and of surveillance systems to improve diagnostics and treatment and to monitor the impact of interventions. We also include a holistic and transversal approach in our program, the social sciences component, that will integrate the human factor to understand how populations respond and adhere to interventions. The program will generate data and will invest to reach policy makers, who can improve health strategies having a beneficial impact on the health of the Burkina Faso population. By contributing to increased knowledge, set-up of platforms, train staff and conduct research projects, we contribute to the aim to strengthen the health system in the country.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

A human rights-based approach is based on respect for equity, participation, transparency, accountability and non-discrimination, and focuses specifically on the most vulnerable populations. In this program we adopt a human rights-based approach, by contributing to ensuring the right to health for all. We work at the level of the 'duty bearers' (public actors, health staff -providers and managers-, professional associations, civil society organisations, etc.) by increasing their capacity to

help them to fulfil their obligations properly and increase accountability. The program also aims to contribute to empower different groups of 'rights holders' (the final beneficiaries, including women and vulnerable groups such as children and families in rural communities) to know, claim and fully exercise their right to quality health care.

Our program is in line with the Enabel 'She Decides' initiative in Burkina Faso which aims to increase access to quality SRH services (Emergency Obstetric Care), to reduce maternal and neonatal mortality, to adopt a human rights-based approach and to promote sexual and reproductive health rights (SRHR).

Decent and sustainable work

Even though Decent Work is not ITMs core business, we do adhere to a number of principles which are part of the definition of decent work as given by the Decent Work JSF such as the productive and freely chosen employment, which provides an income sufficient to cover family needs, includes social protection, respects fundamental rights at work, includes equal treatment of all workers without making any distinctions based on sex, age, origin, political or religious beliefs and includes health and safety provisions in the workplace. Since our program involves a large component of laboratory activities, we also work and train students on laboratory safety measures and good laboratory practices to ensure a safe working environment. As highlighted in the response on lessons learned above, we work explicitly on fair working conditions and salaries. This does not only increase the sustainability of the program, but also explicitly addresses the pillar of decent work 'guaranteeing employment rights'. In addition, we work on specific activities related to laboratory safety which fall under the pillar of 'universal social protection'. Lastly, we strongly engage ourselves on the cross-cutting objective of equality between men and women (see lessons above).

Gender

Our program is gender sensitive as it will contribute to DGD gender strategy priorities number 1) Education and decision-making and 2) health and sexual reproductive rights.

Women are still under-represented in decision-making positions in Burkina Faso. Therefore, there is a clear obligation to put more women at the center of the process of training and capacity strengthening, to develop not just into health-implementers but to qualify as decision makers and grow into leadership positions to have a greater impact on gender equality.

We are committed to reduce the gender gap in society by increasing the number of women in training and postgraduate education (MSc and PhDs) at CRUN. There is one female PhD ongoing, a second one will start at the end of 2021 (local scholarship, support from the current five-year program). 3 female technical staff will start training activities to take responsibilities in molecular analysis and train others. Another female sociologist will be involved in the HDSS activities. We will include these women researchers in networking activities organized by ITM, African networks on surveillance and bioinformatics. We will mentor inclusion of students in science networking such as the Women In Malaria community, where the first meeting voiced a round table with women African scientist discussing the importance of increasing women's leadership across aspects of the malaria elimination.

One of the components of our program focuses efforts in enhancing sexual health and HIV among highly vulnerable women. The program will inform the National Council for the Fight against AIDS and STI; and will explore synergies with the Enabel project "She Decides". Where relevant, indicators in our results matrix are disaggregated by gender, to ensure follow-up of their equal inclusion in the program activities.

Environment

The potential impact of the program on the environment includes the production of biohazard and chemical waste, the use of single-use consumables and paper forms in the laboratory settings as well as international travels.

The potential impact of climate change on the country program includes a rise in temperature and rainfall which will likely aggravate the challenges already faced by the agriculture and forestry sectors. However, the impact of climate change will be mainly indirect through its impact on the socio-economic situation and development of the country. In certain rural areas, extended periods of draughts can be expected. Collaborating ANGCs are involved in mitigating activities such as forestation and agricultural activities.

Actions for neutralizing and managing the potentially negative effects include the correct processing of laboratory waste via autoclave and incinerator platforms. The risk-based ISO 15189 approach, a standard quality norm in use in the bacteriology laboratory, includes risk assessment and mitigation for environmental pollution by biomedical and chemical laboratory waste. We pay attention to the reduction of packaging and reusing of materials where possible and provided its correct reprocessing (cleaning, decontamination, sterilization). We reduce the use of paper registers in the laboratory by digitalization of the laboratory data system where possible (e.g. through a laboratory information system). Regarding international travel, we will adhere to ITM's travel policy (currently in a pilot phase) to minimize flying and to pay compensations for carbon-neutralize travel. CRUN uses solar energy as a back-up in case of power interruption and breakdown of the generator for the haematology and biochemistry laboratory.

Common outcome within a common programme

N/A

Common outcome between distinct programmes

N/A

Areas of complementarity and synergy with the intervention of ENABEL

Our program is potentially complimentary with the Enabel ‘She Decides’ project that has recently started in Burkina Faso and discussed during the visit of the ITM to the Belgian Embassy in Ouagadougou in June 2021. In line with ‘She Decides’ approach implemented, our program aims to increase access to quality SRH services which will contribute to reduce maternal and neonatal mortality. We will also promote SRH rights among women and men of reproductive age including adolescents. Collaborations will be explored during the continuation of the program.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	Improve research capacity in infectious diseases and surveillance to inform policy and practice and improve current control strategies in Burkina Faso.
Indicator title :	OC1 - (PLATFORMS) Number of recommendations made based on the data generated by the established surveillance networks
Indicator description :	This indicator refers to the reports generated from the surveillance platforms, with recommendations for practices in the hospital, in the community or for the stakeholders at the national level. Quantitative indicator, cumulative over the years, absolute number, ascending. SoV: Recommendation reports
Baseline :	0
Target Year 3 - 31/12/2024 :	17
Target Year 5 - 31/12/2026 :	30

Formulation of outcome or result :	Improve research capacity in infectious diseases and surveillance to inform policy and practice and improve current control strategies in Burkina Faso.
Indicator title :	OC2 - (RESEARCH) Number of academic staff with strengthened qualifications (Master/PhD) supported by the ITM, disaggregated by gender
Indicator description :	This indicator refers to all students that are supported by the ITM (e.g. grants, co-promotorship) to obtain a qualification. Quantitative indicator, cumulative over the years, absolute number, ascending. SoV: Qualification degrees documented by the programme
Baseline :	0
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	9

Formulation of outcome or result :	Improve research capacity in infectious diseases and surveillance to inform policy and practice and improve current control strategies in Burkina Faso.
Indicator title :	OC3 - (RESEARCH) Number of scientific publications in international peer-reviewed journals by the support of the program
Indicator description :	By scientific publications we refer to manuscripts published in peer-reviewed journals that make a contribution to evaluate the impact of the program interventions Quantitative indicator, cumulative over the years, absolute number, ascending. SoV: Pubmed online platform
Baseline :	0
Target Year 3 - 31/12/2024 :	7

Target Year 5 – 31/12/2026 :	14
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Formulation of outcome or result :	Improve research capacity in infectious diseases and surveillance to inform policy and practice and improve current control strategies in Burkina Faso.
Indicator title :	OC4 - (GRIPP) Uptake/influence of ITM-supported research in public policies
Indicator description :	Qualitative indicator, indicating progress over time. This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies SoV: Written reports /meeting reports
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	Improve research capacity in infectious diseases and surveillance to inform policy and practice and improve current control strategies in Burkina Faso.
Indicator title :	OC5 - (EDUCATION) Number of joint trainings developed/sustained through support of the program
Indicator description :	By joint trainings we refer to trainings and workshops developed or sustained in joint collaboration of ITM and the partner site Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Training evaluation reports
Baseline :	0
Target Year 3 – 31/12/2024 :	8
Target Year 5 – 31/12/2026 :	14

Formulation of outcome or result :	Improve research capacity in infectious diseases and surveillance to inform policy and practice and improve current control strategies in Burkina Faso.
Indicator title :	OC6- (SYNERGIES) Number of activities done between existing and newly developed national, regional and international collaborations
Indicator description :	By networking activities we refer to exchange of relevant research findings by online or F2F meetings and/or mobility of staff for continued training and education. Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Yearly reports on network activities
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	R1 - Platforms are developed to surveil infectious diseases in rural Burkina Faso
Indicator title :	R1.1 - Number of recommendations for AMR surveillance
Indicator description :	This indicator refers to three-monthly meeting with active engagement by relevant staff, and to GLASS annual reports generated by the surveillance platform Reports for staff: 12 (y3) - 20 (y5) Reports for WHO: 2 (y3) - 4 (y5) Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Meeting reports
Baseline :	0 (0:0)
Target Year 3 – 31/12/2024 :	0 (12:2)
Target Year 5 – 31/12/2026 :	24 (20:4)

Formulation of outcome or result :	R1 - Platforms are developed to surveil infectious diseases in rural Burkina Faso
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Indicator title :	R1.2 - Number of interventions identified for evaluation of rational antibiotic use
Indicator description :	This indicator refers to clinical or diagnostic guidelines/tools, incentives, educational sessions organised to strengthen rational antibiotic use. Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Intervention reports
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	R1 - Platforms are developed to surveil infectious diseases in rural Burkina Faso
Indicator title :	R1.3 - Number of transfers in technology realized for malaria
Indicator description :	By technology transfer realization we mean certificates of installation, validation and maintenance of technical equipment, SOPs, guidelines transferred etc. Quantitative indicator, cumulative over the years, ascending, absolute number. SoV: Reports/company documents
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	2

Formulation of outcome or result :	R2 - Research capacities are in place to provide quality-assured data collection and publication of findings
Indicator title :	R2.1 - Number of scientific publications for AMR surveillance in healthcare facilities and the community, including the social sciences context
Indicator description :	By scientific publications we refer to manuscripts published in peer-reviewed journals that make a contribution to evaluate the impact of the program interventions AMR hospital: 2 AMR community: 4 Social sciences: 2 Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Pubmed
Baseline :	0
Target Year 3 – 31/12/2024 :	4
Target Year 5 – 31/12/2026 :	8

Formulation of outcome or result :	R2 - Research capacities are in place to provide quality-assured data collection and publication of findings
Indicator title :	R2.1 - Number of scientific publications for malaria molecular surveillance
Indicator description :	By scientific publications we refer to manuscripts published in peer-reviewed journals that make a contribution to evaluate the impact of the program interventions Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Pubmed
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	R2 - Research capacities are in place to provide quality-assured data collection and publication of findings
Indicator title :	R2.3 - Number of scientific publications for SRH component
Indicator description :	By scientific publications we refer to manuscripts published in peer-reviewed journals that make a contribution to evaluate the impact of the program interventions. Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Pubmed
Baseline :	0

Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	R2 - Research capacities are in place to provide quality-assured data collection and publication of findings
Indicator title :	R2.4 - Number of academic staff with strengthened qualifications (Master/PhD) supported by the ITM for all program components, disaggregated by gender
Indicator description :	This indicator refers to all students that are supported by the ITM (e.g. grants, co-promotorship) to obtain a qualification. AMR: 1 PHD (2022, Daniel) + 3 masters Social Sciences: 1 PHD (2023, Adelaide) + 1 master Malaria: 1 PHD (Florence) + 2 masters Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Qualification degrees
Baseline :	0
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	9

Formulation of outcome or result :	R3: Robust and sustained connections with specific healthcare authorities are in place to translate research findings into policy and practice
Indicator title :	R3.1 - Number of AMR surveillance reports (including findings from healthcare facilities, communities and social context) to the Ministry of Health
Indicator description :	Based on results from the different activities, CRUN will report relevant information to the MoH in a regular manner. This will be done through written reports and when possible through meetings. Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Meeting reports
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R3: Robust and sustained connections with specific healthcare authorities are in place to translate research findings into policy and practice
Indicator title :	R3.2 - Number of malaria molecular surveillance reports to the NMCP
Indicator description :	Based on results from the different activities, CRUN will report relevant information to the NMCP in a regular manner. This will be done through written reports and when possible through meetings. Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Meeting reports
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R4 - Knowledge of healthcare practitioners is improved through training and education provided by partner institutes
Indicator title :	R4.1 - Number of workshops and trainings for healthcare staff in AMR surveillance and antibiotic use, with participants disaggregated by gender
Indicator description :	This indicator refers to the yearly workshops and trainings organised for the AMR component comprising both the hospital and the community aspect. Participants will be selected taking into account the gender balance. This will be specifically reported. Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Training evaluation reports
Baseline :	0
Target Year 3 - 31/12/2024 :	6

Target Year 5 – 31/12/2026 :	10
Formulation of outcome or result :	R4 - Knowledge of healthcare practitioners is improved through training and education provided by partner institutes
Indicator title :	R4.2 - Number of trainings on malaria molecular surveillance, with participants disaggregated by gender
Indicator description :	This indicator refers to the trainings organised for malaria molecular surveillance. Participants will be selected taking into account the gender balance. This will be specifically reported. Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Training evaluation reports
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	R5 - Synergies with important stakeholders and other partners are developed to strengthen and sustain current and future activities
Indicator title :	R5.1 - Number of networking activities for all components in the program
Indicator description :	By networking activities we refer to exchange of relevant research findings by online or F2F meetings and/or mobility of staff for continued training and education Quantitative indicator, absolute number, ascending, cumulative over years. SoV: Yearly reports on network activities
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Activities, targets groups and beneficiaries

Classification of activities

The planned activities of our program to achieve the country objectives and expected results are classified in 5 components: First, platforms will be developed to build and create capacity for diseases' surveillance. By platform we mean not only technological platforms, but also the basic skills needed to operate them. This will include developing laboratory and bioinformatics capacity, role models in hospitals and creating skills on which research capacities will be shaped. Second, research capacities will be strengthened by conducting pilot studies in the intervention areas related to malaria, AMR and SRH, with social science as transversal axis to bridge impact to local communities. Third, to get research into policy and practice, relevant stakeholders will be informed on a regular basis about the results generated by the platforms and associated research projects. The existing communication channels at CRUN with stakeholders will be exploited to achieve this objective and will prospects will be done to build new collaborations. Forth, all research activities in our program are intimately connected with education and training. Staff and students at CRUN and Centre Muraz are embedded in research projects to foster the learning-by-doing. Formal trainings will be organized in different formats and at regular intervals at CRUN, and we will provide online training and short-term trainings at ITM. Long-term training will include Master and PhD programs at ITM. Finally, networking and synergies will be promoted as important levers of change. Synergies with in-country, regional and international partners will be created or strengthened during the program. The various outcomes under the DGD program also provide an excellent opportunity to connect with other countries on topics such as surveillance. Exchange will be fostered through field visits, online meetings, organization of workshops and courses while cultivating sharing of information and cross-fertilization.

Target group(s)

CRUN and Centre Muraz will be targeted as institutions through capacity building. The core persons targeted are 35 in CRUN and 5 in Centre Muraz. With these staff, follow-up will be done on a regular basis.

For the current program, the gender balance is:

Lab technicians: 2 female AMR, 1 female malaria

PhD candidates: 1 female malaria, 1 female social science

Participants for educational programs will be selected based on general inclusion criteria that also consider gender balance.

Beneficiaries

Populations at risk of infectious diseases:

- children under the age of 5 that hold the major burden of malaria disease and death
- female sexual workers will benefit from a higher coverage in sexual and reproductive health
- patients with bacterial infections will benefit from accurate case management and effective antibiotic use
- vulnerable populations will benefit from a holistic approach to understand the complexity in implementation and acceptance of interventions.

Title of the reference annex :	TOC_ITM_BurkinaFaso_22-26
Title of the reference annex :	RA_ITM_BurkinaFaso_22-26

Description of the Relevance

1. The proposed program relates to the health priorities set by the national health authorities (1) based on the sustainable developmental goals (Agenda 2030) and the targets sets in the Performance Monitoring and Accountability 2020 (Burkina Faso-R2). It will also contribute to the SDG 3 to Ensure healthy lives and promote well-being for all at all ages. 5 specific contribution will be made to the target 3.3., to end the burden of malaria and other communicable diseases by 2030.
2. We contribute to improving health for all with activities related to platform development, research and policy, education and synergies, targeted to raise awareness and develop the capacity to improve current case management guidelines (e.g. AMR and use and abuse of antibiotics) and monitoring of interventions (e.g. malaria control). These activities will build capacity to generate data to inform disease control at the government level during the duration of the project but will also create platforms and skills that are an opportunity for sustainability to tackle other diseases in the long term. In addition, the work done will contribute to international surveillance platforms such as GLASS. The relevance for the partner was ensured by having them conduct the needs analysis, both in terms of needs at the country level concerning case management, as at their own level in terms of capacity strengthening.
3. Gender inequalities are larger in low-income countries where cultural-specific factors tend to favor men over women. In Burkina Faso, women continue to be discriminated with enormous gaps affecting womens rights like access to education and training, exposure to violence, access to social decisions and employment. We are committed to reduce the gender gap in society by increasing the number of women in training and in hospital service. These women researchers will participate in networking activities jointly organized by ITM, and African networks on surveillance and bioinformatics. We will mentor inclusion of women in science networking such as the Women In Malaria community. Where relevant, indicators in our results matrix are disaggregated by gender, to ensure follow-up of their equal inclusion in the program interventions.
4. Reduced inappropriate use of antibiotics will decrease environmental contamination with residues and will reduce the prevalence and transmission of AMR bacteria and mobile genes between One Health compartments, protecting environmental health. In addition, we aim to upgrade the incinerator at CRUN for the management of biological waste, as with the growth of CRUN and increased activities in the Hospital an increase of waste is expected.
5. Educational approaches and teaching methods will be adapted for the different target groups. To broaden teaching and learning opportunities and expand access to courses and information, blended learning and e-learning will be integrated, using the skills acquired during the COVID-19 pandemic. In the long-term we expect that online learning can also work as an equalizer for students to access resources that are currently not available to them; this can be especially beneficial to women with less opportunities to travel for trainings due to family-care obligations.
6. ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards emphasis on institutional collaboration. Over time, partners will acquire specific capacities, knowledge and expertise. The latter will allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthened capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as hub for a network. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice.

This program will involve two partner institutions, the CRUN in Nanoro and Centre Muraz in Bobo-Dioulasso. The collaboration with CRUN started in 2009. In this period the partnership gradually moved from an initial phase with emphasis on institutional capacity strengthening mainly focused on malaria, towards a consecutive phase with emphasis on institutional collaboration. CRUN is now an internationally renowned clinical trial unit in Africa, has diversified its research portfolio, and has expanded its national and international network of collaborators including relevant stakeholders for decision making. However, there is still a need for support to assist CRUN to grow further and consolidate its role in the scientific community, both in the country and the region. In this program we will continue our institutional scientific collaboration with impact on health as the major outcome. Building on the lessons learnt from capacities strengthened in the previous program, we expect that results generated will create conditions for translating research findings into policy and practice to contribute to the decrease and control infectious diseases. Moreover, at the end of the program we expect that molecular /laboratory capacity is consolidated at CRUN, and therefore more applications for external research funds (both with ITM and without ITM as partner) will be successful. CRUN will be part of networks including other institutes in the African region and therefore create opportunities not only for collaborative research but also to become a hub for a regional/international network.

The Centre Muraz is managing two Centers for Sexual and Reproductive Health among vulnerable women: Yerelon Ouagadougou and Yerelon Bobo Dioulasso. The Framework Agreement with DGD implemented between 2017 and 2021 focused on the improvement of the provision of sexual and reproductive health services among female sex workers as well as the strengthening of the research capacities of the MURAZ Centre in sexual and reproductive health among in vulnerable groups in the two major cities of Burkina Faso. During the following framework agreement, capacities of the technical platforms and of the staff in both clinics will be further strengthened.

7. -(8) The program is linked to the **6 strategic goals of the JSF HES4SD**. We will increase to capacities of individuals (Strategic Goal (SG) 1) to have an increased potential to be change agents (SG 2), by applying their newly acquired knowledge and skills. This allows them to have a positive impact on the performance of organizations they work in as well as on their sector at large. The program will strengthen the capacities of CRUN and Centre Muraz (SG 3) in the fields of increased research, education and service delivery capacity, increased information, infrastructural and technological structures and increased collaborative and networking capacity. By strengthening the capacities of the institutes, they are enabled to operate as drivers of change (SG4) aiming at a meaningful impact in society. This will be realized via both the co-creation, transfer and application of relevant knowledge (SG5), and/or via the science-society interface (SG6). Several aspects may help the increased institutional capacity (SG3) to result in our partners becoming real drivers for change (SG4): the quality of their scientific work, demand-driven and needs-oriented research, the trust policy makers and users of their outputs have in them, the willingness to deliver services to the community by means of valorization of research, the networks they belong to, implementation of technology transfer, etc. Operating as a driver of change may involve a strategic, uptake-oriented stakeholder engagement and targeted dissemination and capacity strengthening of end-users. This can lead to effective uptake and/or a broader application of new knowledge, applications or services by relevant societal stakeholders. (SG5).

Description of Coherence

The present five-year program brings together units of three departments : Biomedical Science, Clinical Sciences and Public Health and is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programs and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP. Within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved.

The proposed activities of our program are well aligned with the country's initiatives to eliminate communicable diseases' epidemic and ensure healthy lives at all ages, with a focus on vulnerable populations. CRUN takes up the mission to contribute to unique areas of capacity building, i.e. reinforcing and developing holistic approaches to understand the complexity of successful interventions and evaluate changes for improvement.

The present program contributes to the latter priorities set by the CRUN. Even though we find synergies with other research institutes to generate more impact and finance research activities, this program has its unique characteristics, as it does not only support specific research activities, but aims to build sustainable capacity over time. In Burkina Faso, CRUN is an established research center that contributes to research capacity in Africa and has the mission to strengthen healthcare for populations living in tropical areas, focusing on the assessment of new interventions to control malaria and other tropical diseases. In collaboration with ITM, laboratory capacity has been created and expanded in recent years. The current program will contribute to develop Next Generation Sequencing (NGS) capacity to serve research and surveillance for different pathogens. In addition, this program will start with the incorporation of antibiotic use data at CRUN into ongoing AMR surveillance research, including both the hospital and the community level, and generate joined reports to the national authorities and the global community (GLASS), which Burkina Faso joined in 2020. The program will also continue to develop the social science unit at CRUN that works to understand risk factors, such as socio-ecological factors, health inequalities, population mobility, access to care, acceptability of interventions and local perceptions of malaria and AMR interventions. This social sciences component will be key as it is a transversal topic across different disciplines and projects.

Finally, Sexual and Reproductive Health, one of the components of the program, is also into the core business of the Sexual and Reproductive Health Group of ITM and aligned with priorities on the national health agenda of Burkina Faso (1).

Description of Effectiveness

In this section, we demonstrate how the proposed interventions can achieve its objective. In our theory of change, we make explicit the various steps we take to achieve our results. We follow the logic that by strengthening platforms, education and research practices and investing in getting our research results into policies and practice, our intervention will lead to improved health for all in Burkina Faso in the long run. At the level of our sphere of control, we can be held accountable for the achievements of results, where at the level of the sphere of influence and interest, we can say we built a solid foundation for the change to materialize, but it is out of our hands. However, we can make a strong case that our interventions will prove effective

on the long-term because of the long-standing collaboration between the ITM, CRUN and the Centre Muraz, the research and capacity building expertise of the partners, and the ongoing collaborations with national health authorities in Burkina Faso.

As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programmes. From the evaluations of past interventions, such as [the one for the third framework agreement funded by DGD](#), it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between CRUN and ITM, the effectiveness criterium never scored below B.

In our “Sphere of control”, the effectiveness of the results is foreseen as follows:

1. R1: Platforms are developed for the surveillance of infectious diseases in rural Burkina Faso (“**platform development**”). This program is set with the aim to better grasp impact and outcomes of disease through the Health and Demographic Surveillance System (HDSS) of Nanoro, a rural area at 85km from Ouagadougou, covering a rural population of > 60.000 inhabitants living in 24 villages. The continuous registration of the healthcare seeking behavior and healthcare outcomes of the people living in the HDSS catchment area is a platform that allows for surveillance and monitoring of specific diseases and interventions, tailored to the needs of these populations. The Centre Médical avec Antenne chirurgicale (CMA) of Nanoro for example is one of the few healthcare facilities at this level in Burkina Faso that performs microbiology and blood cultures, because of its close connection to the CRUN laboratory. The connection of the HDSS to the microbiology laboratory enables the rare opportunity to study rural, remote populations of Burkina Faso, and identify their needs. In addition, platform development needs to have established protocols, toolboxes, methodologies etc. to ensure proper data management. The development of these elements can be closely attributed to the program, as they will be drafted in collaboration between the partners and ITM. The further contribution to improved services to society and knowledge translation can be followed by tracking the use of evidence generated through these improved data in for instance national policies and revised strategies.
2. R2: Research capacities are in place to provide quality assured data collection and publication in state-of-the-art techniques and relevant health questions on infectious diseases (“**research projects**”). Over the years, CRUN has developed its research capacity, improving infrastructure as well as building human capital from expert technical staff until post-doctoral researchers that are attracting funding and further expanding research capacities and human resources at CRUN. Research publications from CRUN highlight key topics in current infectious disease management (*e.g.* recent publication in Lancet on malaria vaccine). The research in malaria and AMR surveillance planned in this program will continue to be supported in CRUN by well-implemented Good Clinical (Laboratory) Practice (GC(L)P) practices as well as a unit of data management. The same context is in place to support the reproductive health research of Centre Muraz.
3. R3: Robust and sustained connections with specific healthcare authorities are in place to **translate research findings into policies and practice**. Next to its capacity of research and its associated availability of demographic and clinical data from the HDSS, CRUN also proves its effectiveness to influence research translation into practice due to its close links with the Ministry of Health and relevant bodies and policy makers. Frequent workshops are organized in CRUN to inform ministers and policy makers about the research findings achieved by CRUN and partnering institutions. In addition, surveillance programs will work closely together with the clinical staff in the rural medical centers that are appointed by the Ministry of Health. By providing training and inclusion of these healthcare staff in the different program platforms, we aim to improve the quality of clinical practices in public hospitals.
4. R4: Health care practitioners have increased knowledge on malaria and AMR surveillance through **training and education projects** provided by CRUN. The effectiveness of the program will also root in the ongoing collaborations of CRUN and ITM in education of staff, Master student and PhDs. Different rotations and trainings have been conducted in for example Good clinical practices (GCP) and molecular techniques for malaria surveillance. The facilities of CRUN (molecular and microbiology research labs, housing for participants and trained staff with extended professional network), provide the opportunity to start in-house trainings to build and sustain capacity in the different research components, and invite participants from over the country and the region.
5. R5: **Synergies** with relevant stakeholders are developed to strengthen and sustain current and future activities. The synergies envisioned in this program build, amongst others, upon previous research and education collaborations with ITM and other DGD countries. The program will create synergies with other DGD programs involved for example in molecular surveillance of malaria and therefore, will create opportunities for collaboration between south-south partners that can be used beyond the program described here. These collaborative networks using online channels have proven to be active and effective in for example sharing experiences and epidemiological data during the COVID-19 pandemic when the ITM alumni network organized regular webinars.

In the mid- and the long term, i.e. our sphere of influence and sphere of interest, we base the effectiveness of the program on:

- **The successful partnership between CRUN and ITM.** During the past CRUN-ITM collaboration, the research and training capacity of the CRUN has been strengthened and a critical mass of researchers was built. The objectives formulated in the present proposal are a consolidation and expansion of the previous goals – which were successfully achieved – and we therefore consider these new objectives as realistic and achievable. From our past evaluations (FA3 - hera 2020) we derive that long-term engagement with partners is important for capacity strengthening. Partners acknowledge that the long-term perspective distinguishes working with ITM from other partnerships. It also makes working together more effective, as each time we can jointly build on previous achievements, and no time is lost on 'getting to know each other'. Lessons learned from previous collaboration are incorporated through constructive dialogue, increasing the joint efforts towards achievement of results. The FA3 evaluation shows that especially in terms of service capacity strengthening, activities are mostly implemented as planned. For instance, capacities on core lab services (diagnostics, quality control, input into guidelines) are often mentioned as properly being reinforced.
- **Interdepartmental collaboration at ITM and CRUN.** As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue, with the partner having the key say. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programs. From the evaluations of past interventions, such as the one for the third framework agreement funded by DGD, it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between CRUN and ITM, the effectiveness criterion never scored below B.
- **Self-assessment and evaluations** are planned throughout the program. Baseline information is collected at the level of CRUN mainly through document review, as the partners are also the target groups of the results. In addition, a capacity assessment will be conducted at the start of the program to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression. At the level of ITM it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore, we included a mandatory outcome indicator on this aspect.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present program: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM program (2) is a more operational approach to delivering on the JSF's Theory of Change through development of relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

The budget proposed and applied for has been carefully studied. Thanks to previous investments (both DGD and non-DGD), CRUN has reliable and functional core-facilities so that investments can be focused on new technologies which are not yet available at CRUN.

Personnel costs at CRUN are approximately 20% of the project costs and are allocated to PhDs, HDSS professional profiles and technical staff that are responsible to maintain and expend skills in mid- and long-term. Financial investments for PhDs are high, but from previous evaluations we learned that they have a positive effect on institutional learning through their multiplier effect, and there is a high return on investment.

Also at the ITM side, personal costs account for 20% of the project costs. ITM staff will fulfill key-supportive roles in trainings, general and advanced laboratory support, bioinformatic capacity building, quality assurance (including organization and distribution of proficiency testing), updating of techniques for surveillance and infection prevention and control, assistance to scientific and practical project management (design, ethical clearance, analysis and reporting), as well as logistical support (procurement, reception, shipments of materials and consumables). ITM does not work with technical assistants in the partner country. Instead, we opt to offer technical assistance and program management from a distance, with regular exchange visits, hence reducing personnel costs. In addition, while FTE investment at ITM to support program activities is of 1 FTE expert researcher and approximately 0,5 FTE for technical support, only a limited part is budgeted on the program.

Operational costs (approximately half of the project costs) provide a blend of laboratory consumables, staff and communication means to maintain and extend surveillance and research and on-site coaching visits by ITM staff as well as equally divided rotation visits of Burkinabe staff at ITM.

The budget has been divided by costs to be spend at CRUN (LOC) (which also includes the line allocated to Centre Muraz, approximately 9% of the total budget), costs at ITM and costs LOC@ITM. This last category is budget that will be spend at ITM to purchase laboratory equipment, consumables and reagents that are expensive and are more cost-efficiently purchased in Belgium and send to the partner institute where they will be used. This solution is in line of lessons learned in the previous program.

In addition, efforts will be done by the different ITM departments part of this program to synchronize shipments of consumables and materials from ITM to CRUN, as well as team visits (North-South and South-North) to decrease administrative tasks and to maximize efficiency between the departments and program projects.

Description of the expected Impact

Expected impact of the intervention in policymaking: Strengthening of the research-surveillance capacity at CRUN and Centre Muraz will generate evidences on the effect of interventions in the population, *e.g.* the effect of SMC in children under 5 years of age for malaria prevention. This evidence will inform governmental stakeholders responsible for maintaining health and providing effective interventions to control infectious diseases. We expect exchange and interaction researchers and stakeholders will lead to improved and better health strategies for the whole population, and especially to the most vulnerable, adhering to the principle of LNOB.

In addition, strengthening of the human capital will create a pool of skilled researchers, capable of conducting high level research and training others, hence multiplying the effect and impact in research and evidence generation.

Expected societal effects of the intervention: we expect that our program will lead to multiplicative impacts in the spheres of influence and interest. For example, improving access to health programs for women, contributes to better control the burden of infectious diseases but also qualifies more women as decision makers. These women will contribute to a more gender-balanced leadership that will have a greater impact on gender equality.

Description of Sustainability

1. Programme viability

The technical, social, and institutional sustainability have strong overlaps, since the program target group and beneficiaries coincide. **Technical sustainability** is logically covered, as the results are based on the demands for collaboration from the partner side. This also goes for **social sustainability**, since our target groups control the intervention. To ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal and will remain the key responsible party to its execution.

The **institutional sustainability** of CRUN is benchmarked by its readily available platform to conduct research at a very high standard. In addition, the unit increased its capacity to attract funding which led to increase in its research staff from 10 people in 2009 at 335 people in 2021. Therefore, CRUN has become one of the leading actors for research on tropical diseases among the West African francophone countries. In recognition of this leadership, the government of Burkina Faso has set-up CRUN as the Regional Direction of the Institute for Health Sciences Research (IRSS) since 2016. This new status acquired by the CRUN is a grantee for the sustainability of the institution over time.

The **financial sustainability** of the program is ensured by different mechanisms. At the creation of the CRUN in 2009, the director of the center, Halidou Tinto, who obtained his PhD at the ITM, was the only well-trained staff at high level able to attract research grants. Thanks to the capacity strengthening activities from the successive collaborations with ITM, CRUN was able to train 10 new PhDs, 5 supported by DGD Framework Agreement funds. 7 of them were able to successfully attract 10 external competitive funding grants within the last 3 years. This positive experience has encouraged the director of CRUN to launch 12 other PhDs that are currently ongoing. With so many expected PhDs well trained at high level, CRUN has the potential to guarantee its financial sustainability in the future.

2. Capacity strengthening

The current program will continue to invest in the research and technical platform capacity of the partner relying on the different PhDs and post-doc staff who can take the lead in each of their domains. In addition, the program will focus on **strengthening capacity** in the current knowledge gaps identified by the partner institution, *i.e.* Social Sciences, led by a (female) PhD candidate. The development of a social sciences unit interconnected with ongoing research projects at CRUN will attract multi-disciplinary research that integrates socio-, economic and cultural aspects. Finally, we will capitalize on the strengths of CRUN as a model site and training center for activities in the containment of infectious diseases.

3. Empowerment strategy

ITM's partnership trajectory approach aims to **strengthen sustainability** by reinforcing partner capacities. CRUN reached the phase of institutional collaboration, with an equal level partnership for joint research with a societal impact. For this program, CRUN made a thorough analysis of their needs and priorities. The activities proposed were initiated and organized by CRUN with an emphasis on training and elaboration of the research center. By considering the needs assessment we ensure buy-in from both ITM and CRUN and ensure local ownership hence anchoring sustainability.

4. Multiplier stakeholders

CRUN will engage in platform development by training healthcare staff at the district and national level. The trained staff will pass on their new knowledge within the health institutes they work in, thereby **multiplying the effect of our actions**. In addition, by performing as a role model for surveillance of infectious diseases, lessons learned are aimed to be taken up by other healthcare centres of the primary healthcare level, scaling up our activities on geographical scale and having an impact on a larger population.

Description of the Partnership Strategy

Regarding the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through its general council in which ITM's partners are represented and where the thematic JSF proposal was discussed and approved.

As mentioned above in this program, CRUN has become one of the leading actors for research on tropical diseases in Burkina Faso. Since its start it has carried out several high-quality clinical trials, has considerably increased its research capacity and has broadened up its portfolio to include tropical diseases other than malaria. It has the ambition to become a referral center for research and training and to expand the field of antibiotic resistance, including social factors driving ABR at the hospital and the community. ITM has the ambition to remain involved in research on tropical and Poverty-Related diseases and capacity building of researchers and health staff. Over the past years CRUN and ITM have established a fruitful collaboration.

The present proposal was built through continuous discussion, exchange visits to Burkina Faso, online calls and workshops to develop the Theory of Change (ToC). The development of the proposal started with informative sessions by ITM to detail the changes in the country program format, and instructions on how to develop a ToC with the different spheres of control, influence and interest. Next, with partners at CRUN we defined the communication channels that would be used during the development of the program. The people indicated, will remain the leads/responsible of the different program components (AMR, malaria, sexual and reproductive health, social sciences). After this a ToC workshop was organized by ITM's International Cooperation and Development Office. By the online whiteboard tool 'Mural' we identified the long-term goals, mid-term targets and outcomes, started reflection on the activities and recognized the relevant stakeholders for our program. The next step was a travel mission from ITM to visit CRUN. During the visit we had the opportunity to discuss the organization of the program and learn from CRUN about their capacity strengthening priorities and priorities in terms of research at the national level. CRUN was responsible for the drafting of the budget and the activities. ITM will offer technical support. Over the following days of the visit, coordinators of the different components sat together to outline the pathways of change, stakeholders to be involved and staff and students to be integrated in research and training activities. The weeks after the visit were taken up by an intensive process of writing-discussing-integrating the narrative of the proposal, with important feed-back and guidance from the International Cooperation and Development Office of ITM. Therefore, with priorities and areas of action and change defined and prioritized by the partner, and support agreed by ITM this proposal is the fruit of a close collaboration. CRUN will take the lead in the implementation of the different research projects, the organization of the quality laboratory environment, the setting-up of AMR activities, the consolidation of a social science unit and the organization of trainings and identification of PhD/MSc students. CRUN will also continue to team-up with the other Burkinabe partner present during the previous program (Centre Muraz) to develop sexual and reproductive health-related research activities in urban Burkina Faso. ITM will continue to support the CRUN for each of these components.

ITM has the capacity to manage this partnership effectively and efficiently. Not only we already have an excellent track record of collaboration with CRUN as outline above, ITM also has the internal capacity to ensure the smooth implementation of the outcome. First, as said above, there is buy-in from ITM scientists to support the identified pathways of change. Secondly, ITM has a professional financial project management service, with a specific finance person appointed to the follow-up of the collaboration. Lastly, the International Cooperation and Development Office will ensure timely reporting to DGD, monitoring and evaluation of the project.

In addition to the partnership approach already outlined above under relevance, we want to add that capacity strengthening will be based on a self-assessment. A capacity assessment will be conducted at the start of the program to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression. This tool will be provided by the International Cooperation and Development Office and will be adapted to the context. Not only will this help us to identify potential new areas for collaboration, it will also help ITM increase its insight into partners strengths. In this way, we improve our knowledge on which partners are at what level of

capacity and will be more equipped to identify partners for joint research development.

Description of Synergies

This program will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation, and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country program.

Other Belgian actors with programs in Burkina Faso include VLIR-UOS and ARES with Université de Liège, Université Libre de Bruxelles, Université Catholique de Louvain, and Université de Mons tackling diverse topics such as waste management of electronic equipment, entrepreneurship, multidisciplinary research to prevent and manage cardiovascular disease, journalism, communication and conflict, and strengthening of Master programs, while the majority of topics are focused on building capacity of the agricultural sector. Synergies within these topics are difficult as the activities are related to very distant fields. However, since VLIR-UOS and ARES open new calls regularly, we will explore potential collaborations and synergies continuously during the duration of the program. That ITM is part of the same JSF on Higher Education and Science for Sustainable Development with VLIR-UOS and ARES will help to further facilitate these exchanges of information.

We also aim to keep ourselves informed on the development of projects targeting health related issues by other NGO's even though they are not focused on infectious diseases but environmental issues and climate change and water sanitation. During the meeting of ITM at Belgian Embassy in Ouagadougou in June 2021, potential synergies with the Enabel project 'She Decides' were mentioned. The Enabel program only started recently in Burkina Faso but considers the same topics that empower women by promoting sexual and reproductive rights. Synergies with our program in Centre Muraz can be sought by for example establishing the same connections to get research and program findings into practice.

ITM and CRUN have built synergies with **international Institutions** in previous programs that will continue to be exploited in the current program. Each of the program components has planned new or sustained synergies:

Prof. dr. Andre van der Ven and his group at **Radboud University Nijmegen** have been collaborating with CRUN on the implementation and use of Sysmex platform (hematology analyzer). In the previous program this tool has been used to investigate the presence of blood bacterial infections (Prof. Jan Jacobs, ITM) and malaria infections and red-blood cell disorders (Prof. Anna Rosanas-Urgell). The use of Sysmex technology for malaria diagnosis and quantification of transmissible stages will continue to be evaluated within the current program.

The **malaria component** will also explore synergies with:

- the **Academic Medical Centre University of Amsterdam** with whom we have previously collaborated with the use of rapid diagnostic tests in malaria in pregnancy studies.
- the group of Prof. Carlota Dobaño, an expert malaria immunologist **ISGlobal** (Barcelona), with whom a collaboration was started in 2014, in the context of the previous DGD five year program. Prof. Dobaño, contributed to training of Dr. Natama (PhD) and as such helped built immunology expertise at CRUN. In the previous program, the synergy contributed to one EDCTP mobility and one EDCTP career development grant to Dr. Natama. Because of this synergy, CRUN will soon implement a Luminex platform for high-throughput analysis of immunological factors, that will greatly contribute to the current program and expand training activities.
- Furthermore, the current program will work on capacity strengthening on genomic surveillance using next generation sequencing platforms and bioinformatic analysis. This component malaria molecular surveillance is also included in **various other ITM program outcomes** proposed in this new DGD five-year program (Rwanda, Peru, Vietnam and the Democratic Republic of the Congo). This will be done online and F2F with workshops, seminars and training, which aim is to foster communication and collaboration between partners facing similar challenges that could benefit of sharing expertise and troubleshooting. In this way, we aim to build programs that are not isolated from one another but that link, benefit, support and create alliances and synergies with existing networks.
- In this context, the program will connect to existing programs and networks in Africa that are aiming to increase surveillance and next generation sequencing capacity in Africa to respond to infectious diseases: **DELGEME Developing Excellence in Leadership and Genetics Training for Malaria Elimination in Sub-Saharan Africa**; **PDNA Pathogens genomic Diversity Network Africa**; **African Pathogen Genome Network** (funded by CDC); **WANETAM**,

West Africa network of excellence for clinical trials in TB, AIDS, and Malaria. With this links we create opportunities for CRUN to develop into a molecular surveillance hub in Africa.

Synergies for the AMR (hospital and community) component:

- The PhD candidate of the AMR community component, Mr. Daniel Valia, will be supported by a synergetic team with scientists from ITM, CRUN, and Prof. Hector Rodriguez-Villalobos and , **Université Catholique de Louvain**.
- Collaboration and synergies with the group of prof. Abdoul Salam Ouedraogo in the Centre Hospitalier Universitaire (CHU) in Bobo-Dioulasso will be sought for training and surveillance activities in AMR containment.
- Synergies with the **DGD programs** in Benin, Guinee and Rwanda that also include an AMR component will be established. For example, healthcare staff from the CRUN AMR surveillance network will have the opportunity to attend trainings in Cotonou, Benin and laboratory technicians from hospitals in the country program of Guinee will be invited to attend the AMR microbiological surveillance trainings planned in CRUN.

Synergies for the **sexual and reproductive health** component:

- The SHR component will link up with the CohMSM-PrEP program, which is an international collaborative effort to enhance HIV preventive research among highly vulnerable populations in four West African Countries: Mali, Côte d'Ivoire, Togo and Burkina Faso (15). Our proposed research on sexual and reproductive health, including cervical cancer screening among vulnerable women, is complementary with the HIV combination prevention research approach carried out by the CohMSM-PrEP program.

Synergies for the **social sciences** component:

- The PhD candidate of the social sciences component, Ms. Adelaide Compaore, will be supported by a synergetic team with scientists from ITM, CRUN, and Prof. Salla Sariola, **University of Helsinki, Finland**.
- The strengthening of the Social Science Unit at Nanoro will include a South-South collaboration with the Health Research Centre at **Institute Médical Evangelique, Kimpese** (Democratic Republic of Congo).

We expect that the synergies and collaborations set-up in our program will foster an important exchange of students, healthcare staff and know-how in the following years. For example, we expect CRUN to also host participants from surrounding countries to visit the institute and attend the associated courses.

Additional ongoing and upcoming synergies can be found in annex 'Responses December'.

Description of how individual or collective recommendations and lessons are to be taken into account

Administrative aspects such as new import regulations occurred in 2017 delaying shipments of reagents. We will plan logistics well in advance and when possible, different disease components will join efforts to merge all importations in a single yearly shipment. This will also allow to reduce our ecological footprint.

Gender. Previous programs in Burkina Faso involved a majority of male students and staff. Efforts were put in place to gradually reach a gender balance. Although we have not yet reached a 50%, in the previous program a female PhD candidate (social sciences) was enrolled who will continue her PhD in the following years. Our new program targets for training and capacity strengthening are disaggregated by gender as detailed in the section *Target groups and beneficiaries*.

Sustainability: DGD funding is necessary, but not always sufficient to carry-out the research activities. The fact that such additional funds have been found, illustrates that CRUN does not depend only on DGD funding, and is already working on sustainability in the long run. We will work to further support to attract international competitive funding.

Synergies: Given the specific (research) nature of the ITM-project, finding synergies among Belgian actors (the majority focused in the agricultural sector) has been proven difficult; however, synergies with international research institutes has been highly beneficial to multiply capacity building and expertise (for example an immunological lab is being build and equipped at CRUN). Active synergy with partner ARES has been achieved with exchanges at ITM and CRUN, and we will work to expand them (together with VLIRUOS) in the next program.

Laboratory capacity strengthening and human resources sustainability. Molecular biology techniques have been transferred from ITM to the CRUN laboratory and are currently being used to support molecular diagnosis of the cohort study on malaria. A common remark over de different components is the need for dedicated local staff to follow-up procedures, complete databases and train students. If this dedicated staff is lacking, activities often experience delays, as they are not given priority. Often PhD students take on this task, however, we agree that in the short and the long term, the laboratory at CRUN would benefit of expert technical staff with long-term duration of employment contracts that would support implementation of new

techniques, organize logistics in the lab, train students and other technicians to further transfer and develop expertise. In the current proposal we have foreseen budget to support salaries of technical staff to increase sustainability in the capacitation of staff technical skills.

GRIPP. In order for activities to be effective and sustainable and have an impact on the affected populations, they should be integrated into the national programs. The FA3 DGD evaluation team made the remark that although ITM is doing relevant activities to support policy and practice these were not properly measured. Therefore, in the current program we include a Result.3 targeting GRIPP (*see ToC figure*), we outline a number of activities that aim at regularly informing national control programs and we have selected indicators to accurately measure the contribution of the program to policy and practice.

Finally, the program has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue, this program gives particular attention to the valorization of knowledge (see GRIPP above). Furthermore, as recommended in the approval dialogue, this program has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

More on collective learning can be found in annex 'Responses December'.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
TOC_ITM_BurkinaFaso_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_BurkinaFaso_22-26_0.pdf
RA_ITM_BurkinaFaso_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_BurkinaFaso_22-26.pdf
References_ITM_BurkinaFaso_22-26	Other	https://fundhub.openaid.be/sites/default/files/2021-07/Reference_ITM_BurkinaFaso_22-26.pdf
FrameCollaborationBTC-ITG ALLsigned_20161007	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FrameCollaborationBTC-ITG%20ALLsigned_20161007_1.pdf
FACTSHEET_ITM_BurkinaFaso_22-26_CRUN	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_BurkinaFaso_22-26_CRUN.pdf
RESPONSES_DECEMBER_ITM_BURKINAFASO	Other	https://fundhub.openaid.be/sites/default/files/2022-03/RESPONSES_DECEMBER_ITM_BURKINAFASO.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The total amount of budget allocated for this program is 1.106.936,00 euro. The budget is divided in investment costs, salaries and operational costs. The allocation of budget to each of the categories has been talked through with ITM and CRUN and between the different components. Most of our budget (51%) is allocated to the category operating costs. This category is divided in three: operating cost, travel and grants. The operating cost will be dedicated to field activities, laboratory activities (equipment, reagents, consumables), maintenance costs (building, vehicles), organization cost for training and networking

meetings, and transport of samples/goods and customs clearance. The budget for travel is 10.95% of the total budget, of which 85,15% is allocated to ITM and the remaining 14,85% to CRUN. This budget will be used for research exchange visits and/or training at ITM/CRUN and for the participation to scientific meetings. In addition, a small travel budget is allocated to CRUN for local travels to attend national or regional meetings. The budget for grants (6,41%) will foresee the support of the Sandwich PhD in social sciences.

The second largest category of our budget is salaries (39.98%). 49,48% is allocated to CRUN, for technical staff at CRUN. This high investment on salaries is a well-considered choice, as strengthening of human capital is an important aspect of our project. We aim to continue to build individual capacity in CRUN, to strengthen the institute and its impact in health comes, as well as its sustainability for applying for external funding. The salaries include amongst others, the coordinator of the field activities and laboratory technicians. Gender balance is considered in the selection of staff.

7,01% of the budget is foreseen for investment costs at CRUN, i.e. purchase of motorbikes for field workers, office furniture and indirect costs. The budget for investments costs will be allocated to CRUN. Operating costs and salaries are divided over ITM and CRUN, to foresee all necessary consumables and equipment to sustain the activities.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym CRUN

Full name Clinical research Unit of Nanoro

Budget available

2022	2023	2024	2025	2026	TOTAL
102400	91800	109200	107200	106200	516800

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL
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Achieving progress in control of NTDs & AMR in Ethiopia

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Strengthening Ethiopian research capacity to achieve programmatic progress in control of NTDs & AMR		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-5-ET		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Ethiopia		
Sector :	12182 - Health - Medical research	Budget share :	100%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Ethiopia

Lat/Long :	8.9875670894972, 38.782937729743
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Outcome summary

Description of the outcome

This programme will be a collaboration between ITM and four research and academic institutes in Ethiopia. The University of Gondar will act as a hub for the north of the country and Jimma University will be a hub for the south. All activities will be closely linked to the two national research institutes in the capital: Armauer Hansen Research Institute (AHRI, for basic and clinical research) and the Ethiopian Institute for Public Health (EPI, for public health research and capacity building). The involvement of the national research institutes will enhance the alignment of activities with the national priorities and the translation of research findings into policies and practices. The project focusses on improved control of neglected tropical diseases (with a focus on One Health) and antimicrobial resistance, and diagnosis of viral infections.

At the core of the projects will be the researchers who work in the different institutions. Due emphasis will be given to educational activities to enhance their research skills, as well as platforms being developed for better surveillance and research on the different diseases. Furthermore, a stakeholder advisory committee will be established to ensure uptake of the research findings.

The projects aim to develop a strong network of Ethiopian research institutes, that can contribute to better programs to control the various diseases, by addressing key knowledge gaps and close collaboration with policy makers. Ultimately, this can contribute to improved health for all Ethiopians. While neglected tropical diseases, antimicrobial resistance and emerging viral infections are a potential threat for all citizens.

Wording of the outcome

Our objective is a sustainable Ethiopian ecosystem of research institutions that's capable of contributing to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases.

Target groups

The main target group consists of the researchers working in the different institutions, to be able to enhance research practices

in Ethiopia. Health care staff will also be involved, given their key role in implementing improved practices. Ultimately, improved disease control programs will benefit all Ethiopians.

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	1
7. Climat Change - Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	0
10. HIV / AIDS :	1
11. Children's Rights :	0
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	No
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

<i>Agriculture and Food Security</i>

There is an indirect link of the project with this strategy paper via the work on zoonotic NTDs. These diseases also affect livestock and hence better control of zoonotic NTDs will also improve the health of the livestock. This will be beneficial in terms of nutrition for the population directly, and via increased income of the families indirectly.

Education

In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an is highly appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

In our programme we focus on inter-institutional cooperation with university actors. Through the provision of scholarships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

The disease cutaneous leishmaniasis, which is one of the main research foci in this program, mostly occurs on patients' face and extremities and predominantly affects in children. After healing, the lesions leave scars that cause stigmatization of the patients by the community, causing children to retain from school and other activities. Other zoonotic NTDs, bacterial infections and viral febrile illnesses often occur in children, resulting in a high mortality rate. Health care for most diseases is only available at primary level, leaving the hard-to-reach populations behind. With our program we aim to improve the outcomes of the patients and bring health care closer to the communities. We will also build platforms for the different diseases (clinical, arboviral, AMR, zoonotic NTDs) to provide our partners the facilities, medication and experience to offer qualitative health care to the vulnerable patients. We will closely involve the community and children in our research activities, and for many studies ask also for their opinion on how health care should be provided. Women and children are often underrepresented in hospital-based studies due to differences in health-seeking behavior. By moving towards active case finding and community-based studies, we aim to increase inclusion of these vulnerable populations into our studies.

Development education

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff, who will further distribute their skills and knowledge in local trainings.

By regularly organizing a Steering Committee meeting with all partners involved in the program, we will ensure complementarity and synergies between the actors in our program.

Environment and climate change

Due to global warming, vector-transmittable diseases will move to areas at higher altitudes that have never been affected by the diseases before and are therefore naïve to the pathogens, which can result in outbreaks. Moreover, deforestation and urbanization is causing the rise of NTDs. Our program contributes to better knowledge about the diseases and aims to provide health care to hard-to-reach communities. Additionally, with the knowledge gathered in our studies, we aim to inform governments with policies to anticipate on the situation by disease prevention and improvement of health care.

Gender

Within the current program, we want to move towards formal incorporation of gender into our selection procedures for education and leadership positions to ensure equal access to education and work within a setting of gender imbalance. We will actively encourage women to participate in our projects and stimulate them to apply for opportunities and trainings. Specifically, we will target to have at least 40% female students and trainees for our projects, and to have at least 40% female staff involved/leading our projects. For our scientific research projects, we aim to recruit patients reflecting the true study population, and incorporate gender as a variable that will be studied as a risk for disease, poor outcomes etc. We also aim to include at least 40% of female stakeholders in our advisory board, so that the female partners also have a large influence on decision making and implementation of guidelines into practice.

Digitalization - Digital for Development D4D

Data provide the basis for almost any research intervention. They allow for objectively describing the situation or the problem that one will address.[...] Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. Data is also needed to keep track of a country's progress towards the SDGs. (DGD strategy paper D4D). In our program, we use data generated based on our studies to provide to policy makers so that they would maximize the number of beneficiaries and lower the threshold for vulnerable groups to receive appropriate, high standard health care.

Health

There is clear alignment of this project with the aspect of “integrated control of neglected diseases. This project strongly focuses on neglected tropical diseases, which typically affect the most vulnerable, poor and deprived parts of the population. Our project aims to develop improved strategies for control of these diseases, and will improve the access and quality of care for this vulnerable segment of the population.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

Despite its strong economic growth the past years, Ethiopia remains one of the poorest countries in Africa and is highly affected by political instability. As defined in article 25 of the Universal Declaration, the right of adequate health and health care is a universal human right and special care and assistance should be given to mothers and children.

Neglected tropical diseases affect the poorest populations in the country, and often occur in vulnerable populations such as HIV patients, children, migrants and women. Moreover, health care for many NTDs is currently mainly centralized in primary hospitals, which is often inaccessible for remote-living patients.

The strategy for implementing the FA5 program takes human rights into account by 1) supporting free diagnosis and treatment for all patients involved in the program 2) extending our research focus to vulnerable populations such as those affected by NTDs in general, and more specifically HIV patients, migrants, women and children 3) moving towards community-based research projects and active case finding which allow inclusion of hard-to-reach populations (Leave No One Behind). The central aim is to generate recommendations based on our research findings to improve health care for all patients (rights-holders).

Our program will also perform capacity strengthening of the partner institutions and will closely collaborate with the national institutions (duty-bearers). Moreover, our program will incorporate stakeholder advisory board meetings, which ensures policy relevance of research and enables buy-in from potential users. This is done to get our research in to policy and allow duty bearers to fulfil the right to health for the communities.

Decent and sustainable work

ITM adheres to a number of principles which are part of the definition of DW as given by the DW JSF:

- o Productive and freely chosen employment;
- o Which provides an income sufficient to cover family needs;
- o Which includes social protection;
- o Which respects fundamental rights at work, including freedom of association and the right to participate in collective bargaining agreements (CBAs);
- o Which includes equal treatment of all workers without making any distinctions based on sex, age, origin, political or religious beliefs;
- o Which includes health and safety provisions in the workplace.

In our FA5 activities, we will strive to promote the DW principles. Staff hiring procedures, salaries, top-ups and per-diems, as well as social protection will be in line with the institutional policies in the country. Where needed, discussions to adapt these for staff primarily paid using FA5 funding will be held. We also ensure that staff working in the laboratory can work in a safe environment, by supplying necessary protective safety equipment and ergonomic equipment such as desks and chairs.

Gender

In Ethiopia, a gender imbalance in terms of education and employment within the medical field is evident, with around 20% estimated to be female. Gender was included in the formulation of the previous project, but a gender strategy was not yet raised to a higher institutional level in terms of guidance, plan or policy. Nevertheless, coincidentally, we have had a relatively large proportion of females in key positions, around 30-40%, although this percentage was much lower overall.

Prof Veerle Draulans from the KU Leuven visited Gondar in 2018 to analyze the gender situation, which was followed by a gender workshop organized by VLIR-UOS in which several of our partners from Gondar participated. Although the workshop did not generate concrete gender action plans, it was successful in terms of increasing gender awareness and can be seen as a starting point for further action and discussion.

Within FA5 we want to move towards more formal incorporation of gender into our selection procedures for education and leadership positions to ensure equal access to education and work within a setting of gender imbalance.

We will actively encourage women to participate in our projects and stimulate them to apply for opportunities and trainings. Specifically, we will target to have at least 40% female students and trainees for our projects, and to have at least 40% female staff involved/leading our projects.

For our scientific research projects, we aim to recruit patients reflecting the true study population, and incorporate gender as a variable that will be studied as a risk for disease, poor outcomes etc.

Women and children are often underrepresented in hospital-based studies due to differences in health-seeking behavior. By moving towards active case finding and community-based studies, we aim to increase inclusion of these vulnerable populations.

Lastly, we aim to include at least 40% of female stakeholders in our advisory board.

Environment

We used the KLIMOS toolkit to screen our Ethiopia country program.

Most of our projects are hospital and laboratory based, We did an analysis of the potential impact of the environment and climate on the intervention and vice-versa, and foresee some actions to offset the negative effects.

One of the main activities within FA5 that could cause environmental damage is travel. We aim to minimize travel whenever possible, and use digital tools and phone calls to monitor projects virtually. We also aim to compensate flights with carbon compensation schemes.

This is in line with ITMs travel policy, with a vision for carbon-neutral travel.

Other potential environmental impact relates to (potentially toxic) consumables which need to be discarded safely. This will receive due attention to safely discard of any potentially toxic products.

The impact of the environment on the project is mainly: 1) natural disasters could impact on project implementation; 2) climate change could contribute to the increase of some NTDs and viral pathogens. This last aspect will receive particular attention in various research activities.

Areas of complementarity and synergy with the intervention of ENABEL

As Ethiopia is not a bilateral country for the Belgian Development Cooperation there are unfortunately no Enabel interventions we might synergize with.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC1: Total number of new projects/grants acquired from external funders (disaggregate for competitive and non-competitive)
Indicator description :	This indicates that the partner is using its new capacity, is appealing and independent, and therefore capable of performing sustainable research ; Sov: Number of grants obtained
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC2: Locally organized hands-on trainings by Ethiopian partners
Indicator description :	Based on the practical skills acquired by trainings done by the ITM team, the partner institutions will be transferring this knowledge to next generations independently ; Sov: Number of trainings
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC3: Total number of PhD scholarship holders graduated, disaggregated by gender
Indicator description :	Highly educated people needed to sustain good research, find solutions for local and global problems and apply for future grants; Sov: PhD thesisses
Baseline :	0
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	2 (1:1)

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC4: LEISH: Uptake/influence of ITM-supported research in public policies
Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies; Sov: Policy briefs/summaries
Baseline :	NA
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC5: AMR: Uptake/influence of ITM-supported research in public policies
Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies; Sov: Policy briefs/summaries
Baseline :	NA
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC6: AFI: Uptake/influence of ITM-supported research in public policies

Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies; Sov: Policy briefs/summaries
Baseline :	NA
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	2

Formulation of outcome or result :	OC: Sustainable Ethiopian ecosystem of research institutions capable to contribute to programmatic change in neglected tropical diseases, antimicrobial resistance and viral diseases
Indicator title :	OC7: ZNTD: Uptake/influence of ITM-supported research in public policies
Indicator description :	This indicator is based on a self-assessment where 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies; Sov: Policy briefs/summaries
Baseline :	NA
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	R1. Platforms
Indicator title :	R1.1 Number of new laboratory tests introduced
Indicator description :	Making use of the state-of-the art methods to perform research/interventions and build good platforms; Sov: SOPs developed
Baseline :	0
Target Year 3 – 31/12/2024 :	5
Target Year 5 – 31/12/2026 :	8

Formulation of outcome or result :	R1. Platforms
Indicator title :	R1.2 Number of AMR meetings for hospital staff
Indicator description :	Three-monthly meeting with active engagement by relevant staff; Sov: Meeting reports
Baseline :	0
Target Year 3 – 31/12/2024 :	12
Target Year 5 – 31/12/2026 :	20

Formulation of outcome or result :	R1. Platforms
Indicator title :	R1.3 Number of AMR reports to GLASS
Indicator description :	Yearly reports of accumulative AMR results submitted to WHO GLASS; Sov: Meeting reports
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	R1. Platforms
Indicator title :	R1.4 Number of local quality assurance systems established/improved

Indicator description :	The number of reports that are sent from the partners to ITM to monitor the quality control in the laboratories; Sov: QC reports
Baseline :	0
Target Year 3 - 31/12/2024 :	9
Target Year 5 - 31/12/2026 :	15

Formulation of outcome or result :	R1. Platforms
Indicator title :	R1.5 Number of recommendations made based on the data generated by the platforms established
Indicator description :	Number of recommendations made based on the data generated by the platforms established; Sov: Recommendation briefs
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R2. Education/training
Indicator title :	R2.1 Number of participants in trainings organized at partner institutions, disaggregated by gender
Indicator description :	Over all trainings organized by the local partners, the number of participants, striving to 40% females eventually; Sov: Certificates
Baseline :	0
Target Year 3 - 31/12/2024 :	30
Target Year 5 - 31/12/2026 :	45

Formulation of outcome or result :	R2. Education/trainings
Indicator title :	R2.2 Number of participants in e-learning modules, disaggregated by gender
Indicator description :	Over all e-learning modules organized by ITM, the number of participants, striving to 40% females eventually; Sov: Certificates
Baseline :	0
Target Year 3 - 31/12/2024 :	20
Target Year 5 - 31/12/2026 :	30

Formulation of outcome or result :	R2. Education/trainings
Indicator title :	R2.3 Number of exchange training visits, disaggregated by gender
Indicator description :	Fellows visiting ITM ; Sov: mission reports
Baseline :	0
Target Year 3 - 31/12/2024 :	6
Target Year 5 - 31/12/2026 :	10

Formulation of outcome or result :	R2. Education/trainings
Indicator title :	R2.4 Number of students enrolled in Master or short-course programs at ITM, disaggregated by gender
Indicator description :	Courses at ITM allow the partner researchers to develop new skills and get in contact with other cultures; Sov: course
Baseline :	0
Target Year 3 - 31/12/2024 :	3 (1:3)
Target Year 5 - 31/12/2026 :	5 (2:5)

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.1 Number of research protocols approved

Indicator description :	Being involved in research protocols will allow researchers of partner institutions to learn how to develop protocols; Sov: protocols approved by IRB
Baseline :	0
Target Year 3 – 31/12/2024 :	9
Target Year 5 – 31/12/2026 :	16

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.2 Number of peer-reviewed scientific publications
Indicator description :	Publications with research results in peer-reviewed journals; Sov: PubMed
Baseline :	0
Target Year 3 – 31/12/2024 :	7
Target Year 5 – 31/12/2026 :	13

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.3 Number of conference presentations
Indicator description :	Talks at conferences will allow local researchers to broaden their network ; Sov: abstract books
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.4 Number of MSc thesises (co-supervised by ITM) successfully defended
Indicator description :	A number of educated researchers is important to maintain sustainable research; Sov: thesis dissertations
Baseline :	0
Target Year 3 – 31/12/2024 :	8
Target Year 5 – 31/12/2026 :	14

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.5 Number of PhDs grants accredited (disaggregated by gender)
Indicator description :	Highly educated people needed to sustain good research and apply for future grants; Sov: Grant approvals
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.1 Number of policy briefs communicated to stakeholders
Indicator description :	Briefs to stakeholders with advice on how to implement the obtained results; Sov: Policy briefs sent out
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.2 Number of steering committee discussions
Indicator description :	3 monthly steering committee meetings will be held to ensure that activities of the different partner institutions are aligned and integrated. ; Sov: Meeting reports
Baseline :	0

Target Year 3 – 31/12/2024 :	12
Target Year 5 – 31/12/2026 :	20

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.3 Stakeholder Advisory board meetings
Indicator description :	Twice per year the Stakeholder Advisory board will meet to discuss on the synergies and relevance of the projects; Sov: Meeting reports
Baseline :	0
Target Year 3 – 31/12/2024 :	6
Target Year 5 – 31/12/2026 :	10

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.4 Number of information campaigns and software apps
Indicator description :	Dissemination of output to the general public will be done through campaigns and online platforms; Sov: Materials
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.5 Number of partnerships with other research organizations
Indicator description :	Official partnerships with additional research organizations within the country or abroad (memorandum of understanding); Sov: MoUs
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Activities, targets groups and beneficiaries

Classification of activities

1) Platform development

- Research platform for zoonotic NTDs
- Research platform for viral etiologies
- Clinical research platform
- Immunological and molecular platform
- Quality-assured laboratory for bacterial infections

2) Education and training

- Regional laboratory training to address zoonotic NTDs
- ITM-based training on viral-etiology detection platform
- Trainings on GCP/GCLP, data management, biobanking
- Trainings on immunological and molecular assays
- Hands-on training in clinical bacteriology for AMR containment

3) Research projects

- Unraveling prevalence and risk factors of selected zoonotic NTDs
- Identifying gaps in current zoonotic NTD surveillance, diagnostics, prevention and control
- Identify etiologies in Ethiopian patient cohorts at ITM
- Diagnostics and treatment of leishmaniasis in hospitals and in the communities
- Update on AMR of bacteria isolated from blood

4) Getting Research into Policy and Practice (GRIPP)

- Community and general public disease awareness campaign on zoonotic NTDs
- Addressing policy makers to stimulate change
- Leishmaniasis task force and national guidelines committee
- Active participation to AMR national surveillance network meetings

5) Synergy

- Networking activities between the institutions
- Synergy with VLIR-UOS students working in the country

Target group(s)

Four research institutions are involved, within which mainly researchers and health staff are targeted, around 200-300 staff linked to the project. Historically, around 20% of Ethiopian staff involved in previous ITM projects in Ethiopia were female, although there is an increasing trend and further increasing this, is an aim of this project.

This project also aims to closely involve policy makers at various levels in the country (ministries of health, education and agriculture).

Beneficiaries

Ethiopian population (male/female): Ethiopia is a hotspot of NTDs and AMR is also a widespread problem making potentially affecting all Ethiopians. As to CL, zoonotic NTDs; NTDs most strongly affect vulnerable/poor communities, hence a focus on NTDs fully fits with the aim to Leave No One Behind.

Health care staff: directly benefit from the improved treatment and control practices that will come out of this project. They will be the direct link to patients.

Title of the reference annex :	TOC_ITM_Ethiopia_22-26
Title of the reference annex :	RA_ITM_Ethiopia_22-26

Description of the Relevance

Alignment local, regional, national or international policies: Neglected tropical diseases (NTDs) are a group of diseases of poverty predominantly occurring in tropical and subtropical areas among the most vulnerable, marginalized populations. Currently, WHO has listed 20 diseases as NTDs. The United Nations has specified the end of epidemics including NTDs as an important target within the 2030 health-related sustainable development goals. NTDs have strong interlinkage of with various SDGs; successful interventions against NTDs can contribute to 7 SDGs.

While WHO has put targets for control or elimination of various NTDs to be achieved by 2020, a recent evaluation found that most 2020 WHO NTD control targets were not achieved. In response to that, WHO recently launched an ambitious revised roadmap, entitled "ENDING the NEGLECT to ATTAIN the SDGs: A road map for neglected tropical diseases 2021-2030". This road emphasizes that research and innovation are fundamental enablers of programmatic progress for all NTDs. To reduce the incidence, prevalence, morbidity, disability, and death due to NTDs filling gap knowledge in research and providing new interventions and effective, standardized, and affordable diagnostics is required.

Antimicrobial resistance (AMR) has been recognized as a global public health threat affecting lives and livelihoods of vulnerable populations and the environment. This growing problem is driven in Africa by inappropriate use of and uncontrolled access to antibiotics, weak regulation and oversight, and poor clinical diagnostic capacity. Without effective measures, AMR attributable deaths may rise to 10 million per year by 2050 corresponding to an economic cost of US\$ 100 trillion, whereby the poorest countries would be hit hardest . The rise of AMR impacts the realization of several SDGs critical to development, i.e. SDG 1, SDG 2, SDG 3 , SDG 8 and SDG 10, as people in lesser health have increased health spending, cannot work and thus have less resources to spend on other household needs such as nutrition and education.

Maintenance or further development of activities: ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed.

In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer etc.) and on continued capacity building. Over time, partners will acquire specific capacities, knowledge and expertise. Over time this capacity will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as hub for a network. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice. With the University of Gondar, the collaboration was started in 2014. After this start-up phase, the collaboration has moved to institutional strengthening in this programme. The three new partners (Jimma University, EPHI and AHRI) will have a start-up phase in this programme.

Link Relevance and ToC: Ethiopia is one of the countries most affected by NTDs. In response to that and to the WHO roadmap, Ethiopia has designed a national strategy to improve the control of NTDs in the country. Five NTDs listed in these documents will be targeted in this project. The Ethiopian strategy acknowledges important knowledge gaps that should be addressed to make progress in the control of NTDs. This project explicitly aims to address some of these key knowledge gaps.

The WHO roadmap explicitly states the importance of alignment of all partners to achieve maximal impact. In line with that, a dedicated structure will be put in place to ensure coherence and alignment of the activities of all partners involved in this project. To ensure GRIPP, stakeholder mapping has been conducted and regular stakeholder & advisory board meetings will be held, particularly involving the relevant ministries, to ensure project activities target national priorities and that new findings and recommendations will be integrated in the national strategy and guidelines.

Relative to previous programme, important changes include: 1) the involvement of the national research institutions; 2) the role of the University of Gondar as a hub to support other universities in the North; 3) the inclusion of Jimma University as a hub for the South; 4) inclusion of zoonotic NTDs as a new field on top of leishmaniasis.

AMR is a global concern, which is even more challenging for resource-constrained countries. Blood culture based surveillance for AMR was introduced in the previous programme in Gondar. The aim is now to capitalize on the established capacity at Gondar aiming for an impact at the national level by having UoG as a hub for training and capacity building on AMR in Ethiopia, closely linked with the national research institutions (EPHI & AHRI).

Gender. We will encourage women to participate in all aspects of this project. We aim to go for at least 40% involvement of women in the training activities and at least 40% involvement in coordinating/leading positions in the project. We will actively reach out to female staff in Ethiopia to encourage applications. Several key indicators will be disaggregated by sex. During analysis of the scientific projects, careful evaluation of gender in the study population will be done, to identify whether there is a gender imbalance in the study population, whether males/females are more affected by the disease and whether gender specific recommendations or actions are needed.

Protecting the environment & natural resources:

There is a strong One Health component in this project. The One Health approach is built on the fact that human, animal and environmental health are closely linked. There will also be a focus on early detection of new viral pathogens that are more likely to emerge due to climate change. All laboratory activities can have an impact on the environment by disposal of products. We will ensure safe disposal of any toxic product in the project. Climate change can lead to increases in several of the diseases targeted in the project, such as neglected tropical diseases. In that sense, the project can contribute in addressing some of the health consequences of climate change

Link with JSF strategic goals: The present programme is strongly linked to the 6 strategic goals of the JSF HES4SD. It will fundamentally increase to capacities of individuals (**SG 1**). More specifically the programme will strengthen the capacities of researchers (and health staff; cf. involved actors JSF pp. 24-25) and will have increased their potential to be change agents (**SG 2**), by applying their newly acquired knowledge and skills. Furthermore, this programme goes beyond individual capacity development but will strengthen the capacities of the different partner organisations (**SG 3**; cf. involved actors JSF pp. 24-25). By strengthening their capacities they are enabled to operate as drivers of change (**SG4**) aiming at a meaningful impact in society. This will be realized via both the co-creation, transfer and application of relevant knowledge (**SG5**), and via a strengthened science-society interface (**SG6**; e.g. work on GRIPP).

The **new annex** 'Responses December' provides more details on the **alignment with national priorities**.

Description of Coherence

Unique characteristics of the programme: Several actors such as CDC and the drugs for neglected diseases initiative (DNDi) are present working on NTDs and AMR but they have often not involved the national research institutions. In this project, the national research institutions play a key role, as they will have a coordinating role to align capacity building, research and educational projects conducted in Ethiopia on the different diseases by various actors. We have also set up a stakeholder advisory committee, bringing relevant actors together to closely align our activities with the activities of other actors, and to ensure our activities are aligned with national priorities. Another difference is that several actors engage for a few years with Ethiopian institutions, but when the project ends, there is poor sustainability. For this reason, a strategy for external fund raising and training for the Ethiopian researchers on grant writing is foreseen.

Complementary

As to other Belgian actors, clear complementarity exists with VLIR-UOS. This will be facilitated by including Jimma University, one of the key partners for VLIR-UOS. Several joint collaborations have already been conducted with VLIR-UOS and will continue during this programme. VLIR-UOS will also be present in our stakeholder advisory committee. As VLIR-UOS aims to continue working in Ethiopia via a calls-based system, this will also provide opportunities for joint projects. Relevant international actors will be included in the stakeholder advisory committee.

Link coherence to ToC

Our ToC and the approach for this project is based on the observation during previous programme that there is limited alignment and coordination between various actors in the Ethiopian context. To improve this, we foresee 1) setting up a project steering committee to ensure good linkage between the different institutions involved in this project; 2) setting up a stakeholder advisory committee to ensure good linkage and alignment of this project with other key actors involved in similar domains in Ethiopia. We also observed that a lot of scientific projects often only lead to scientific publications with limited focus on the potential impact on policy. For this reason, we will – together with policy makers – define a GRIPP strategy at the start of the project.

Coherence other activities carried out by ITM

In terms of internal coherence, it is worth noting that this programme will be highly complementary to ITM's Synergy programme. The Synergy programme will allow this programme to flexibly grasp opportunities for synergetic interventions with other actors or funding sources, including activities linked to the collective learning of the thematic JSF HES4SD. The synergy programme will be a further catalyst for the programme's impact. The present programme is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics (e.g. Declaration of Helsinki and CIOMS International Ethical Guidelines for Health related Research involving Humans). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data (any research undertaken also adhering to GDPR principles).

External coherence: Within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved.

Description of Effectiveness

Realistic and achievable nature + link with ToC

This project has a sound starting base based on previous activities that were already conducted in Ethiopia over the last years. With the University of Gondar, there is a successful DGD funded collaboration since 2014. During this period, we have proven to be able to successfully develop capacity, conduct research and training in the field of leishmaniasis and AMR. Collaborations with other universities have been started (Arba Minch, Dessie University & Bahir Dar university) and linkages with the national research institutions have been made. Several of the research findings generated during previous programme have fed into national guidelines and has informed policy.

With the University of Jimma, ITM has been collaborating for several years on zoonotic NTDs, closely linked to the VLIR-UOS activities. In general, we have successfully achieved the planned activities and results in previous programme. In this programme we want to take the project to a higher level by adding Jimma University and by integrating the national research institutions.

A key focus of the project will be of alignment of project actors and close linkage with the stakeholders. For this purpose a scientific steering committee will be set up, which will closely interact with the stakeholder advisory board. At the project start, a joint evaluation of ongoing or planned activities will be done. Based on the needs and gaps identified by the stakeholders, a strategy will be jointly developed with regular monitoring of progress.

How the expected results can be closely attributed to the programme

Based on our ToC, a number of indicators have been put forward that naturally flow out of scientific capacity building activities and the various types of activities: 1) platform development; 2) education and training 3) research projects ; 4) GRIPP and synergy. For each activity, clear output indicators have been developed with regular monitoring. We will track the number of trainings done, protocols developed and scientific publications published and disseminated. We will monitor quantitatively the fellowship process and the proportion that continue towards a PhD. All these indicators are direct results from the project. The proportion of females involved in the project will also be monitored. We will track the number of policy briefs & recommendations made, and the extent to which these have informed national strategy and policy using a quantitative grading system. In summary, at each level quantitative measures will be used to quantify direct output on key components of the project.

Marginalized groups, and inequalities:

Neglected tropical diseases (NTDs) typically mostly affect underprivileged, poor and vulnerable populations. Poverty is a key risk factor for NTDs. With a strong focus of NTDs in this project, these populations are directly targeted. AMR is a global

problem, affecting the entire population of Ethiopia. As the consequences are even more severe for poor & vulnerable segments of the population, this component of the project will also be most beneficial for these groups.

As to gender, we will actively encourage female staff to apply for the training and fellowship programs and will actively search for female staff to take up leading roles in the implementation of the program (>40%). This will be monitored throughout the project. Several indicators in the project (such as PhD applications, training visits to ITM) will be reported disaggregated by gender.

Baselines identification and used as part of the intermediate or final evaluations or even impact assessment: As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programmes. From the evaluations of past interventions, such as the one for the third framework agreement funded by DGD, it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between the university of Gondar and ITM, the effectiveness criterium never scored below B.

Baseline information is collected at the level of the four Ethiopian project partners mainly, as the partners are also the target groups of the results. Baseline information is collected mainly through document review at their level. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

At the level of ITM it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore we included a standard indicator on this aspect.

Common approaches in thematic JSF: The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

Budget justification

Investment costs (54,000 EUR) will be used to reinforce the laboratories at the partner institutions so that they can be used for the different research platforms (immunological equipment, freezers, ELISA reader). Local salaries (225,000 EUR) will be used to support key researchers and lab staff, but also project coordinators, while about 20% of the total budget is used for ITM salaries (398,387 EUR). The operating costs will mostly be utilized to buy consumables and ship them to Ethiopia for the research activities (368,937 EUR at LOC@ITM) or to locally support the research projects (patient costs, locally available consumables) and organize courses and trainings at the partner institutions (411,000 EUR at LOC). The operational costs at ITM side (197,600 EUR) will be used to facilitate laboratory work for the research projects and to cover among other things publication costs, organize trainings and pay for shipments of consumables. The travel budget on ITM side (202,500 EUR) will be used for exchanges of ITM researchers going to Ethiopia, but will also cover the costs of Ethiopian partners coming to Belgium for learning new techniques, protocol development etc. The travel budget for Ethiopia (117,200 EUR) will solely be used for travels within the country between the different partner institutions for research or trainings, or to facilitate field work. Lastly, the grants at ITM (22,000 EUR) will ensure that Ethiopian partners can be enrolled in courses at ITM.

Justify allocating resources for achieving the expected results:

The project is geared towards building strong researchers and research institutions in Ethiopia, as to allow high quality research to be conducted to inform national policy. Central in this is investment in young, talented Ethiopian researchers that can be the future leaders in the country and the actors of change. The budget is allocated in such manner to allow to have a high quality environment in which staff is able to access high relevant and high quality training, can work in effective networks and platforms and has the means to implement studies addressing key knowledge gaps. In that sense, we prioritize quality over quantity (meaning instead of providing scattered trainings to many more people, we prefer to focus on achieving highly skilled Ethiopian researchers that can serve as a model and can educate the next generation of young researchers. It is our experience

that these highly skilled people can be a catalyzer for the institution and can be very successful in attracting additional funding from international partnerships. In that sense, it is an investment that pays off and is vital in terms of scaling-up, impact and sustainability. The budget allocated to cover ITM staff in the project is limited to 20%, to ensure the bulk of the budget goes to our partners.

We see good cost-saving opportunities with VLIR-UOS by organizing training together and streamlining activities. VLIR-UOS also has a project support structure at Jimma University, and working together in that respect can also increase efficiency.

Additional info on the scholarships budget:

The 22,000 EUR foreseen for scholarships in the budget will be complemented by external and internal ITM funding. More details can be found in the new annex 'Responses December'.

Customs formalities

More details regarding the choice not to outsource the collaboration and facilitation of custom formalities can be found in Annex 'Responses December'.

Description of the expected Impact

The United Nations has specified the end of epidemics including NTDs as an important target within the 2030 health-related sustainable development goals (SDG3). Antimicrobial resistance (AMR) has been recognized as a global public health. **AMR attributable deaths may rise to 10 million per year by 2050** corresponding to an economic cost of US\$ 100 trillion (O'Neill 2016), whereby the poorest countries would be hit hardest (World Bank Group 2017). **Better control of NTDs impacts on 7 SDGs (SDG 1,2,3, 4, 5, 8, 10). The rise of AMR impacts the realization of 5 SDGs (1,2, 3, 8, 10) critical to development.**

In the long-term, this programme wants to contribute to reducing the burden of Neglected Tropical Diseases, and establishing solid systems to contain AMR, emerging infections and other national health risks in Ethiopia. This long-term goal is aligned with the WHO "ENDING the NEGLECT to ATTAIN the SUSTAINABLE DEVELOPMENT GOALS: A road map for neglected tropical diseases 2021–2030" emphasizes that research and innovation are fundamental enablers of programmatic progress for all NTDs.

The project can contribute to realising this long-term objective via improved practices in key stakeholders (predominantly ministries and policy developers) on the basis of an improved national strategy to control diseases. This would be based on improved strategies to monitor, prevent, diagnose or treat the various diseases integrated in national guidelines and knowledge on the various diseases that is translated in national policy.

NTDs typically mostly affect underprivileged, poor and vulnerable populations. With a strong focus of NTDs in this project, these populations are directly targeted. AMR is a global problem, affecting the entire population of Ethiopia. As the consequences are even more severe for poor & vulnerable segments of the population, this component of the project will also be most beneficial for these groups, following the principle of leaving no one behind.

Description of Sustainability

Program viability. As mentioned under other sections, the programme target group and partners coincide. Therefore technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups completely control the intervention. Together with ITM, they co-implement the project. In order to ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal, and will remain the key responsible party to its execution.

This project is unique in the Ethiopian context in the sense that it aims for sustainable and strong regional or national platforms bringing various actors together, under the umbrella of the national research organisations and with close linkage with the stakeholders. A strong emphasis is put on GRIPP, and obtaining external funding is part of the objectives of the project, to enhance sustainability.

The successful establishment of such a structure could be a paradigm shift in the way scientific capacity building and research has been organized in Ethiopia. Such an approach would be much more efficient in terms of identifying the true knowledge gaps that are most relevant for the national strategies, conducting the research to fill the knowledge gaps, and have an efficient structure to translate these findings into policy. Such a set-up would directly help to address the two SDGs targeted in this project. Moreover, it could also serve as a model and foundation for any other disease relevant in Ethiopia, and hence contribute

to SDG 3 in a general manner. To enhance sustainability, due focus will be given to work as much as possible with consumables that are locally available, to ensure the partners can continue their activities if this DGD supported project would come to an end.

Multiplier effect. The experience from previous programme has also been that the collaboration had a clear catalyzing effect: by having well trained staff and quality platforms, the partners become also highly attractive for international research partners. For example, a large range of additional grants (mainly with funding from EU and the US) has been obtained at the university of Gondar, building on the capacity that was developed during previous programme. Moreover, we will develop a strategic plan to jointly attract external funding; trainings will be organized on this, and the application for external grants will be monitored during the project, with an indicator specifically linked to this.

Capacity building. The capacity building work in this project also directly builds the key ingredients for a sustainable research network: training of staff, alignment of all actors and joint knowledge gap prioritization. Strengthening of the partners will be done in various ways. Support will be given to establish strong platforms for the diseases targeted. A fellowship program will be organized to identify those researchers that can become the future research leaders in the country. A dedicated training program will be organized to enhance their skills. As to research projects, a due focus will be on quality of the projects, adhering to international standards. We do not only install high-tech lab equipment but foresee sufficient capacity development and deliberately choose for technology that can be sustained within the local context.

By the end of this programme, we expect to have a strong, sustainable and high quality network that is effective in providing scientific evidence that is key for the national programs and that is integrated in the national policy documents. The partners will have the capacity to obtain external funding, and to attract other international research groups.

Description of the Partnership Strategy

Composition and justification of partners

The composition of the partners in this project have been carefully thought through. On the one hand, we want to further capitalize on the capacity already established at UoG during previous programme, but to take it at a higher level with UoG acting as a regional hub for leishmaniasis research in the North. Several universities will be linked to the leishmaniasis platform, including Bahir Dar University, Wollo University (Dessie) and Arba Minch University. In the field of AMR, UoG aims to support national trainings and the contributing to the development of a national platform.

Jimma University is a key partner for VLIR-UOS. They have been acting as a hub for the capacity building work for the South of Ethiopia. In this project, Jimma university will act as a hub for work on zoonotic NTDs. A regional one health network will be developed, in close collaboration with AHRI.

AHRI is the national research organisation covering basic and clinical research on a wide range of infectious diseases. EPHI is the national research organisation responsible for epidemiological research, surveillance and capacity building on various infectious diseases.

This project will bring these key partners together, with the national research institutions to ensure coordination of the activities, and to achieve a national reach. UoG will act as a hub for the north, while Jimma university will act as a hub for the South.

Involvement/ownership of partners

To ensure ownership and alignment between partners, a scientific steering committee will be established. Within this committee, a strategic plan for project activities will be developed based on a needs assessment, and a research agenda will be drafted, in close consultation with the stakeholder advisory committee.

Capacity building

A capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

Link between partners and target groups

The target group will essentially be the researchers working in these institutions.

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for

Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council in which ITM’s partners are represented and which discussed the thematic JSF process.

Description of Synergies

The organisation of this project is based on the observation that various actors are working on the diseases targeted in this project, but not in a coordinated manner. This was one of the key reasons to include the national research organisations, as they are generally involved in many research collaborations and have a national overview of ongoing or planned projects. Their involvement will also help to align the collaborations with the various international partners.

The national research institutions also have certain expertise or capacity not present at the university level (eg high level technological platforms), and vice versa. Bringing these two types of institutions together synergizes the available capacity.

Jimma university and Gondar university both have experience in clinical and laboratory research, and have collaborated in various fields already. More formally linking these two leading universities will further synergize available capacity and lay the foundation for sound south to south exchange activities. The experience of Jimma university with one health could also be beneficial for UoG and vice versa, the extensive experience with clinical trials at UoG could be useful for Jimma University.

For all disease topics, key actors have been mapped and these will be reached during the project, to align activities at the national level. In the field of leishmaniasis, DNDi has been very active in Gondar, and they will be part of the stakeholder advisory committee. They have established a leishmania research center in Gondar and we have been collaborating with them in that center for 10 years. In this center, pivotal studies have been conducted that have directly fed into guidelines and policy

We have also mapped One Health initiatives in Ethiopia, and will engage with the various partners.

Several of these initiatives have very similar objectives as ours. The synergy lies in the fact that they cover different areas of the country (and hence contribute to the development of a national network) or could enhance the role of Ethiopia within international networks.

Initiative	Aim	Partners
Jigjiga One Health Initiative (JOHI)	building the capacity of Jigjiga University to become a center of excellence for OH studies and create innovative integrated health systems for the improvement of health and wellbeing of pastoral communities	Swiss Agency for Development and Cooperation (SDC): Jigjiga University, AHRI—MOH, Swiss Tropical and Public Health Institute
Ohio Global One Health Initiative	improving the capacity of pre-service health professionals in Ethiopia	Ohio State University Health Sciences: African regional office in Addis Ababa
One Health Central and East African (OHCEA) University Network	Cultivating the culture of multi-sectoral collaboration through field attachment, experimental learning, training and research.	Network of 21 public health and veterinary universities from 8 countries in the East, Central and West Africa regions. In Ethiopia: JU, Mekelle University and Addis Ababa University
One Health Regional Network For the Horn Of Africa (HORN)	improving the research capacities of individuals and institutions particularly on human and animal health issues and create a One Health Regional Network for knowledge and information sharing	Biotechnology and Biological Sciences Research Council Fund: University of Liverpool in partnership with Liverpool School of Tropical Medicine, United Kingdom; University of Nairobi, and International Livestock Research Institute, Kenya; University of Addis Ababa, and the International Livestock Research Institute, Ethiopia; IGAD Sheikh Technical Veterinary School, Somaliland; Hamelmalo Agricultural College, Eritrea; and other national and international organizations and NGO’s.

As to VLIR-UOS, various collaborations have been started during previous programme (including joint PhD supervision, south to south exchange, joint research projects). We will continue to align our research with universities and VLIR-UOS in Ethiopia, by jointly applying for among others, VLIR-UOS Global minds, Short Initiative or TEAM calls, and through their MSc programmes. Good links exist between various key staff of ITM and VLIR-UOS. For Jimma, ITM is closely working together with Bruno Levecke and Sarah Gabriël from the University of Ghent who have been active in zoonotic NTDs in the partner site for a long time (VLIR-UOS Network programme in Ethiopia). Jimma university will thus put due emphasis on aligning ITM and VLIR-UOS support, including also joint missions to Ethiopia and joint program evaluation meetings.

We will also more cohesively cooperative with international partners. For example for immunology and molecular diagnostics of NTDs, we will collaborate with partners at the University of York to establish state-of-the-art laboratories and trainings in novel techniques in Gondar and at AHRI. Involvement of AHRI in FA5 also provides opportunities to explore collaboration with APOPO, who are already collaboration with AHRI and are observer in the thematic JSF HES4SD. EPHI has expressed interest in the set-up of local production of microbiology reagents and media. Therefore, South-South visits to the ITM partner at Central Media Making Laboratory (CMML) in Phnom Penh, Cambodia as well as the EDCTP-funded facilities ('SIMBL' project in which ITM is involved) in Cotonou, Benin will be considered. In addition, connections with the American Society of Microbiology (dr. Martin Evans), who supported the microbiology work of the EPHI during the last years, will be further explored.

There is no geographic JSF for Belgian partners in Ethiopia anymore. Previously, however, ITM was actively attending the JSF meetings and was strongly engaged in the initiative for gender equity, one of the predominant common activities.

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme.

Description of how individual or collective recommendations and lessons are to be taken into account

The programme has integrated the recommendations and lessons identified through the JSF, Strategic Dialogues and learning pathways (More details: Annex 'Responses December'). First, as recommended in the report of the approval dialogue, this programme gives particular attention to the valorisation of knowledge. Central in the project is the identification of knowledge gaps and addressing these through research projects. Through its focus on "Getting Research Into Policy and Practice (GRIPP)" we will strive to maximize this aspect in its programme, and will also establish the preconditions to learn more about the best possible strategies to achieve this, a.o. through indicator development, and as main topic of the mid-term evaluation in 2024. Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

While pioneering work has been done on leishmaniasis & AMR at UoG, a number of important observations were made during the project:

- The established capacity at UoG could also be beneficial for other universities (with UoG acting as a hub)
- Other research groups are conducting work on leishmaniasis & AMR in Ethiopia, but there is insufficient linkage and streamlining across the groups
- The national research institutions are not systematically involved
- NTDs have been approached mainly from the human/patient perspective but as many NTDs are zoonotic, a combined human-animal host perspective using an integrated One Health approach would have a clear added value.
- While the AMR surveillance work has been very useful to identify the main bacterial pathogens and resistance patterns, this should be complemented by work to identify viral pathogens as well, and the use of biomarkers to guide antibiotic therapy
- Ethiopia has confronted several outbreaks over the last years, and the COVID-19 pandemic exemplifies that a focus on outbreaks and emerging viral infections is a global need. Strengthening outbreak research capacity is a vital part of that.

This proposal aims to address a number of these observations

1. With the established Leishmaniasis research capacity at UoG, the university could act as a kind of hub for several other universities in CL endemic areas that are in need to strengthen their capacity
2. AHRI & EPHI will be partners; this will
 - Allow integration of scientific capacity building and research on leishmaniasis and AMR into the national research agenda
 - Enhance integration of the various research groups into an overarching national approach
 - As the national research institutions are the direct link with the Ministry of Health, integrating these institutions will also facilitate GRIPP

3. Jimma University will be a partner
 - VLIR-UOS & ITM have been working with Jimma University for over a decade, but for ITM this was never within a formal larger collaboration
 - The focus will be on NTDs as well, but within a zoonotic perspective
 - Over time, Jimma University could focus as a hub for the South, similarly as in the VLIR-UOS collaboration
4. Additional focus on capacity building for outbreak research and emerging viral infections.

Other challenges mentioned below, remain and we will continue to address these.

- It is very difficult to procure consumables within Ethiopia. To tackle this, we order the required goods at ITM and ship these to Gondar but the bureaucracy related to shipments from Belgium to Ethiopia are complicated and time-consuming.
 - In the short term, we will have a dedicated person in Ethiopia within this programme to handle the shipments more efficiently
 - An additional logistics staff member will be hired at ITM to optimize the import procedures

In the longer term, we continue to discuss with our partners how they could manage these orders locally, but this requires changes at the national level.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
TOC_ITM_Ethiopia_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Ethiopia_22-26_0.pdf
RA_ITM_Ethiopia_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Ethiopia_22-26.pdf
FACTSHEET_ITM_Ethiopia_22-26_UoG	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Ethiopia_22-26_UoG.pdf
FACTSHEET_ITM_Ethiopia_22-26_JU	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Ethiopia_22-26_JU.pdf
FACTSHEET_ITM_Ethiopia_22-26_EPHI	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Ethiopia_22-26_EPHI.pdf
FACTSHEET_ITM_Ethiopia_22-26_AHRI	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Ethiopia_22-26_AHRI.pdf
FACTSHEET COLLABORATION_ITM_Ethiopia_22-26_DU	Fact sheet per collaboration	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET%20COLLABORATION_ITM_Ethiopia_22-26_DU.pdf
FACTSHEET COLLABORATION_ITM_Ethiopia_22-26_BDU	Fact sheet per collaboration	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET%20COLLABORATION_ITM_Ethiopia_22-26_BDU.pdf
FACTSHEET COLLABORATION_ITM_Ethiopia_22-26_AMU	Fact sheet per collaboration	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET%20COLLABORATION_ITM_Ethiopia_22-26_AMU.pdf
Responses_December_Ethiopia	Other	https://fundhub.openaid.be/sites/default/files/2022-03/Responses_December_Ethiopia_UpdateMarch.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

Investment costs (27.295 EUR) will be used to reinforce the laboratories at the partner institutions so that they can be used for the different research platforms (immunological equipment, freezers, ELISA reader). Local salaries (282.000 EUR) will be used to support key researchers and lab staff, but also project coordinators, while about 22% of the total budget is used for ITM salaries (398.387 EUR). The operating costs will mostly be utilized to buy consumables and ship them to Ethiopia for the research activities (242.495 EUR at LOC@ITM) or to locally support the research projects (patient costs, locally available consumables) and organize courses and trainings at the partner institutions (430.251 EUR at LOC). The operational costs at ITM side (102.000 EUR) will be used to facilitate laboratory work for the research projects and to cover among other things publication costs, organize trainings and pay for shipments of consumables. The travel budget on ITM side (196.000 EUR) will be used for exchanges of ITM researchers going to Ethiopia, but will also cover the costs of Ethiopian partners coming to Belgium for learning new techniques, protocol development etc. The travel budget for Ethiopia (92.800 EUR) will solely be used for travels within the country between the different partner institutions for research or trainings, or to facilitate field work. Lastly, the grants at ITM (54.000 EUR) will ensure that Ethiopian partners can be enrolled in courses at ITM.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym EPHI

Full name Ethiopian Public Health Institute

Budget available

2022	2023	2024	2025	2026	TOTAL
22700	25700	25200	22700	22700	120000

Acronym AHRI

Full name Armauer Hansen Research Institute

Budget available

2022	2023	2024	2025	2026	TOTAL
22700	38200	35700	34200	34200	165000

Acronym JU

Full name Jimma University

Budget available

2022	2023	2024	2025	2026	TOTAL
23800	56600	54600	50600	50600	236200

Acronym UoG

Full name University of Gondar

Budget available

Connecting the Dots - Higher Education and Science for a Healthier World

2022	2023	2024	2025	2026	TOTAL
49000	49000	49000	49000	49000	245000

South-African Higher Education Institutions as drivers of change for health and wellbeing

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Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	South-African Higher Education Institutions as drivers of change for health and wellbeing		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-6-ZA		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	South Africa		
Sector :	12250 - Health - Infectious disease control	Budget share :	78%
Sector :	12220 - Health - Basic health care	Budget share :	22%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

South Africa

Lat/Long :	-28.4793, 24.6727
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Outcome summary

Description of the outcome

Ensuring healthy lives and promoting well-being is essential to achieve sustainable development. The complex interrelationships of factors affecting human and animal health, the well-being of the population and universal health coverage, require a move away from siloed to integrated and collaborative approaches which incorporate diverse disciplinary perspectives as exemplified by the One Health, "Whole of Society" approaches to health (cf. interlinkages).

In this South African programme, the two partners, Department of Veterinary Tropical Diseases (DVT, University of Pretoria) and School of Public Health (SOPH, University of the Western Cape), will work together aiming to contribute to the long-term goal to improve the health and wellbeing of vulnerable populations in South Africa and beyond, making sure no one is left behind. Each partner will have a specific pathway of change and entry point to this long-term goal. DVT will focus on infectious diseases of poverty in vulnerable, rural populations living at the interface and using a global One Health approach, while SOPH will focus on health policies, systems and services, especially those related to pharmaceutical public health.

Through platform and network development, quality education, and lifelong learning opportunities, we will contribute to building and connecting the next generation of African researchers and global health leaders capable of enhancing synergies between sectors in improved health. This human potential will, in turn, build the capacity of African countries to establish and address their own health priorities. Moreover, we will identify strategies to minimize disease risk and improve access to affordable quality medicines and vaccines and translate them in changed practices and policy. Overall, we aim to enable South-African Higher Education Institutions as drivers of change, ultimately contributing to the improved health and well-being of vulnerable populations in South Africa and beyond.

Wording of the outcome

The objective is to enable South-African Higher Education Institutions as Drivers of Change for Health and Wellbeing.

Target groups

The target groups on an institutional level are DVTD (UP) and SOPH (UWC). On an individual level we aim to target scientists DVTD (8M, 10F), UWC (3M, 9F), trainees DVTD, UWC (min. 50% women), admin staff DVTD (1M, 6F), UWC (4F), participants of research projects (not enough data to disaggregate by sex, target: reflection of demographic situation), targeted community members, policy makers . Lastly, the networks of people we want to target are partner institutes, researchers and alumni.

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture	SDT :	By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries

SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	1
3. Participatory Development / Good Governance :	1
4. Trade development :	0
5. Biodiversity :	1
6. Climat Change – Mitigation :	1
7. Climat Change – Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	1

11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	1

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

The DVTD part of the programme in particular is aligned with DGD strategies with regards to agriculture and food security. As mentioned in the relevant strategy paper, a more integrated and cross-cutting approach is necessary in the areas of education, healthcare and agricultural policy, which will be ensured through One Health training and research. Research on health risks associated with crops and animal products will lead to improved knowledge, development of adequate, multisectoral interventions thus leading to safer crops and animal products, hence improved food safety thus more quality nutrition. A community feedback loop will enhance local capacity to provide safe food. Moreover, we will investigate certain social and cultural factors hampering adequate zoonotic disease control. SOPH has long standing engagement (training, research, advocacy, networking) on issues of food security and nutrition mainly highlighting the need to build capacity, network and policy, link between poverty and malnutrition, the role of community health workers in the promotion of good health and nutrition.

Education

In the annex of the strategy note it reads: "Belgian university cooperation, which is much appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly." In our programme we focus on interinstitutional cooperation with university actors. Through the provision of scholarships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

Sexual and reproductive health represents one of the main areas of training and research at SOPH. A significant proportion of our postgraduate students conduct research in various aspects of this topic across countries in Africa.

SOPH is also part of a global study on adolescent sexual and reproductive health, which focusses on poor urban youth, a vulnerable and fast-growing population worldwide. While evidence shows gender norms influence SRH, how early adolescents acquire these norms and adopt behaviors is not well understood. Understanding this process underpins efforts empowering girls and boys to determine their future SRH trajectories.

The right to basic nutrition for children in South Africa is enshrined in section 28 of the Constitution. Based on the human rights approach, SOPH has done research and advocacy work on how to improve the management of children with severe malnutrition, underlying causes of malnutrition in South Africa. Some of this work include bringing attention to the transnational food companies in the growing obesity and non-communicable diseases epidemic, and need for strengthened regulation.

Development education

In our programme, we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own. In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Climate change is increasingly modifying the ecosystem and concentration of animal vectors, thereby introducing diseases and the spread of vectors to new geographic locations. As such, it is estimated that between 2030 and 2050, climate change will cause approximately 250 000 additional deaths per year, from malnutrition, malaria, diarrhea and heat stress. As indeed mentioned in the strategy note, “climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate”. Our programme (DVTd activities in particular) contributes to better knowledge about these diseases and risks that are becoming more prevalent due to changing climate, and aims to inform policies to anticipate and address their impact. As such the programme aims to build resilience to climate change-induced health risks.

Gender

To attain gender equality, it is essential that a specific strategy of gender mainstreaming which is included within our programme. Throughout the DVTd research activities on the drivers of infectious diseases and health risks, we will investigate the association with gender. Moreover, when designing and dissemination strategies to address these diseases and health risks, we will pay specific attention to the empowerment of women in the areas of food security, WASH, natural resources and impact of climate change. Furthermore, sexual and reproductive health represents one of the main areas of training and research at SOPH. A significant proportion of our postgraduate students conduct research in various aspects of this topic across countries in Africa.

Digitalization - Digital for Development D4D

Digitalization is key for any programme striving for development. More specifically digitalization can lead to more inclusive societies, by maximizing the number of beneficiaries and lowering the thresholds for vulnerable groups e.g. to participate in public life. Through a range of digital educational activities, our programme aims to lead to improved virtual learning opportunities for alternative access to science education, also to a wider audience than anticipated before, and to address challenges in certain target groups of the current MSc/PhD programmes who are known to have a steeper learning curve, due to less advanced earlier training in their graduate programme and/or other factors.

Moreover, as described in the DGD strategy paper D4D “Data provide the basis for almost any development and humanitarian intervention. They allow for objectively describing the situation or the problem that one will address. Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. Data is also needed to keep track of a country’s progress towards the SDGs. Data play a key role in our programme. First of all, they will be used to track programme progress, and allow for timely adjustments in programme management when striving for success. Moreover, research is an important component in our programme, and data will be generated throughout the research activities. Using these data, we are striving for improved synthesis, exchange, and application of knowledge by relevant stakeholders, thus leading to strengthen health systems and improving people’s health.

Health

Our programme aims to contribute to the long-term goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond. Each partner will have a very specific entry point to our long-term goal: DVTd (UP) focuses on infectious diseases of poverty in vulnerable rural populations living at the interface using a global One Health approach, while SOPH (UWC) focuses on health policies, systems and services, and in this programme in particular on pharmaceutical systems. Through research projects, education, networking and knowledge translational activities, our programme is in perfect alignment with the core principle concerning the right to health and healthcare, this to be achieved through key strategies, being to strengthen the health sector by means of system strengthening international partnership and democratic policy planning and implementation, as well as strengthening the healthcare system in contributing to the integrated control of neglected and specific diseases, accessible quality health care and availability of essential medicines.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

The right to health and to health care is a universal human right, as defined in the Universal Declaration article 25. In our programme we ensure that guidelines or protocols are approved at the national level. By informing these strategies, we

strengthen the capacity of duty-bearers to fulfil the right to health. The right to have access to health care services is a basic human right guaranteed by the South African Constitution. 1) Everyone has the right to have access to health care services, including reproductive health care; sufficient food and water; and social security, including, if they are unable to support themselves and their dependents, appropriate social assistance. 2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights. 3) No one may be refused emergency medical treatment. The NDP 2030 vision for health is a system that works for everyone, produces positive health outcomes, and is accessible to all. A HRBA towards ensuring healthy lives for all, is most urgent for populations living at the margins, with multiple interacting vulnerabilities, such as rural impoverished populations, where we have chosen to concentrate our efforts. Improved health can break the poverty-disease cycle as communities will be less vulnerable for poverty-related diseases, in turn, enabling communities to stay at work and create an income for their families, allowing them also have enough funds to consume adequate quality food. In addition, access to affordable, quality-assured essential medicines, vaccines and medical devices is key to the realization of health, and the Covid-19 era has highlighted challenges posed by global inequities. We will seek to redress these inequities through building national and southern institutional capacity in postgraduate education and research in medicines regulation and related areas.

Decent and sustainable work

In all our activities, we will promote the principles of DW. We will make sure we will adhere to these for staff working on specific projects supported by DGD. Where possible and indicated, we will discuss the need to DW with our partners and collaborators. Even though the grant-funded nature of much of our work undermines efforts to ensure secure employment, we strive to ensure decent work through fair salaries particularly for lower paid field and administrative staff, encouraging and financially supporting staff development activities, and retaining staff across projects wherever possible. Both DVTD and SOPH has also removed distinctions and inequities between different staff categories with regard to basic working conditions, such as leave allocations, flexible working hours, and working from home arrangements.

Gender

To attain gender equality, it is essential that a specific strategy of gender mainstreaming is included within the programme. The NDP Vision 2030 seeks to promote the transformation of the socio-economic lives of women. It proposes a range of measures to advance women's equality: that the role of women as leaders in all sectors of society actively be supported; the transformation of the economy should involve active participation and empowerment of women; and, that social, cultural, religious and educational barriers to women entering the job market be addressed. Throughout our programme activities, we aim to encourage women to participate, and stimulate them to grow into leaders in their field. More specifically, we will target to have at least 50% of female trainees for the educational activities, and at least 50% female staff involved in the research projects, management, and monitoring of the overall programme. For surveys targeting communities, we will aim for a reflection of the true demographic situation. In addition, throughout the DVTD research activities on the drivers of infectious diseases and health risks, we will investigate the association with gender. SOPH strives to promote equity in its postgraduate programmes by adopting an open and flexible approach, which is viable for working professionals especially women. Students are able to continue to work in the services while studying part-time. This has enabled women, which make up majority of our graduates and current students, to successfully participate in the programme, and play key leadership, academic, research roles in various settings. Sexual and reproductive health represents one of the main areas of training and research at SOPH. A significant proportion of our postgraduate students conduct research in various aspects of this topic across countries in Africa.

Environment

The KLIMOS toolbox was used to evaluate the potential impact of the country programme on environment and proposed actions/activities. In this context, the ITM management is piloting a travel policy to minimise flying and using compensations, with a vision for carbon-neutral travel. DVTD has and will continue to invest heavily in digital learning tools. Moreover, DVTD, as part of UP, is committed to adopting environmentally responsible practices by (i) ensuring compliance with relevant legal and other requirements, (ii) improving its policies and practices continually to adapt to the dynamic environment in which the University operates, (iii) preventing pollution as far as practically possible, and (iv) fostering environmental sustainability. Furthermore, it aims to address these commitments through taking specific actions where reasonable and practical in a financially viable manner. SOPH is increasingly making use of digital technology to reduce its ecological footprint in terms of traveling and printing of training materials. Its learning materials are offered entirely on a digital platform, and all its programmes are offered online. UWC is paying close attention to the ecologically sensitive area it is positioned in, nurturing and retaining its adjacent conservation area. The potential impact of the environment on the country programme and targeted measures with a positive environmental impact were also evaluated. As the research study sites of DVTD are in livestock-wildlife interface areas, environmental issues/impact will be implicit in all research projects. Environmental risks (e.g. climate change, air quality, forest and land degradation, water availability and quality, biodiversity, waste management) will be considered and addressed (where applicable) in all of the projects.

Areas of complementarity and synergy with the intervention of ENABEL

As there are currently no Enabel activities in South-Africa anymore, we deem this section is not applicable to our programme

(see also "Synergy").

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC South-African Higher Education Institutions as drivers of change for health and wellbeing with the desired long-term country programme goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond
Indicator title :	OC.1 Education (DVTD): Percentage of students being referred to DVTD for postgraduate and short course training by our alumni
Indicator description :	This indicator will represent the national and international recognition of DVTD in terms of postgraduate level education in Global One Health, and the multiplier effects of DVTD alumni; SoV: Application portal
Baseline :	0%
Target Year 3 - 31/12/2024 :	10%
Target Year 5 - 31/12/2026 :	30%

Formulation of outcome or result :	OC South-African Higher Education Institutions as drivers of change for health and wellbeing with the desired long-term country programme goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond
Indicator title :	OC.2 Education (SOPH): Percentage of students and short course participants being referred by peers, online search, social media
Indicator description :	This indicator will represent acknowledgment of SOPH's contribution and presence in the field of Pharmaceutical Public Health, and doctoral education in Africa; SoV: Application portal
Baseline :	0%
Target Year 3 - 31/12/2024 :	40%
Target Year 5 - 31/12/2026 :	60%

Formulation of outcome or result :	OC South-African Higher Education Institutions as drivers of change for health and wellbeing with the desired long-term country programme goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond
Indicator title :	OC.3 Research (DVTD): Number of collaborative grant proposals submitted for external funding
Indicator description :	This indicator will represent the expanded DVTD, and enhanced collaborative research activities, leading to the development of sustainable research proposals (ie funding beyond DGD); SoV: Project administration
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	OC South-African Higher Education Institutions as drivers of change for health and wellbeing with the desired long-term country programme goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond
Indicator title :	OC.4 Research (SOPH): Number of collaborative grant proposals funded externally
Indicator description :	This indicator highlights increased collective capacity (research grant writing, etc.) to generate and disseminate evidence to contribute to body of knowledge and development of the field of pharmaceutical public health and doctoral education in Africa; SoV: Project administration
Baseline :	1
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	OC South-African Higher Education Institutions as drivers of change for health and wellbeing with the desired long-term country programme goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond
Indicator title :	OC.5 GRIPP (DVTD): Uptake/influence of ITM-supported research findings/new technologies/ innovations/solutions by health staff/local communities/civil society/private sector
Indicator description :	A self-assessment scale will be used to by pre-identifying a ladder of change: 1 - knowledge has been disseminated ; 2 - first exchanges and request for support from target groups after dissemination ; 3 - first signs of uptake: smaller groups are applying our knowledge in practice; 4 - new knowledge is being applied in practice at scale; SoV: Self-assessment project team
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	2

Formulation of outcome or result :	OC South-African Higher Education Institutions as drivers of change for health and wellbeing with the desired long-term country programme goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond
Indicator title :	OC.6 GRIPP (SOPH): Uptake/influence of ITM-supported research in public policies and practice
Indicator description :	A self-assessment scale will be used here by pre-identifying a ladder of change: 1 - knowledge has been disseminated ; 2 - there have been some first exchanges with policymakers after dissemination ; 3 - we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies; SoV: Self-assessment project team
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	2

Formulation of outcome or result :	R1.a DVTD Platform development: Virtual and field learning hub. <i>Developing a holistic and integrated approach to learning by providing virtual and field learning sites to create opportunities for alternative access to science education.</i>
Indicator title :	R1.a.1 Number of skills modules and/or short courses utilizing newly developed virtual training tools
Indicator description :	This indicator will represent the number of opportunities created for alternative access to science education (also ensuring that quality in learning is maintained in case of travel restrictions); SoV: Project administration
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	R1.a DVTD Platform development: Virtual and field learning hub. <i>Developing a holistic and integrated approach to learning by providing virtual and field learning sites to create opportunities for alternative access to science education.</i>
Indicator title :	R1.a.2 Number of students enrolled to MSc preparatory programmes - (disaggregated by gender)
Indicator description :	This indicator will represent the number of trainees that benefited from the MSc preparatory programmes, allowing for shorter student retention in the actual MSc programmes. Our target will be at least 50% female trainee; SoV: Student Administration office
Baseline :	0
Target Year 3 – 31/12/2024 :	15 (8F/7M)
Target Year 5 – 31/12/2026 :	40 (20F/20M)

Formulation of outcome or result :	R1.a DVTD Platform development: Virtual and field learning hub. <i>Developing a holistic and integrated approach to learning by providing virtual and field learning sites to create opportunities for alternative access to science education.</i>
Indicator title :	R1.a.3 Number of collaborative team approach surveys and sampling activities conducted at the two rural One Health platforms
Indicator description :	This indicator represents the intensity of research activities at the two locations, thus reflecting the growing opportunities for One Health field research; SoV: Project administration
Baseline :	0
Target Year 3 - 31/12/2024 :	6
Target Year 5 - 31/12/2026 :	10

Formulation of outcome or result :	R1.b SOPH Platform development: <i>Developing a holistic and integrated approach to public health learning, dissemination and advocacy of public health issues.</i>
Indicator title :	R1.b.1 Satisfaction with improvement in online platform and learning management system
Indicator description :	Report of platform improvements and participant evaluations; SoV: Report of platform improvements, course evaluations, convenor reflections
Baseline :	0%
Target Year 3 - 31/12/2024 :	60%
Target Year 5 - 31/12/2026 :	80%

Formulation of outcome or result :	R1.b SOPH Platform development: <i>Developing a holistic and integrated approach to public health learning, dissemination and advocacy of public health issues.</i>
Indicator title :	R1.b.2 Number of dissemination/advocacy/ networking events using virtual platform
Indicator description :	The reports will highlight information about the thematic focus of the events, number of participants. The indicator will help shed light on success of events, and interest for engagement around specific issues in key priority areas including Pharmaceutical Public Health; SoV: Event reports
Baseline :	1
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R1.b SOPH Platform development: <i>Developing a holistic and integrated approach to public health learning, dissemination and advocacy of public health issues.</i>
Indicator title :	R1.b.3 Proportion of students and short course training participants that use online learning platform
Indicator description :	This indicator shows the contribution of the online platform to students and short course participants for research, and teaching and learning purposes; SoV: Web analytics
Baseline :	40%
Target Year 3 - 31/12/2024 :	75%
Target Year 5 - 31/12/2026 :	90%

Formulation of outcome or result :	R2.a DVTD Education: Knowledge for change. <i>Building the next generation of researchers and global health leaders capable of enhancing synergies of various sectors in improving human and animal health.</i>
Indicator title :	R2.a.1 Number of students enrolled to the joint MSc Global One Health (disaggregated by gender)

Indicator description :	This indicator will represent the number of trainees that benefited from the joint MSc Global One Health, who will eventually grow into experts able to address the health threats prioritized in the programme. Our target is to enroll at least 20 students per year; at least 50% will be female; SoV: Student Administration office
Baseline :	0
Target Year 3 - 31/12/2024 :	60 (30F/30M)
Target Year 5 - 31/12/2026 :	100 (50F/50M)

Formulation of outcome or result :	R2.a DVTED Education: Knowledge for change. <i>Building the next generation of researchers and global health leaders capable of enhancing synergies of various sectors in improving human and animal health.</i>
Indicator title :	R2.a.2 Number of students successfully completing the leadership short course (disaggregated by gender)
Indicator description :	This indicator will represent the number of trainees that benefited from the short courses, thus providing a growing number of trainees with the skills and tools for building their personal and professional capacity as a leader and manager and to ignite personal transformation and self-enhancement for impactful and effective results. Our target is to enroll at least 20 students per year; at least 50% will be female; SoV: Student Administration office
Baseline :	0
Target Year 3 - 31/12/2024 :	60 (30F/30M)
Target Year 5 - 31/12/2026 :	100 (50F/50M)

Formulation of outcome or result :	R2.a DVTED Education: Knowledge for change. <i>Building the next generation of researchers and global health leaders capable of enhancing synergies of various sectors in improving human and animal health.</i>
Indicator title :	R2.a.3 Level (%) of student satisfaction with quality and relevance of study programme / module
Indicator description :	This indicator monitors the quality and relevance through already developed and implemented survey. It is an important indicator to continuously improve the programme. We aim for at least 70% of student satisfaction initially, and gradually increase based on feedback received; SoV: Surveys conducted on teaching platform
Baseline :	70%
Target Year 3 - 31/12/2024 :	80%
Target Year 5 - 31/12/2026 :	90%

Formulation of outcome or result :	R2.b SOPH Education: <i>Building the next generation of public health practitioners and researchers, with emphasis on pharmaceutical public health. Building the next generation of researchers and global health leaders capable of enhancing synergies of various sectors in improving health and pharmaceutical policies and systems.</i>
Indicator title :	R2.b.1 Number of new joint courses developed through the project
Indicator description :	The materials will provide insight about the contents covered, and help assess the extent to which they address topics of mutual concern; SoV: Materials, course descriptor, website
Baseline :	2
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R2.b SOPH Education: <i>Building the next generation of public health practitioners and researchers, with emphasis on pharmaceutical public health. Building the next generation of researchers and global health leaders capable of enhancing synergies of various sectors in improving health and pharmaceutical policies and systems.</i>
Indicator title :	R2.b.2 Number of individuals trained on new short courses (disaggregated by gender)

Indicator description :	The indicator helps monitor number and profile of participants, and coverage and relevance of the course to participants; SoV: CE Certificates, registers, evaluation reports
Baseline :	0
Target Year 3 – 31/12/2024 :	30 (15F/15M)
Target Year 5 – 31/12/2026 :	75 (38F/37M)

Formulation of outcome or result :	R2.b SOPH Education: <i>Building the next generation of public health practitioners and researchers, with emphasis on pharmaceutical public health. Building the next generation of researchers and global health leaders capable of enhancing synergies of various sectors in improving health and pharmaceutical policies and systems.</i>
Indicator title :	R2.b.3 Number of partial grants awarded for doctoral and postdoc fellows (disaggregated by gender)
Indicator description :	The indicators provide feedback about the profile of awardees, nature of support, and contribution of support to their progress. Disaggregated by gender, the indicator help monitor gender parity (at least 50% female) ; SoV: Agreements, progress reports, feedback from awardees
Baseline :	29 (15F/14M)
Target Year 3 – 31/12/2024 :	38 (19F/19M)
Target Year 5 – 31/12/2026 :	44 (22F/22M)

Formulation of outcome or result :	R3.a DVTB Research: Knowledge generation for research into action. <i>Understanding and mitigating current impediments to improved animal and human health. The ultimate aim being translating the evidence into interventions that can reduce the burden of infectious diseases and build resilience in such vulnerable populations.</i>
Indicator title :	R3.a.1 Number of research projects supported
Indicator description :	This indicator represents the intensity of research activities and the level of knowledge generation on diseases of poverty in vulnerable communities living at the interface; SoV: Project administration
Baseline :	0
Target Year 3 – 31/12/2024 :	6
Target Year 5 – 31/12/2026 :	8

Formulation of outcome or result :	R3.a DVTB Research: Knowledge generation for research into action. <i>Understanding and mitigating current impediments to improved animal and human health. The ultimate aim being translating the evidence into interventions that can reduce the burden of infectious diseases and build resilience in such vulnerable populations.</i>
Indicator title :	R3.a.2 Number of articles published in international peer reviewed journals (through the support of the programme)
Indicator description :	This is a key indicator for knowledge generation in scientific field and is the result of a long chain of processes leading to success; SoV: Online bibliographic databases (Pubmed, Web of Science)
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	6

Formulation of outcome or result :	R3.a DVTB Research: Knowledge generation for research into action. <i>Understanding and mitigating current impediments to improved animal and human health. The ultimate aim being translating the evidence into interventions that can reduce the burden of infectious diseases and build resilience in such vulnerable populations.</i>
Indicator title :	R3.a.3 Number of MSc, PhD and postdoctoral students actively participating in the research activities (disaggregated by gender)

Indicator description :	This is another important indicator to measure building the next generation of experts able to understand, study and address infectious diseases of poverty as researchers and global health leaders, as well as agents of change. Our target is to enrol at least 6 research MSc, 6 PhD and 4 postdoctoral students over the time period; at least 50% will be female; SoV: Project administration
Baseline :	0
Target Year 3 – 31/12/2024 :	10 (5F/5M)
Target Year 5 – 31/12/2026 :	16 (8F/8M)

Formulation of outcome or result :	R3.b SOPH Research: <i>Understanding and mitigating current challenges in public health education and practice, including access to quality medical products (pharmaceuticals, vaccines, diagnostics and veterinary products) and doctoral-level education.</i>
Indicator title :	R3.b.1 Number of peer reviewed articles, book chapters published (through the support of the programme)
Indicator description :	This indicator represents part of the effort to generate and disseminate evidence, and contribute to the growing body of knowledge, and field building; SoV: Published manuscripts, chapters
Baseline :	2
Target Year 3 – 31/12/2024 :	5
Target Year 5 – 31/12/2026 :	7

Formulation of outcome or result :	R4.a DVTD Research into Policy & Practice: Knowledge translation toolkit. <i>Equipping health researchers with knowledge to move research findings into the hands of people/organizations to put it to practical use; critical to strengthening local health systems capacity to respond to major health challenges. Goals include sharing of knowledge, raising awareness, adding to research evidence and knowledge, informing or changing policy, changing practices or service deliveries, and/or changing behaviour.</i>
Indicator title :	R4.a.1 Number of other knowledge users (community members, farmers, herders, butchers, smallholder farmers, roadside drug shop owners, food vendors) reached through dissemination workshops
Indicator description :	The indicator represents the level of interaction with important knowledge users, aiming to grow awareness and to improve practices. There are not enough data to disaggregate by gender at the moment; SoV: Participation lists
Baseline :	0
Target Year 3 – 31/12/2024 :	20
Target Year 5 – 31/12/2026 :	60

Formulation of outcome or result :	R4.a DVTD Research into Policy & Practice: Knowledge translation toolkit. <i>Equipping health researchers with knowledge to move research findings into the hands of people/organizations to put it to practical use; critical to strengthening local health systems capacity to respond to major health challenges. Goals include sharing of knowledge, raising awareness, adding to research evidence and knowledge, informing or changing policy, changing practices or service deliveries, and/or changing behaviour.</i>
Indicator title :	R4.a.2 Number of policy briefs developed
Indicator description :	The indicator reflects the efforts to translate generated knowledge in changed policy; SoV: Policy brief documents
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	R4.b SOPH Research into practice: Strengthening capabilities of researchers and partners to engage in knowledge translation activities.
Indicator title :	R4.b.1 Number of participants attending collaborative policy & practice training workshops
Indicator description :	The indicator serves as a source to monitor number and profile of participants, topics covered, and nature of engagement. There are not enough data to disaggregate by gender at the moment; SoV: Workshop reports, participant list
Baseline :	0
Target Year 3 - 31/12/2024 :	25
Target Year 5 - 31/12/2026 :	50

Formulation of outcome or result :	R4.b SOPH Research into practice: Strengthening capabilities of researchers and partners to engage in knowledge translation activities.
Indicator title :	R4.b.2 Number of policy makers involved in research projects
Indicator description :	The indicator provide information about the profile of policy makers involved and the nature of their engagement, showing engaged nature of research. There are not enough data to disaggregate by gender at the moment; SoV: Research reports/publications
Baseline :	3
Target Year 3 - 31/12/2024 :	6
Target Year 5 - 31/12/2026 :	9

Formulation of outcome or result :	R4.b SOPH Research into practice: Strengthening capabilities of researchers and partners to engage in knowledge translation activities.
Indicator title :	R4.b.3 Number of policy outputs (policy briefs, policy reviews, dissemination workshops, engagements by doctoral students in the policy space, etc)
Indicator description :	This indicator depicts the range of activities to bridge research-policy gap by, 1) disseminating findings to policy makers 2) developing policy briefs and reviews to inform policy and practice 3) Doctoral students involving policy makers and practioners at various stages of the research; SoV: Policy reviews, policy briefs, event reports
Baseline :	0
Target Year 3 - 31/12/2024 :	3 (policy briefs/reviews) and 3 dissemination events
Target Year 5 - 31/12/2026 :	6 (policy briefs/reviews), and 6 dissemination events

Formulation of outcome or result :	R5.a DVTB Synergy and Networking: Interconnectedness; creating a community of practice. Creating a Global One Health network for Africa - linking One Health initiatives across sub-Saharan Africa through science engagement. Developing sustainable and meaningful collaboration for increased collaborative research and capacity. We will have a strong focus on creating a platform for young scientists to build collaborative links that will last a lifetime.
Indicator title :	R5.a.1 Number of African institutes active in the Global One Health in Action network
Indicator description :	This indicator reflects the growing level of external visibility of the Global One Health network; SoV: Established e-source platform.
Baseline :	0
Target Year 3 - 31/12/2024 :	5
Target Year 5 - 31/12/2026 :	15

Formulation of outcome or result :	R5.a DVTB Synergy and Networking: Interconnectedness; creating a community of practice. Creating a Global One Health network for Africa - linking One Health initiatives across sub-Saharan Africa through science engagement. Developing sustainable and meaningful collaboration for increased collaborative research and capacity. We will have a strong focus on creating a platform for young scientists to build collaborative links that will last a lifetime.
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Indicator title :	R5.a.2 Annual virtual stakeholder workshops
Indicator description :	The indicator represents the level of international recognition of the network, and growing desire of the network members to consult, use, and apply the knowledge shared with them through the network; SoV: Workshop reports
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R5.a DVTD Synergy and Networking: Interconnectedness; creating a community of practice. <i>Creating a Global One Health network for Africa - linking One Health initiatives across sub-Saharan Africa through science engagement. Developing sustainable and meaningful collaboration for increased collaborative research and capacity. We will have a strong focus on creating a platform for young scientists to build collaborative links that will last a lifetime.</i>
Indicator title :	R5.a.3 Number of alumni registered to alumni network
Indicator description :	This indicator will represent the number of trainees that participating in the knowledge sharing initiative of the network. Our target is to register at least 10 alumni per year; we anticipate that at least 50% will be female (although this cannot be guaranteed; it will be based on voluntary participation); SoV: Alumni network website/platform app
Baseline :	0
Target Year 3 - 31/12/2024 :	30
Target Year 5 - 31/12/2026 :	50

Formulation of outcome or result :	R5.b SOPH Synergy and Networking: Strengthening collaboration with existing & new partners through communities of practice.
Indicator title :	R5.b.1 Number of collaborative research project proposals submitted with support from the programme
Indicator description :	This indicator provides input about the contribution/synergy of this programme to developing institutional and network capacity; SoV: Submitted proposals
Baseline :	1
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R5.b SOPH Synergy and Networking: Strengthening collaboration with existing & new partners through communities of practice.
Indicator title :	R5.b.2 Number of visitors to SOPH website dedicated programme pages, number of downloads, number of followership across online platforms (Facebook, Twitter), number of users of learning management system
Indicator description :	This indicator will enable gaining insight about level of external visibility through social media and internet presence; participation in online events, indicating the programme contribution to field building and communities of practice; SoV: Web analytics
Baseline :	Facebook 4156 followers, Twitter 1795, and 11,000 website visits
Target Year 3 - 31/12/2024 :	Facebook 4500 followers, Twitter 2000, and 12000 website visits/annum
Target Year 5 - 31/12/2026 :	Facebook 5000 followers, Twitter 2500, and 15000 vists/Annum

Formulation of outcome or result :	R5.b SOPH Synergy and Networking: Strengthening collaboration with existing & new partners through communities of practice.
Indicator title :	R5.b.3 Number of doctoral students undertaking research in key areas (pharmaceutical public health, AMR, gender, SRH, HIV, etc.) partially supported through the programme (disaggregated by gender)
Indicator description :	This indicator helps to show contribution of doctoral students to the growing body of knowledge, and field building; SoV: Research protocols, thesis, publications

Baseline :	2 (1F/1M)
Target Year 3 - 31/12/2024 :	5 (3F/2M)
Target Year 5 - 31/12/2026 :	7 (4F/3M)

Activities, targets groups and beneficiaries

Classification of activities

PLATFORM DEVELOPMENT:

- Education & training: Curriculum development of an MSc degree (DVTD), short courses (DVTD, SOPH), MSc and PhD preparatory programme (DVTD)
- Digitalization: Development of virtual learning hub (DVTD), teaching encyclopedia (DVTD), online portal for integrated e-learning (SOPH)
- Learning sites: Rural One Health platforms (DVTD)

EDUCATION PROJECTS:

- Scholarship programmes: MSc (Global One Health) scholarships (DVTD), short courses & training grants (DVTD, SOPH), postgraduate & postdoc fellowships (DVTD, SOPH), development grants (DVTD, SOPH)
- Student and staff mobility: Fieldwork, short courses, conferences and exchanges (DVTD, SOPH)
- Programme coordination and management: Continuous coordination, monitoring and evaluation (DVTD, SOPH)
- Resources: Human resources, management systems, IT and other infrastructure (DVTD, SOPH)

RESEARCH PROJECTS:

- Collaborative research projects (DVTD, SOPH)
- PhD, MSc research projects (DVTD, SOPH)
- Student and staff mobility (DVTD, SOPH)
- Ensuring sustainability funding programme (DVTD)

GETTING RESEARCH INTO POLICY AND PRACTICE (GRIPP):

- Education: Science communication (DVTD)
- Awareness: Community and stakeholder engagement (DVTD, SOPH), creating conditions for policy influence and uptake/outreach through improved engagement/consultation with policy makers (DVTD, SOPH)
- Evidence synthesis: Dissemination of research findings, policy briefs, etc. (DVTD, SOPH)
- Collaborative activities to strengthen the capacities of partners (DVTD, SOPH)

SYNERGY:

- Networking: Global One Health in Action: Interfaced Reality Network for Africa (DVTD), Alumni network (DVTD, SOPH)
- Synergy: Strengthen existing partnerships and develop new ones (DVTD, SOPH)

Target group(s)

Institutions: DVTD (UP), SOPH (UWC)

Individuals:

- Scientists DVTD (8M, 10F), UWC (3M/9F)
- Trainees DVTD, UWC (not enough data to disaggregate by sex, target: min. 50% F)
- Admin staff DVTD (1M, 6F), UWC (0M/4F)
- Participants research projects (not enough data to disaggregate by sex, target: reflection of demographic situation)
- Targeted community members, policy makers (not enough data to disaggregate by sex)

Networks: Institutions/people in networks: partner institutes, researchers, alumni

Beneficiaries

Populations:

- Communities at risk of infectious diseases of poverty occurring at the interface, and at risk of having no access to safe, effective, quality, affordable essential medicines and vaccines in South Africa and beyond
- Scientific community
- Health workers and managers
- Policy makers
- Staff at regulatory bodies
- Members of relevant professional associations
- General public

Title of the reference annex :	TOC_ITM_South Africa_22-26
Title of the reference annex :	RA_ITM_South Africa_22-26

Description of the Relevance

Alignment local, regional, national or international policies: Our programme is fully aligned with the **South African National Development Agenda, Vision 2030**, aiming to improve the lives of the poor and marginalized in society. Specific target areas include eliminating poverty and reducing inequality by 2030, providing affordable access to quality health care (including medicines and other health products) while promoting health and wellbeing, increasing the percentage of PhD qualified staff in the higher education sector and expanding science, technology and innovation outputs by increasing research and development. The programme also speaks to Africa's goal to achieve its **Africa Agenda 2063** to build a more prosperous "Africa that we want", aspiring that by 2063, African people will have a high standard of living, and quality of life, sound health and well-being, well-educated and skilled citizens, underpinned by science, technology and innovation for a knowledge society. Finally, taking a multisectoral, One Health approach addressing the interconnectedness of health and its social and economic determinants aligns with the **SDG framework**. Health is a critical consideration in achieving all 17 goals, and taking a One Health approach in health activities will support making progress in achieving the SDGs.

Relevance and ToC: The complex interrelationships between human and animal health, wellbeing of the population and universal health coverage (e.g. affordable, quality medicines and vaccines), require a shift from siloed to **integrated and collaborative approaches** which incorporate diverse disciplinary perspectives, such as the One Health approach, as once again emphasized by the Covid-19 pandemic. Moreover, there is a growing recognition by development agencies and academia of the **importance of building knowledge economies from within the south; thereby enabling South-African Higher Education Institutions to be drivers of change for health and wellbeing**. For instance, the DVTD **virtual learning hub** and SOPH **e-learning platform**, will ensure opportunities for alternative access to science and public health education, enabling us to reach a wider audience than anticipated before. **Timely, targeted and ongoing research will prevent infectious diseases from driving more people into poverty**. Interactive, inter- and transdisciplinary research will identify ways to mitigate risk factors, and direct future interventions to minimize risk. Tools and strategies will be developed to **effectively translate our findings into interventions** reducing disease burden, improving access to high-quality affordable medicines and vaccines and build resilience in these vulnerable populations. To ensure knowledge sharing within and beyond South Africa, One Health and pharmaceutical public health initiatives across sub-Saharan Africa will be linked through **science engagement**. Through field learning hubs, our **One Health platforms** will ensure a holistic and more integrated approach for research and student training, which in turn will amplify and strengthen regional competencies in One Health, further increasing national and international recognition. Through building an integrated programme of research, policy development and academic learning amongst master and doctoral students, together with health managers and policy-makers, **access to affordable quality medicines and vaccines will be improved**.

Gender: Throughout our activities, we will **aim to encourage women to participate, and stimulate them to grow into leaders in their field**. More specifically, we will target to have at least 50% of female trainees for educational activities, and at least 50% female staff involved/leading in research projects, management, and monitoring of the overall programme. For surveys targeting communities, we will aim for a reflection of the true demographic situation. In addition, the link between gender and presence of disease/health hazards will be investigated throughout our research projects. Gender also remains a focus of most of the doctoral research projects at SOPH in the area of maternal and child health, sexual and reproductive health, adolescent health, HIV, non-communicable diseases, nutrition and food security.

Protecting the environment and natural resources: In this country programme, the two partners will work together towards our long-term goal, exploiting the collaborative One Health approach, which recognizes that **human, animal and environmental health are closely linked**, in addressing important health issues. We will conduct research on the presence and impact of diseases circulating between people, animals and the environment (DVTD). This also entails research on diseases that might be emerging and disease vectors that may be spreading to new geographic locations due to climate change. The acquired knowledge generated from our activities, will in the long-term, aid communities to strengthen resilience against these climate induced health risks. The interest in pharmacovigilance, regulatory systems for e.g. good manufacturing practices and safe waste management, and AMR will have long term implications towards protecting lives and the environment (SOPH).

Educational approaches and/or targeted teaching methods: The programme will include a wide range of educational activities, using **diversified educational approaches and teaching methods**. To allow for students to reach their full potential as well as to ensure knowledge uptake remains up to standard during times of travel restrictions, we will e.g. develop a virtual learning hub (DVTD) and online portals for integrated e-learning and continuous education (SOPH). The MSc (Global One Health) (DVTD) will be a blended programme, allowing students to combine work, family life and study. SOPH will further develop online short courses and webinars in pharmaceutical public health for MPH, and for doctoral students. We will train our students through simulated science communication courses (DVTD) on how to convey key messages to communities at risk during awareness campaigns, and develop health educational tools (DVTD). Through community and stakeholder engagement

activities, and network activities, we also aim to raise public awareness of the importance of development cooperation and values like international solidarity and empowerment (Global Citizenship Education, cf. **SDG 4.7**).

Maintenance or further development of activities: ITM approaches partnerships along the lines of a **partnership trajectory**. Partnerships gradually move from an initial institutional capacity strengthening phase towards a consecutive phase with emphasis on institutional collaboration. In the phase of capacity strengthening, the focus is on building and consolidation of platforms and on continued capacity building. Over time, partners acquire specific capacities, knowledge and expertise allowing further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding, and with more focus on networking, and use of knowledge to create the conditions for getting research into policy and practice. The ITM/DVTD collaboration started in 2002, while the ITM/SOPH collaboration started in 2008. In both instances, the relevant partnerships have expanded significantly during the past years; gradually transitioning from initial institutional capacity strengthening towards an increased emphasis on joint research, education and equal partnerships. **At the moment the partnership with DVTD and SOPH can be defined as institutional collaboration.** This collaboration can in the longer-term transition towards a gradual exit from DGD funding.

Contribution towards Strategic Targets JSF, including stakeholders in development, local civil society, decentralized authorities, public institutions and partners: See Strategic Goals of JSF HES4SD highlighted in Theory of Change.

Description of Coherence

Unique programme characteristics: UP hosts the only Veterinary School in the country, and is as such an important contributor to attain optimal health for people, animals and environment, and leading One Health concept driver. Its Hans Hoheisen field station in particular, is uniquely situated for research and training in this field. The DVTD is, therefore, a highly suitable partner for One Health related training and research activities in the country. UWC is emerging as an integrated and multiracial institution committed to excellence in teaching, learning and research, and has been at the forefront of South Africa's historic transformation, playing a leading and unique academic role in helping to build an equitable and dynamic nation. UWC's key concerns with access, equity and quality in higher education arise from extensive practical engagement in helping the historically marginalised to fully participate in society.

Complementarity: DVTD's activities are complementary to those of the **South African National Institute for Communicable Diseases**, a national public health institute, providing key knowledge and expertise, and assistance in policy and programme planning on communicable diseases to the South African Government, Southern African Development Community countries and the African continent. Furthermore, there's complementarity with the **Southern African Wildlife college**, a hands-on conservation training institution, working beyond boundaries to conserve and secure Africa's wildlife and ecosystems in partnership with local communities. **SOPH** is an active member of a number of national, regional and global networks, complementary in its contribution in building the field of Pharmaceutical Public Health and Public Health doctoral education: e.g. the **People's Health Movement**, bringing together grassroots health activists, civil society organizations and academic institutions from around the world; **Health Systems Global**, linking researchers, decision-makers and implementers dedicated to promoting health policy and systems research and knowledge generation.

Link Coherence and ToC: There's a strong coherence between the programmes of DVTD and SOPH, through their pathway of change with the same country programme goal. Content-wise there's coherence with other thematic JSF programmes, including some currently active in South Africa. VLIR-UOS is anticipating to continue its activities in South Africa, yet, specific programmes are call-based, so coherence cannot be foreseen now. There's no specific geographical JSF.

Coherence other activities carried out by organization: The present programme is aligned to the goals for International Collaboration and Development of **ITM's Institutional Policy Plan (2020-2024)**, aiming to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve populations' health status, thus contributing to reduced poverty and inequity. ITM's development actions contribute to health improvement for all, based on the provision of evidence and translating evidence into policy. DVTD programme activities are also linked with the DGD-ITM initiatives "**NGS Clinical Bioinformatics Capacity Building in the South**", and "**Thematic Global Network on Health, Climate change and Urbanisation**". Furthermore, SOPH aims to collaborate with a new **DGD-ITM partner, Rwanda** in Pharmaceutical Public Health. Both DVTD and SOPH aim to continue to develop educational activities under the **DGD-ITM Educational Alliance programme**. Within the **Thematic JSF HES4SD** we share common strategic goals and strive for synergy and complementarity with other actors involved. Furthermore, ITM, UP and UWC adheres to the international ethical standards such as the Declaration of Helsinki and the Guidelines of the CIOMS International Ethical Guidelines for Health-related Research involving Humans (2016). Any research undertaken also needs to adhere to EU GDPR and South Africa POPI Act.

Description of Effectiveness

Realistic and achievable nature programme, link with Theory of Change: Through increased research and teaching capacity, as well as the establishment of collaborative networks, we can contribute to improved health and wellbeing of

vulnerable communities in South Africa and beyond. As our Theories of Change indicate, **this programme will be effective by establishing and reinforcing a capacity for teaching, research, networking and advocacy embedded in the context of South Africa.** In order to achieve our set goals and objectives, and to ensure positive outcomes, **a strong collaborative team and effective management of the project is required.** Besides this capacity, we have a strong shared vision: the initiative is built upon an understanding of the ways in which individual and organizational capital can be developed in a sustained manner, and of how policy relevant knowledge for health system strengthening is generated. Effectiveness will depend on a number of issues, including the extent to which postgraduate training produces graduates with the confidence, resilience and technical capacity to engage complex problems. Mindful of this, the initiative seeks to develop not just individual capacity but, through processes such as appropriate selection, networking and collaborative research, the organizational and institutional environment of students and graduates. The programme also includes research that engages communities and health systems over long periods of time, thus enabling trusting relationships to develop which will enhance the usability and relevance of the knowledge generated. There are numerous synergies between the different activities outlined to achieve the results with each expected result interlinked with others to enable better traction. For example, the teaching incorporates intersections between material development, short-courses, masters and doctoral training; and these are closely aligned with the research and networking (with collaborations between institutions), and dissemination strategies including but not limited to social media. The partners have already developed a fruitful collaboration through the DGD-ITM 2017-2021 FA4 programme (see baseline identification), and have enacted principles of mutual respect and true equality, with an openness to different perspectives and collegial growth. Furthermore, the partners have the required capacity to develop this project to fruition.

How the expected results can be closely attributed to the programme: Our 2022-2026 DGD-ITM programme consist of a number of components, the expected results of which can be closely attributed to the programme. For instance, the developed platforms and networks will form a direct result of the programme, their establishment is easy to measure (e.g. websites), and can be clearly attributed to the programme activities. Within our educational component, we wish to train a number of experts on a wider range of topics, the result of which can be measured in number of students successfully finishing their course work and degrees. We aim for our research activities to lead to improved knowledge, which will be disseminated in (open access) journal articles, but also with a number of relevant stakeholders, through engagement activities, both which can be easily quantified and attributed to the project.

Baselines identification and used as part of the intermediate or final evaluations or even impact assessment: As the target groups and partners of the proposed intervention coincide, results are decided upon in in dialogue. This close collaboration to set the project targets increase the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programmes. From the evaluations of past interventions, such as the one for the third framework agreement funded by DGD, it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between DVTD/SOPH and ITM, the efficiency criterium never scored below A (qualification: Very good; a reference for good practices).

Baseline information is collected at the level of DVTD and SOPH mainly, as the partners are also the target groups of the results. Baseline information is collected mainly through document review at their level. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression. At the level of ITM it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore, we included a mandatory indicator on this aspect.

Marginalized groups, and inequalities: Within the DVTD programme, preparatory programmes will ensure that certain target groups that currently struggle to successfully and timely finalize their studies, will have the right tools to start their training activities. At both the DVTD and SOPH, MSc (DVTD and SOPH) and PhD (SOPH) programmes are offered as blended programmes (combination of face-to-face and online contact) which make access more affordable and mean that students can study while they continue working in their jobs. Several (blended, online) SOPH short courses similarly make access easier for those who cannot travel to Cape Town due for financial, work or family-related issues.

Within both programmes, we intend to maintain high representation of women in our staff compliment and enrolled masters and doctoral candidates (>50%). Gender remains a focus of most of the SOPH doctoral research projects in the schools across the following clusters: maternal and child health, sexual and reproductive health, adolescent health, HIV, non-communicable diseases, nutrition and food security. Our overall programme will be informed by principles of context-sensitivity, co-production of research and knowledge; and ongoing focus on relationship-building, networks and partnerships. Moreover, within the community engagement activities, we will make sure that we speak the right language to translate our research finding to key target groups, by pilot testing our communication strategies.

Among academic institutions, the UWC has been at the forefront of South Africa's historic transformation, playing a leading and unique academic role in helping to build an equitable and dynamic nation. UWC's key concerns with access, equity and quality

in higher education arise from extensive practical engagement in helping the historically marginalised participate fully in the South African society.

The SOPH Pharmaceutical Public Health focus will draw pharmacists and other professionals working in pharmaceutical systems into the health systems, public health and policy arena, a key strength of SOPH at UWC. Conventionally, pharmaceutical professionals are at the margins of health systems and current issues such as Covid-19 and antimicrobial resistance highlight the importance of integrating their roles and expertise within a broader health systems framework.

Common approaches in thematic JSF: The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

Budget justification: Efficiency lies at the core of the development of DVTD and SOPH activities and thus budget allocation. For **DVTD**, the majority will go towards education (75.2%) and research (17.8%) (excl. salaries), while 3.7% to platform development aiming to provide virtual and field learning sites to create opportunities for alternative access to science education. 26.3% will be for key technical/specialist posts providing essential skills and expertise into the programme. To ensure effective coordination, monitoring and evaluation of all collaborative activities, we propose 2.5% travel allocation for exchange visits facilitating communication and collaboration between ITM and DVTD. An additional amount is also available for exchange visits between DVTD and UWC. For **SOPH**, approximately 61% of the total budget is allocated to personnel costs for key technical and specialist posts supporting the implementation of the programme. Operational costs (10%) include seed funding for research and workshops to build the Pharmaceutical Public Health area. 18% of the total budget is allocated to grants for doctoral and short-course students, core activities of this initiative. This will support doctoral students with small grants for fieldwork and other activities to facilitate timely completion of their PhD. Travel costs are about 11% of the budget, for exchange visits strengthening the South-South-North collaboration and networking. For both programmes, there's 20% foreseen for ITM staff, who will support in programme coordination, platform and network development, education and research activities, and translation of research findings in policy and practices.

Justification resources allocation vs. expected results: For **DVTD** to conduct and facilitate timely, relevant and innovative research in rural settings, and to build the next generation of research experts and global health leaders, the budget will mainly go towards grants. We plan to enrol ~100 MSc (GOH) students, 6 research MSc, 6 PhD, and 4 postdoctoral students, who will play a crucial role in the start-up and follow-up of research activities. Moreover, we will adopt a team investigation approach for community studies, leading to more comprehensive research outcomes, but also to significant cost-sharing. Personnel costs will include the support of a financial manager (50% support), vital for efficient financial organisation of this budget, a 12 hrs/week e-learning specialist to support the design, development and implementation of the MSc (GOH) platform and two technical assistants (65%) to ensure continued sample collection, laboratory support and student training. For **SOPH** to build the field of Pharmaceutical Public Health and strengthen the doctoral programme, the majority of the budget will be allocated to personnel with the expertise and technical skills (e.g. e-learning/social media expertise, admin support) to lead these areas. The operational costs will contribute to the development of 2 new joint educational offerings (through material and online course development), building a research portfolio (through proposal development and seed funding), and 5 policy-practice events. The travel budget will facilitate networking and exchanges with ITM and South partners to carry out these field building activities collaboratively. The doctoral programme will include overseeing grants and support activities for partial funding of 15 PhD students, e.g. small grants for fieldwork and to facilitate timely completion of their PhD.

“Organizational and logistical” synergies: See annex 'Responses December'.

Justification of sending of volunteers into the field: As ITM does not have local offices at DVTD/SOPH, no volunteers are sent into the field. It should, however, be noted that we work with the community volunteers based at Mnisi to ensure a “bottom up” perspective on needs and priorities, and understanding of how and why knowledge will or will not lead to the desired changes.

Description of the expected Impact

First of all, through quality education, and lifelong learning opportunities (**SDG 4**), the DVTD and SOPH programmes will contribute to building the next generation of African researchers and global health leaders capable of enhancing synergies

between various sectors in improved health, and of developing emerging fields such as pharmaceutical public health (**SDG 3**). This human potential will in turn build the capacity of African countries to establish and address their own health priorities. It will identify ways to mitigate risk factors, and direct future interventions to minimize disease risk as well as improving access to affordable quality medicines and vaccines (**SDG 3**). Overall, we aim for all these factors to contribute to the improved health and well-being of vulnerable populations in South Africa and beyond. For the DVTD programme specifically, our desired long-term focus is to fight infectious disease of poverty in these communities. Improved health will break the poverty-disease cycle as communities will be less vulnerable for these diseases, in turn, enabling communities to stay at work and create an income for their families (**SDG 1**), allowing them also have enough funds to consume adequate quality food (**SDG 2**). For the SOPH programme, our desired long-term focus is to strengthen health and pharmaceutical systems so they are capable of sustainably addressing key threats to health, including pharmaceutical regulation and access, and availability to quality effective medical products; also, when it comes to outbreaks preparedness and response (**SDG 3**).

Description of Sustainability

Programme viability: This programme builds on existing institutional capacity and strengths, and is in line with the developmental trajectory of the research, teaching and networking strategies at both SOPH (UWC) and DVTD (UP). Full institutional support and capacity (e.g. range of institutional, administrative, financial and IT support services) is available to also ensure sustainability on a higher level. In terms of infrastructure and laboratory support personnel, DVTD are adequately staffed with appropriately trained laboratory personnel, while the administrative support consists of Departmental Administrators, a Senior Instructional Designer and e-learning Manager and Financial Manager (latter partially funded by the DGD-ITM 2017-2021 programme). In addition, a half day position was created to assist staff as well as postgraduate students with financial and administrative aspects of ordering consumables. SOPH has a strong administrative section supporting student, project and financial administration, as well as several curriculum and educational technology specialists on its staff.

Partner capacity-building: DVTD wants to strengthen its masters & doctoral training offering, through collaborative efforts to build virtual training hubs, establish a second rural One Health platform and by transitioning the collaborative MSc in Tropical Animal Health into a jointly (DVTD-ITM) organized MSc in Global One Health. The research capabilities will be expanded by running collaborative research projects. DVTD needs capacity building in knowledge translation into policy and practice, which will be achieved through intensive collaboration with experts at SOPH and ITM. **SOPH** sets out to build training and research capacity in the field of pharmaceutical public health and doctoral training, to be achieved through collaborative work in designing curriculum, and undertaking joint research, and building community of practice.

Disengagement/empowerment strategy: ITMs partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners, we ensure buy-in from both ITM, DVTD and SOPH, and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration, as for the partnership with DVTD and SOPH, where we see an equal level playing field for joint research with a societal impact. The final aim to reach the phase out, when partners are fully equipped to obtained external funding.

Raising awareness: To achieve awareness, an optimal dissemination of the project results is targeted through community information and training sessions and an end of project workshop targeting stakeholders. The scientific community will be primarily reached via (open access) publications in national and international journals. Throughout these activities, the programme aims to raise public awareness on the importance of development cooperation and values like international solidarity (Global Citizenship Education). We will reach national and international authorities and policy makers through appropriate forums to promote evidence-based changes.

Multiplier stakeholders: DVTD and SOPH staff involved in research and training activities can multiply the number of experts with knowledge and skills to tackle challenges influencing the interconnectedness of human, animal and ecosystem health, and pharmaceutical systems; and moreover, multiply the staff involved in collaborative research and training. Furthermore, key community members and health workers targeted for GRIPP activities can act as multipliers for the number of stakeholders involved in the improved synthesis, exchange, and application of knowledge, thus sustaining project results.

Description of the Partnership Strategy

Involvement of the partner(s) in compiling the programme and in implementing it: It is important to note that the programme is the result of an intense joint writing, reviewing and correcting process. Key staff at both institutions (DVTD and SOPH) as well ITM worked closely to develop ideas and intentions for the DGD-ITM 2022-2026 programme, which were submitted to ITM's Commission of Development Cooperation in February. Proposed programme coordinators for both institutions were invited to the Joint Partner Meeting held on May 6, 2021, during which the general modalities of the programme formulation process were explained. Thereafter, a joint start-up meeting was organized, with a wider group of involved staff of all institutions, explaining the way forward and brainstorming about the joint programme result. Next, a Theory of Change workshop with involved staff helped to further delineate the programme context, envisaged long-term change and the pathway towards to this change. Following this workshop, intense discussions during several meetings, both joint between

DVTD, SOPH and ITM collaborators, as well as in smaller DVTD-ITM and SOPH-ITM teams, resulted in the compilation of the programme.

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council in which ITM's partners are represented and which discussed the thematic JSF process.

Number of partners: Apart from ITM, this programme includes two South-African partners, DVTD and SOPH. The choice of this number of partners is logical considering the two distinct complementary approaches to achieve our programme objective, and excellent track record of cooperation of all these institutions.

Each partner will have a very specific entry point to work towards our long-term goal of improving the health and wellbeing of vulnerable populations in South Africa and beyond. DVTD will focus on infectious diseases of poverty in vulnerable rural populations living at the interface using a global One Health approach, while SOPH will focus on health policies, systems and services, and in this programme in particular on pharmaceutical systems. As described extensively in the Theory of Change text, the choice of partners is driven by their expertise (which will ensure that the long-term goal will be achieved), as well as their needs on the one hand, and the longstanding, positive history of collaboration between these institutions and ITM (since 2002 for DVTD, 2014 for SOPH) on the other hand. As such, academic links between the DVTD and the SOPH were developed since 2014 in the form of workshops held in sharing experiences in online learning, mapping the field of e- and flexible learning, exploring the concept and practice of workplace-based learning, and bringing together experts in the field of learning and teaching innovations.

At the moment the partnership with DVTD and SOPH can be defined as institutional collaboration. This collaboration can in the longer-term transition towards a gradual exit from DGD funding. It is hence logical that the partners will be in the driving seat throughout the implementation of the programme: the partners will prepare, plan, implement the programme activities, remediate whenever issues arise, and evaluate their progress in reaching the overall goals. Throughout the process, ITM will be supporting DVTD/SOPH.

Capacity-building strategy of partners to promote technical sustainability: A capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

Link between the partner(s) and the target groups: The involved partners (DVTD and SOPH) are included as institutional target groups for the programme. Moreover, admin staff and scientists at both institutions (individual target groups) will ensure follow-up, management, appropriate development and successful finalization of research and teaching components included in the programme. The partners will enroll trainees (individual target groups) for educational activities. They will invite community members to participate in research projects, identify and actively engage with community members and policy to ensure improved synthesis, exchange, and application of knowledge by relevant stakeholders. They will stimulate partner institutes, researchers and alumni to participate in networks.

Description of Synergies

Synergies: Although there is no longer a geographical JSF for South Africa, all the former members of the geographical JSF (including ITM) have expressed their strong interest to continue collaborating in South Africa in future. There are a number of Belgian actors active in the country. The Organisation of Flemish Cities and Municipalities (VVSG) for instance works on local governance, VVOB on early childhood education and basic education more specifically, whereas FOS on decent work. Rode Kruis Vlaanderen – Internationaal is working on first aid. Synergy with these actors will be difficult to achieve as their activities are related to quite distant fields/areas. At a broader level, there are links with VLIR-UOS (i.e. organizing research and training activities), which is part of the thematic JSF, and VLIR-UOS is anticipating to continue its activities in South Africa, however, the specific programmes are call-based, so we don't have an overview of their specific activities yet. However, VLIR-UOS and ITM will deepen their relationship in the future. Overall, there are currently no operational synergies in place, contributing towards achieving a joint country objective. Furthermore, although there is evolving coherence with other Higher Education Institutions, NICD and SAWC (see Coherence), there are currently no operational synergies in place. With NICD and SAWC, however, we aim to develop a more elaborate partnership within the 2022-2026 DGD-ITM programme and investigate how and in what way we can establish operational synergies.

Planned synergies for objectives covered by a geographical JSF or a thematic JSF: Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g.; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme.

Description of how individual or collective recommendations and lessons are to be taken into account

Recommendations and lessons learned previous programmes: The programme has integrated recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. As recommended in the report of the approval dialogue, this programme gives particular attention to knowledge valorisation through its focus on “Getting Research into Policy and Practice (GRIPP)”. ITM will strive to maximize this aspect and will establish the preconditions to learn about the best strategies to achieve this, i.e. through indicators, and as topic of the mid-term evaluation. Moreover, as recommended, this programme has also foreseen a specific context analysis, risk management approach and stakeholder analysis.

Throughout the 2017-2021 DGD-ITM programme, it became clear that in order to promote MSc/PhD student success, a comprehensive approach is needed, addressing the student in a holistic way. Moreover, appropriate selection, induction, monitoring processes need to be developed. Our new 2022-2026 programme aims to further develop these processes and invest in leadership and soft skill training for all our trainees. Moreover, in the DVTD programme, master and doctoral level preparatory schools will be developed to further improve student success. The context of the on-going Covid-19 pandemic has also highlighted the need for new developments and creative approaches to online teaching and learning, remote working and collaboration, and sparked the global interest in One Health. Within the new programme, we would invest in online course and virtual training lab development to address these challenges. Furthermore, transitioning our existing collaborative MSc in Tropical Animal Health into the joint MSc in Global One Health would allow our graduates to have the knowledge and skills to tackle challenges influencing the interconnectedness of human, animal and environmental health. The research and GRIPP activities within our programme will allow further knowledge generation, uptake and application on this very important topic.

During the course of 2017-2021 DGD-ITM programme, SOPH developed a comprehensive approach to doctoral education, focused not just on individual but also institutional capacity. In addition to offering scholarships, we streamlined recruitment, selection and monitoring processes, and developed multiple modalities of support to students and supervisors. Through these activities and a structured internal reflective process, we have also generated a more fundamental understanding of the purposes, values, models of public health doctoral education appropriate to our students and context. The new programme seeks to advance this understanding through further reflection, research and networking. Moreover, SOPH consolidated the Pharmaceutical Public Health niche in collaboration with ITM, including a portfolio of online courses, regional researcher-practitioner networks, and post graduate research. These provide the springboard for establishing SOPH as a pioneering centre for Pharmaceutical Public Health in South Africa, with a reach to other countries in Africa.

External evaluations covering previous programmes: An external evaluation of the DGD-ITM 2014-2016 programme emphasized the need for giving more space to evidence translation in policy and practice, which will now be a separate component in our programme. Moreover, it was advised to promote collaboration between the south partners and several ITM departments. Interdepartmental collaborations were incorporated in the previous South African programme, yet will be further expanded within the context of the new programme. Furthermore, the programme shall continue to stimulate south-south collaborations and formulate yearly lessons learnt, and it would invest in e-learning activities with the south partner training institutions.

Programmes other organizations, pooled/shared where applicable: This is not applicable to our programme.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
RA_ITM_South Africa_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_%20South%20Africa%20_22-26_0.pdf
TOC_ITM_South Africa_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_South%20Africa_22-26_0.pdf
FACTSHEET_ITM_South Africa_22-26_SOPH	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_South%20Africa_22-26_SOPH.pdf
FACTSHEET_ITM_South Africa_22-26_DVTD	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_South%20Africa_22-26_DVTD.pdf
Responses_December_SouthAfrica	Other	https://fundhub.openaid.be/sites/default/files/2022-04/Responses_December_SouthAfrica_UpdateMarch.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The total budget of this country programme is 2.055.822,00€ of which a 22,46% has been allocated to ITM, 77,54% to the local partners. The budget has been developed based on the Results and its activities. Each activity has been budgeted according to the category or categories by the nature of the expense and it has been projected for the five years. The budget is composed of no investment costs, B-Salary costs (=45,17%) C1-Operating costs (=15,66%), C2-Travels (=11,96%) and C3-Grants (=27,21%).

The total Local budget is 1.594.128,00€ of which DVTd receives 77,80%. Personnel cost will account for 20.91% of this budget and will include the support of a financial manager, e-learning specialist and two technical assistants which will provide essential skills and expertise into the programme. A significant percentage of the budget (39,89%) will be for postgraduate and postdoctoral students grants and the research that they will be involved in. These will be spread over the five-year period to ensure sustainability and definite outputs. With the two rural platforms being 460 km (HH) and 980 km (EC) from UP, respectively, the majority of the 14.5% travel allocation is, therefore, linked to the implementation and realisation of the research activities at these platforms. To note, budget for the GRIPP outputs have also been included in the research budgets. The GRIPP budget will be used for the development of a GRIPP toolkit and GRIPP training opportunities. For networking, the Global One Health in Action and alumni networks will ensure long-term benefits to the region, and beyond.

For the SOPH programme, the budget distribution will be as follows; personnel costs will account for 61,79% and will include the specialist skills and expertise essential to the building the area of Pharmaceutical Public Health and the doctoral programme, including topic specialists, e-learning and media specialists, financial and administrative support. 9.36% of the budget will be allocated to operational costs, including workshops and seed funding for building the research portfolio in Pharmaceutical Public Health and on the doctoral programme; and to support the development of new educational courses in these areas; 18,28% of the budget will be awarded as grants, mainly to support doctoral students, with a smaller proportion to short courses participants.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym UP DVTd

Full name University of Pretoria (UP) Department of Veterinary Tropical Diseases (DVTd)

Budget available

2022	2023	2024	2025	2026	TOTAL
214262,00	263,283.00	341,592.00	280,682.00	288,488.00	1,388,307.00

Acronym UWC-SOPH

Full name University of the Western Cape - School of Public Health.

Budget available

2022	2023	2024	2025	2026	TOTAL
70,010.00	74,667.00	79,651.00	84,983.00	90,688.00	399,999.00

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Improving uptake of Evidence-informed Health Policies in Guinea

Contacts

Contact details for the outcome's ANGC reference person in Belgium

Name :	Remco van de Pas
Telephone :	+3232476648
Email :	rvandepas@itg.be

Contact details for the outcome's ANGC reference person or their representative in the field

Organization :	Centre d'Excellence Africain pour la Prévention et le Contrôle des Maladies Transmissibles (CEA-PCMT). Faculté des sciences et techniques de la santé, Université Gamal Abdel Nasser de Conakry, Ministère de l'Enseignement Supérieur et de la Recherche Scien
Name :	Alexandre DELAMOU, MD, MSc (Clin. Trials), MPH, PhD
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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Improving uptake of Evidence-informed Health Policies in Guinea		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-7-GN		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Guinea		
Sector :	12110 - Health - Health policy and administrative management	Budget share :	48%
Sector :	12181 - Health - Medical education/training	Budget share :	52%

Other CSOs/IAs involved

N/A

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Guinea-Conakry

Lat/Long :	9.509167, -13.712222
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Outcome summary

Description of the outcome

In the Guinea '22-'26 programme we aim to increase the uptake of evidence informed policies in the health sector in Guinea. Having evidence-based health policies accepted and applied by important stakeholders contributes to the realization of the SDG on health (SDG3). The approach focuses on higher education (Output – OP1-SDG 4.3) and research (OP2) and builds the institutional capacity of the two partner institutions, CNFRSR Maferinyah and CEA-PCMT (OP3).

ITM worked with partner Maferinyah in the last five years (2017-2021), and we now build on the lessons learned and include a second partner, CEA-PCMT, which was created partly by the activities in the first five years. Institutional capacity strengthening includes attention for resource development by the institutions to create sustainable 'drivers of change' – that capacity is a combination of self-reliant and sustainable institutions that have optimal technical and educational skills as well as the skills it takes for getting research into policy and practice (GRIPP). The programme includes a specific work package on GRIPP (OP4). The prime beneficiaries of the program are clearly the population of Guinea as such, with a focus on the most vulnerable groups among the women. Therefore, our partners identified the most relevant policy areas to make sure that we aim for policies affecting these groups (applying the principles of Leaving No One Behind (LNOB)).

Research is hence done to provide the evidence based on febrile illness, sexual and reproductive health and health system aspects such as accessibility and affordability of well-staffed health services. Training includes MPH and PHD trajectories to strengthen individual capacities to act as agents of change. Research results are also applied in service delivery programs by

the various actor in the health arena – government, private practice, and NGO projects. The program activities focus on equity, gender balance, and improved capacity to reach the SDGs.

Wording of the outcome

The objective of the programme is to improve the use of scientific evidence in drafting and applying health policies in Guinea. Which requires higher education to conduct good research, and practice effective communication and advocacy skills to convince stakeholders to use the evidence available to come to the most productive policies that really influence the people who need it most: the vulnerable groups in society.

Target groups

Most important beneficiaries are vulnerable women in Guinea. In order to reach them, the target group of this project consists of staff of Maferinyah and CEA-PCMT, faculty members and students of CEA at the University Gamal. Indirectly targeted are researchers, health providers, and research populations). These include highly vulnerable children, women, men (including sex workers and Men having Sex with Men).

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	1

4. Trade development :	0
5. Biodiversity :	0
6. Climat Change – Mitigation :	1
7. Climat Change – Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	2
10. HIV / AIDS :	1
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	1

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Education

In this programme we put a strong emphasis on health education, providing scholarships and the increase of academic excellence. We do so to strengthen the knowledge basis, on which solid research and evidence for policy can be built. However, we do not focus on primary, secondary or vocational education as mentioned in the strategy papers.

Children's rights

The specific program components on maternal and sexual health are aligned with the Belgian strategy paper on children's rights. Especially in helping young women and mothers to speak out on education and health-care services concerning their young children – and themselves; and encourage children to have their voice heard and be actively involved in discussions about their health and health care, including sensitive health issues like sexual and reproductive health, HIV/AIDS and other STDs, violence, addictions, harmful (whether or not traditional) practices like female genital mutilation (FGM). We will continue working on a special approach that started this year in organizing women groups that successfully discuss these themes and brings about change in cultural practices.

Development education

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own. In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate, as also mentioned in the strategy note. Our programme contributes to better knowledge about the diseases, and aims to inform policies to anticipate and mitigate climate related risks. In addition, we will link the scholars and partner institutes under this programme to the ITM Global network on Climate Change, hence enabling them to gain additional knowledge on the topic from a global perspective, and share own experiences.

Gender

Both partners and ITM have worked and are still working closely with Enabel on the gender agenda of DD and Enabel. The program in Guinea helps to bring equal opportunities to women and girls in education, works on improved access to quality SRHR services, and actively addresses the issue of gender based violence.

Data, where relevant, are disaggregated by gender, in order to follow our commitments to work towards gender equality.

Digitalization - Digital for Development D4D

In our program, we use data of different kinds and origin. For AMR surveillance, for monitoring the process towards UHC, different methods and thus different modules will be taught. After all, "Data provide the basis for almost any development and humanitarian intervention. They allow for objectively describing the situation or the problem that one will address.[...] Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. [...] Data is also needed to keep track of a country's progress towards the SDGs. (DGD strategy paper D4D).

In our program, we use digital approaches as well to increase access to learning. We do so by implementing e-learning modules into our courses, in order to ensure access for all.

Health

Our impact is fully aligned with the Strategy on Health and its One Result. Our program strengthens individual and institutional capacities, generates relevant research evidence based on identified health needs of the Guinean population, and gets research results into policy and practice.

Building up capabilities for lab and clinical research, surveillance, and healthcare integration promotes integrated control of specific diseases. QMS, exploring innovative healthcare delivery and our focus on mental well-being will increase access to good quality healthcare. Our focus on equity and NIPH's monitoring of UHC will pave the way towards a sustainable health financing system. We will augment local expertise to upgrade health personnel through capacity strengthening of education and training. Knowledge management and training of local trainers will help ensure sustainability of strengthened capacities and increase the abilities of Maferinyah and CEA-PCMT for knowledge transfer and, in turn, to build capacities of other local health institutions. Overall, outputs of our program will strengthen both the health sector and the healthcare system, if our results are transformed into policies and implemented by government ministries and agencies

We to contribute to the long-term goal of improving health and wellbeing of vulnerable populations. Research and education address the following strategies specifically: Strengthening the health sector and the health care system; by co-creating policy planning and implementation with stakeholders including the end-users (the vulnerable groups themselves); while upgrading health personnel; study financing options, ensure coherent employment to improve access to quality care. Partner CEA-PCMT will focus on education while partner Maferinyah will work on research. The planned research projects, education, networking and knowledge translational activities, are in alignment with the core principles on the right to health and healthcare.

Subsidy bonus allocation: priority themes and strategic priorities**Human rights-based approach**

One of the main characteristic of rights-based approaches is meaningful participation, as reflected in the Guinean vision of health. Participation means that national stakeholders - including non-state actors such as non-governmental organizations - communities and citizens participate meaningfully in all phases of programming: assessment, analysis, planning, implementation, monitoring and evaluation of health policies and programmes. Not only in the way we apply participative research (for example in the 'person-centered' approach to improve preventive health and wellbeing, especially aimed at women and girls) but explicitly in the GRIPP approach we focus on meaningful participation. This target, included in SDG 3 "Enable all people to live in good health and promote well-being for all at all ages", goes beyond ensuring that guidelines or protocols are approved at the national level which is the formal representation of the Guinean people. We actively build our suggestions for health policies and our way of getting research into policy and practice upon the strengthened voice of the right holders, and the capacity of duty-bearers to fulfil their right to health.

Decent and sustainable work

1834 characters including spaces (1/2 page)

Regarding decent work, the program will promote equal opportunities for employment at Maferinyah and CEA-PCM, regardless of sex, age, origin, political or religious beliefs. Furthermore, the program's QMS activities will ensure health and safety provisions in the workplace, both within the partners divisions and in local institutions / health facilities whose capacities they will, in turn, strengthen.

Our impact of improved healthy behavior and better access to affordable and good quality health services would promote better health for the Guinean population, which would lead to increased productivity.

Under the pillar of social protection, we reiterate that our program’s health equity goals are in coherence with the National Guinean health strategy. Our priority areas for the health systems and policy research include UHC & health equity, health financing, and social health protection. Research in these areas, together with the function of the partners in monitoring UHC and SDG3-related indicators will generate much-needed policy-relevant knowledge and evidence that will advance universal health coverage through social protection schemes in the country

We plan three direct ways to link with "Decent Work":

- in studies and development of policies for health workforce, we include the principles for decent work ;
- the institutional strengthening of the partners Maferinyah and CEA includes principles of Decent Work ;
- and in seeking synergies as we are already doing with WSM and Trias and Enabel, we link the health agenda with the Decent Work agenda – as it is obvious that Decent Work requires a healthy workforce.

The Belgian CSOs involved from the Decent Work thematic framework is WSM (We Social Mouvements) in collaboration with the Alliance Nationale des Mutualités Chrétiennes (ANMC).

Gender

The 2022-2026 program applies lessons learned in the work done for Enabel on the She Decides agenda. Gender-based violence, female genital mutilation (FGM) and sexual health are structural and endemic in Guinea.[In preparing the evidence base for this program, that is all about a rights based approach to gender issues, Maferinyah and ITM engaged in several studies to understand the position of women and girls and define effective ways to address gender inequity. Throughout the program we will therefore use a ‘gender lens’: women and girls are involved at all stages of programming; research will be conducted through needs assessments where women and girls are brought together in groups to identify their needs and priorities. The maternal & sexual health component focuses on perinatal health and chronic life-long conditions, situations that tend to increase vulnerabilities further. Attention to mental well-being of women and girls is warranted to help reduce gender inequalities, to increase abilities for self-care and to help ensure that no one is left behind, whatever vulnerable position they may have.

Throughout the programme, innovative ways of including women and girls in monitoring activities will be developed in group sessions. In involving women groups in regular feedback, we feed the cybernetic loop for continuous evaluation, but also strengthen the agency of women in being active participants in the communities when it comes to the health agenda.

Working within a women-centered approach does not mean that men are excluded from program. Men hold key positions in communities and can play an important role in enabling women to access information, protection, social and health services and to participate in decision-making. Men are therefore an important target group and can become "male change agents" who can challenge other men and thus support change towards equal access and participation of men and women.

Environment

The SDGs 2030 Agenda recognizes the twin global priorities of delivering environmental sustainability (and specifically mitigating the threat posed by climate change) and the ongoing priority of eradicating poverty, and emphasize the centrality of securing equity, under the strapline “leaving no one behind”.

The potential impact of climate change on the country program includes a rise in temperature and rainfall, increasing the challenges already faced by the agriculture and forestry sectors. The health-related impact of climate change is indirect: worsening socio-economic and psychosocial indicators for health, , even stronger urbanization and The program will explore ways by which the Guinean health system can address these (e.g., disease surveillance is an important element of the project, and we work on innovative ways to deliver healthcare). Conversely, through implementation of quality management systems, we will assure that program activities will not adversely affect the environment (e.g., proper waste management). We will ensure that training and education of health staff and students as well as the knowledge transfer of QMS by Maferinyah and CEA-PCMT to other Guinean institutions will include these environmental measures. Regarding international travel, we will adhere to ITM’s travel policy (currently in a pilot phase) to minimize flying and to pay compensations for carbon-neutralize travel. The use of solar energy is currently not included in our programme but will be considered as an area for investment in the future

Common outcome within a common programme

N/A

Common outcome between distinct programmes

N/A

Areas of complementarity and synergy with the intervention of ENABEL

ITM, CEA-PCMT and Maferinyah work closely with Enabel in a relationship that has grown strongly in the period 2017-2021. Enabel granted research contracts to provide the evidence base for its She Decides program, we collaborated on the Covid crisis (“De l’épidémie d’Ebola à la pandémie de Coronavirus (COVID-19) : une analyse situationnelle rapide en Guinée”) and work

closely with the CAPACITA program. In the period 2022-2026 we will further develop synergies with all three components of the ENABEL - Guinea programme: training, studies and expertise programme (PDF-EE); sustainable and inclusive entrepreneurship development programme on the Conakry-Kindia-Mamou axis and a specific intervention to promote sexual and reproductive rights on the Conakry-Kindia-Mamou axis.

Activities - potential synergies: with WSM and Trias we are discussing with Enabel to link the health and She Decides agenda with the Decent Work agenda – as it is obvious that women who want Decent Work require good health.

Potential results:

- Women's groups are trained in an integrated multidisciplinary approach;
- The staff of the health facilities in the municipalities along the axis will be trained in sexual and reproductive health and primary health care, facility management and quality of care incorporating operational research to ensure continuous, integrated and permanent (24-hour) care, financial management and community responsibility.

Requirements include willingness of different stakeholders to work together; close collaboration between Guinean and Belgian implementing partners and with ENABEL, transparent contributions in terms of harmonisation of ongoing project activities; clear formulation of additional activities per partner to strengthen results and ensure that synergy leads to sustainable results, and obviously availability of financial means.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	The performance of Guinean health system is increased towards the realisation of related SDGs (SDG3, 4)
Indicator title :	OC1 - Number of Health Policies produced
Indicator description :	Cumulative, absolute number, ascending. SoV: Documented Health Policies - project database
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	The performance of Guinean health system is increased towards the realisation of related SDGs (SDG3, 4)
Indicator title :	OC2 - Number of GRIPP activities undertaken
Indicator description :	Number of GRIPP activities (network meetings, F2F meetings with policy makers or other stakeholders...) Cumulative, absolute number, ascending. SoV: meeting reports which also describe type of GRIPP activity
Baseline :	0
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	10

Formulation of outcome or result :	The performance of Guinean health system is increased towards the realisation of related SDGs (SDG3, 4)
Indicator title :	OC3 - Uptake/influence of ITM-supported research in public policies (using a self assesment scale)
Indicator description :	Qualitative indicator, quantified as follows: Scale used: 1 - knowledge has been disseminated; 2 - there have been some first exchanges with policymakers after dissemination; 3 - we are actively working with policy makers on translating our findings to policy; 4 - new knowledge has been translated into policy; 5 - new knowledge is being implemented at scale through changed policies
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	The performance of Guinean health system is increased towards the realisation of related SDGs (SDG3, 4)
Indicator title :	OC4 - Health Policies taken up, disaggregated by stakeholder (MoH : Others (UN, (I)NGO,...)
Indicator description :	Proof of translation of Health Policies, based on references in official documents (legislation, speeches etc.) Disaggregated by stakeholder - MoH : Other (UN, I-NGO, CSO ...) Cumulative, absolute number, ascending. SoV: documentation by programme
Baseline :	0 : 0
Target Year 3 - 31/12/2024 :	2 : 2
Target Year 5 - 31/12/2026 :	4 : 6

Formulation of outcome or result :	R1 - Research practices have been strengthened
Indicator title :	R1.1 - Number of research protocols implemented
Indicator description :	Quantitative, ascending, absolute number, cumulative. Combined for all research areas: Health Systems, Maternal and Sexual Health Research, Febrile Illness Research SoV: Protocol documents; Ethics approval; quaterly reports
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	R1 - Research practices have been strengthened
Indicator title :	R1.2 - Number of scientific publications
Indicator description :	Quantitative, ascending, absolute number, cumulative. Combined for all research areas: Health Systems, Maternal and Sexual Health Research, Febrile Illness Research SoV: Copies of published papers; Pubmed; Scopus
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R1 - Research practices have been strengthened
Indicator title :	R1.3 - Number of people trained, disaggregated by gender (f : m)
Indicator description :	Quantitative, ascending, absolute number, cumulative. Combined for all research areas: Health Systems, Maternal and Sexual Health Research, Febrile Illness Research SoV: Training reports
Baseline :	0
Target Year 3 - 31/12/2024 :	30 (10 : 20)
Target Year 5 - 31/12/2026 :	50 (20 : 30)

Formulation of outcome or result :	R2 - Academic Excellence in strengthened
Indicator title :	R2.1 - Number of students trained; disaggregated by gender (f : m)
Indicator description :	Quantitative, ascending, absolute number, cumulative. SoV: Registration records
Baseline :	0
Target Year 3 - 31/12/2024 :	50 (20 : 30)
Target Year 5 - 31/12/2026 :	100 (40 : 60)

Formulation of outcome or result :	R2 - Academic Excellence in strengthened
Indicator title :	R2.2 - Number of scholarships awarded; disaggregated by gender (f : m)
Indicator description :	Quantitative, ascending, absolute number, cumulative. SoV: Scholarship contracts
Baseline :	0
Target Year 3 - 31/12/2024 :	10 (4 : 6)
Target Year 5 - 31/12/2026 :	20 (8 : 12)

Formulation of outcome or result :	R2 - Academic Excellence in strengthened
Indicator title :	OC5 - Number of programs accredited nationally and/or internationally
Indicator description :	Quantitative, ascending, absolute number, cumulative. Accreditation document
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	R3 - Institutional management capacity is strengthened
Indicator title :	R3.1 - Number of fiduciary reports (quarterly, annual)
Indicator description :	Quantitative, ascending, absolute number, cumulative. SoV: Fiduciary reports
Baseline :	0
Target Year 3 - 31/12/2024 :	9
Target Year 5 - 31/12/2026 :	15

Formulation of outcome or result :	R3 - Institutional management capacity is strengthened
Indicator title :	R3.2 - Number of staff trained, disaggregated by gender (f : m)
Indicator description :	Quantitative, ascending, absolute number, cumulative. SoV: Training certificates
Baseline :	0
Target Year 3 - 31/12/2024 :	4 (2 : 2)
Target Year 5 - 31/12/2026 :	8 (4 : 4)

Formulation of outcome or result :	R3 - Institutional management capacity is strengthened
Indicator title :	R3.3 - Number of positive external audit reports
Indicator description :	Quantitative, ascending, absolute number, cumulative. SoV: External audit reports
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R4 - GRIPP strategy is developed and implemented
Indicator title :	R4.1 - Number of policy briefs developed
Indicator description :	Quantitative, ascending, absolute number, cumulative. SoV: Policy brief documents
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R4 -
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Indicator title :	R4.2 - Number of references to scientific evidence used for program and policy improvement
Indicator description :	Number of references to scientific evidence used for program and policy improvement - references can be made in legislation, official statements, speeches, policy briefs by other civil society actors etc. SoV: database outcome
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	3

Comments on description of the outcome, results and strategy

Submitted by DGEO-MaartenY on Wed, 10/20/2021 - 09:25

Ratio of women in some of the targets

Several of the results are disaggregated by gender. In some of them, e.g. R2.2 Scholarships awarded, the goal is a ratio different from 50:50 or above, in this case 8:12 (f/m). Could you please elaborate on the reasons behind these ratios? Is it considered to be unrealistic or unfeasible to strive for a 50/50 ratio given the lower average education level among women/girls in Guinea, or are there other reasons behind this choice?

Submitted by ITG-IMT on Mon, 10/25/2021 - 13:06

Response on 50/50 gender ratio

In order to realistically reach a 50/50 gender ratio in higher education, challenges in the full education system would have to be addressed. Almost 77 % of girls attend primary school, but only 25 % of girls attend secondary school due to [teen girls dropping out](#) to help at home or as a result of child marriage.

- Families with multiple children, especially those in rural areas, tend to choose to educate boys instead of girls.
- Guinean girls face the issue of being taken out of school to help with younger siblings and assist with cooking or other housework.
- Child marriage is a major barrier to girls' education.
- Gender-based violence also poses a problem to girls' education in Guinea. [Sexual harassment](#)—even assault—is not an uncommon occurrence for female students.
- There is a major disparity in literacy rates between urban and rural areas. While 53 percent of women ages 15 to 24 in urban areas are literate, only 15 percent of those in rural areas can say the same.
- The Ebola epidemic of 2014 severely impacted girls' education in Guinea. Students missed at least 33 weeks of school during the [Ebola outbreak](#), which put girls more at risk for dropping out altogether to support their families through marriage or work. (<https://borgenproject.org/tag/gender-equality-in-guinea/>)

Where possible, we do try to strive for gender equality.

Activities, targets groups and beneficiaries

Classification of activities

We classify activities in 5 categories: Platform development, research & education projects, GRIPP & synergies.

Platform development translates in

- strengthening capacities for research & education through the use of Demographic and Health Surveys (DHS) data (at population-, -facility-level secondary data and collect primary data from rural health centers.
- We plan to consolidate the platforms and research skills of the Maferinyah staff, as well as the prospective collection of clinical data and laboratory samples. This will allow to substantially increase the sample size of various conditions causing fever for diagnostic research, and robustly feed future projects aimed at improving case management, molecular surveillance and etiological research.

c) We will apply longstanding experience in community mental health, and introduce psychosocial aspects of perinatal health, thus adding to quality of person-centered care. Urban health is addressed in the maternal health research.

Education projects: 30 MPH students and at least 15 PhD trajectories will start in the CEA-PCMT program. We will collaborate with the ITM Alliance program (Outcome 'Global Program Education & Scholarships) for scholarships, fellowships, and staff mobility.

Research projects: the MPH and PhD students will contribute to the various research programs.

Getting Research into Policy and Practice (GRIPP): is a central element in the program. Developing activities to strengthen the capacities of partners to engage in knowledge translation activities; integration of knowledge translation in research projects; creating the conditions for policy influence & uptake/outreach.

Synergy: Networking takes place with the programs in DR Congo, Benin and Cambodia in data analysis, urban health, ecohealth

and mental health methodology. Synergy with Enabel is ongoing and will be further developed in their Capacita and She Decides programming. Close collaboration with local NGOs and JSF partners continues.

Target group(s)

Direct targets of activities are staff of the two partners Maferinyah and CEA-PCMT. As CEA-PCMT is established within the Faculty of Health Sciences and Techniques (FSTS) of the Gamal University in Conakry, the faculty is an indirect target group. Maferinyah has presently 24% of female staff and will improve, CEA-PCMT will have no less than 30% of female students.

Beneficiaries

We focus on better health and well-being of vulnerable groups with a focus on women and children in rural areas. Beneficiaries include rural and urban populations who will benefit from the outcome of proposed academic and research interventions in terms of better, more effective health policies. Women and girls are specific beneficiaries of the sexual and reproductive health projects, as are sex workers and Men having Sex with Men

Title of the reference annex :	TOC_ITM_Guinea_22-26
Title of the reference annex :	RA_ITM_Guinea_22-26

Comments on activities, targets groups and beneficiaries

Submitted by DGEO-MaartenY on Wed, 10/20/2021 - 09:23

Estimate of target groups and beneficiaries

Could you provide us with some more information in regard to the beneficiaries and the target groups, with an estimate of the number of beneficiaries / people targeted?

Submitted by ITG-IMT on Mon, 10/25/2021 - 12:58

The direct target group is...



The direct target group is the staff of the two partners, Maferinyah (about 45 staff) and CEA-PCMT (20).

The staff trains health workers and students – aim is about 200 students and 1000 health and ministerial staff. They improve the level of services for people in the direct target area (about 2 million), and eventually effects should reach the full population (13 million), and given the priority areas of work the most important beneficiaries are the most vulnerable groups in Guinea.

These include highly vulnerable children, women, and men (including sex workers and Men having Sex with Men)

total population	13,12 million
female population	6,7 million
population aged 10-24	34%
Adolescent birth rate per 1,000	

for girls aged 15-19, 120

Female genital mutilation prevalence among girls aged 15-19: 92%

To compare: In the 2017-2021 period 42 staff of Maferinyah (out of 18 initially targeted) have been trained, including Master in Public Health training and PhD.) 326 health professionals have been trained up to the time of writing (whereas 140 were originally targeted) on primary health care and sexual health, research methodology and reproductive health management (e-learning courses). Staff from health centers and ministries have been trained in a variety of short courses, workshops and e-learning.

CEA-PCMT presently has a team of 20 people. Training has started in 2021 with a first batch of Master-students (35) and in 2022 the PhD course begins (30 candidates in 5 years), and in ongoing research activities extra staff is employed and receives additional training on the job. For the 5 year period this amounts to about 200 people

Description of the Relevance

The right to health includes timely access to acceptable, affordable and quality health care but also implies a set of social conditions that are conducive to the health of all, including the availability of health services, safe working conditions, adequate housing and nutritious food. The fact is that in Guinea many do not enjoy this right to the "highest attainable standard of health". These include vulnerable groups who cannot afford the public health services. The proposed program addresses these

issues and is aligned with international (SDGs, ILO, Human rights), regional (WAEMU) and local (vision Guinea 2040 and the national health development plan 2015-2024) policies: the SDGs vision 2030 of, among others “a world with equitable and universal access to quality education at all levels, to health care and social protection, where physical, mental and social well-being are assured” and “a world of universal respect for human rights and human dignity, the rule of law, justice, equality and non-discrimination”.

The program is aligned with The West African Economic and Monetary Union (WAEMU) strategic plan 2016-2022 which commits member states to tackle youth unemployment (by creating up to 40 000 new jobs in the health sector), gender inequality, decent work and rights, women’s economic participation and social cohesion.

Finally, the it is also aligned with Pillar 3 of the Vision 2040 for a prosperous and emerging Guinea whose objective 3.2 aims to “Develop an efficient health system that covers the entire territory and is capable of dealing with epidemics”. Finally, the program aligns with the strategic objectives of the national health development plan 2015-2024 which aims at “strengthening of the national health system, including governance and health workforce”.

Relevance of the programme to the Thematic Framework of “Decent Work” - ILO

Referring to the International Labour Organisation, decent work can be defined as productive work, freely chosen by the worker, with an income that covers the needs of his/her family, with social protection for all, with respect for fundamental labour rights, including freedom of association and the right to participate in collective bargaining, with equal treatment for all, regardless of sex, age, origin, religious beliefs, with health and safety guarantees at the workplace.

"Decent Work" will be applied in tree ways in this program:

- In studies and strengthening of policies for health workforce conditions.
- In institutional capacity-building of partners - Maferinyah and CEA;
- In seeking synergies as we are already doing with WSM and Trias and Enabel, where we seek to link the health agenda with the Decent Work agenda – as it is obvious that Decent Work requires a healthy workforce.

The Belgian CSOs involved from the Decent Work thematic framework is WSM (We Social Movements) in collaboration with the Alliance Nationale des Mutualités Chrétiennes (ANMC).

Relevance of the programme to social protection, Universal Health Insurance in the WAEMU region.

The WAEMU Community Mutuality Regulation concerns eight West African countries that are members of the WAEMU. Although Guinea is not a member, it borders Senegal and Côte d'Ivoire, which apply this community regulation, whose advances have an impact on Guinea. In research on Universal Health Coverage this regional approach needs attention – especially because it also aligns with advocacy initiatives to adapt health policies related to Social Protection instruments set up in the different countries (universal health insurance, social mutual, CNSS, etc). Here we link with the Global Theme ‘Equity’ in the ITM Global program – Synergies (ITM outcome 17).

Relevance of the programme to the Thematic CSC - Resilience:

Resilience of socio-ecological systems and improvement of ecosystems will contribute to improving the well-being of local communities. In the well-being approach included in mental health aspects of perinatal health, we will produce knowledge focussing on resilience, that will be disseminated to relevant stakeholders. The resilience framework is based on 4 SDGs #6 (clean water and sanitation), #13 (climate action), #14 (life under water) and #15 (life on land) that are considered by the Stockholm Resilience Centre as the basis for all other SDGs – and we see them as closely linked to eco-health. Here we reserve modest funds to link with the ITM Global program on Synergies , for the networks on ‘urban health’ and ‘climate change’.

Continuation of the partnership

ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration, as indicated in ITMs IPP. Maferinyah has gone through this initial phase in the previous program. The partnership approach should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration – as happened when Maferinyah and ITM partnered in implementing research for Enabel (Maferinyah and ITM worked – and still work – on the evidence base for the Guinea "She Decides’ program since 2019, and with the Capacita programme to deliver e-learning modules).

In the 2017-2021 collaboration, it was noted that capacity strengthening initiatives were still needed at Maferinyah in order to

further increase its ability to accomplish its mandate of a national reference research and training center. Therefore, activities pertaining to the development and consolidation of platforms will continue under this new program. The collaboration with the CEA-PCMT started later under the 2017-2021 program (2020). This is partly due to the fact that the center was created in January 2020. However, the contribution of the '17-'21 program to the capacity-building of the CEA-PCMT was crucial through, among others, the contracting of personnel to assist the center direction with technical and research activities involving the ITM and Maferinyah related to communicable diseases, such as the situational analysis of the national health system preparedness to the COVID-19 pandemic. CEA-PCMT is a very promising partner to focus on education and networking; CEA is part of WANIDA and has the will to develop the ability to assume a coordinating role as hub for a network.

Collective learning process, synergy and complementarity. The JSF HES4SD initiators anticipate that the process of collective learning, synergy and complementarity will be instrumental in achieving the outcomes and impact as defined in the ToC in a more effective and innovative way. Synergies between ITM and JSF partners are discussed intensely with Enabel and the Embassy in Conakry, leading to ongoing talks about a joint program where agriculture, entrepreneurship and social security are combined, and since March these talks intensified at the request of Enabel to respond to the "Comprehensive Approach" and the new agenda on social security of Minister Meryame Kitir. For a further description of the programme's link to the strategic goals of the JSF HES4SD: see ToC).

Relevance of the programme to Gender inequality

Women in Guinea represent the majority of the population (>52%). According to the Ministry of Social Action, Promotion of Women and Child, the prevalence of early marriage is one of the highest in the world with 3 out of 5 girls being married before the age of 18. Furthermore, the recurrence of epidemics in the country deepens the gender inequality in Guinea. As experienced during the 2017-2021 program, the promotion and empowerment of female workers is a crucial asset of the approach we suggest in this new program. This empowerment will include, but will not be limited to, the recruitment of at least 30% of female workers in all research and training activities.

Description of Coherence

Internal coherence:

The present five-year programme is coherent with the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health-related Research involving Humans (2016). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect of this last aspect, any research undertaken also needs to adhere to GDPR principles.

External coherence:

Within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved. This complementarity will be sought in common topics such as gender, getting research into policy and practice and scholarships, to name but a few.

Coherence with the Belgian/Guinea cooperation programme

Our intervention is coherent with the Belgian approach to development in Guinea, as we work on the health sector through a comprehensive health systems approach. The health sector is important for Belgian development cooperation, as healthy people are better able to participate in the labour force and thus contribute to the development of their country; and 'She Decides' is a central strategy for Enabel. The policy orientations of the Decroo Cabinet promoted above all inclusive and sustainable economic and social growth and the human rights-based approach, in particular the rights to sexual and reproductive health. In this indirect way the Belgian development cooperation agency ENABEL still supports low-income countries in developing efficient and sustainable health systems that guarantee quality health care for everyone.

Coherence with strategy of the European Union is in the field of striving for equity and financial governance. The 5-year program of the EU focuses on health governance and new models for health financing, and CEA-PCMT with ITM are involved in a EU-funded program to evaluate the effect of strengthening health services and social security in the aftermath of the Covid-19 crisis, executed by Memisa.

Strengthening the evidence base for projects with the geographical JSF members and their local partners

ITM and its partners will work together in the field of documentation of experiences and research. As we already do for Enabel, ITM and Maferinyah will help strengthen the evidence base for the interventions of partners in the geographic JSF. The research results will also be used to feed the dialogue with the Ministry of Public Health and Social Action on health and social protection policies. They will also provide elements to improve the implementation of the programme and adjust interventions. In this way, the coherence will contribute to the UHC and the quality of care in Guinea. Partners already included are Action Damien, Memisa, FMG.

Comments on description of coherence

Submitted by DGEO-MaartenY on Wed, 10/20/2021 - 09:30

EU-funded program executed by Memisa

This chapter mentions that “CEA-PCMT with ITM are involved in a EU-funded program to evaluate the effect of strengthening health services and social security in the aftermath of the Covid-19 crisis, executed by Memisa”. Which EU-funded program is being referenced here and what exactly is the ITM’s role in it?

Submitted by ITG-IMT on Mon, 10/25/2021 - 13:08

Response to EU funded programme with Memisa

ITM is asked to provide the evidence base for, and evaluate the project « Renforcement du système de santé pour assurer la continuité des services et l'accès aux soins des populations vulnérables dans le contexte COVID 19 en République de Guinée », to strengthen the health system in Conakry, Kindia, Mamou and Labé, funded by the European Union in order to ensure continuity of care and access to care for vulnerable populations in the Covid context. (<https://memisa.be/fr/teameurope-la-delegation-de-lunion-europeenne-en-guinee-long-belge-memisa-et-long-guineenne-fmg-garantissent-des-soins-de-sante-pour-les-plus-vulnerables-en-guinee/>)

Description of Effectiveness

As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programs. From the evaluations of past interventions, such as [the one for the third framework agreement funded by DGD](#), it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between ITM and Maferinyah, the effectiveness criterium never scored below B.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present program: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM program (2) is a more operational approach to delivering on the JSF’s Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in the thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals

The expertise of ITM and its partners is in research and education – the raison d’être of the thematic framework HES4SD. This capacity is strengthened at the level of individuals and institutions. Individuals will strengthen their research capacities through education; institutions (the partners, but also other relevant institutions in the health sector) will strengthen their capacity to organize and manage education and research and become actors of change. Both scientific and management capacities of Maferinyah and CEA-PCMT should therefore be strengthened. **This translates in three areas of work: research, academic excellence and capacity strengthening;** and on the basis of these results, **a GRIPP strategy** will be developed and implemented to achieve results according to the main impact of the HES4SD: contribution to SDGs by acceptance and application of evidence-informed health policies.

Research is planned in three domains: Health Systems and Outbreak capacity, Sexual and Reproductive Health, and Febrile Illness. These domains correspond to urgent needs in the overall health situation and for capacity strengthening at the partner level and have been chosen as an outcome of deliberations with the partners. There are overlaps: with our involvement in maternal, perinatal and reproductive health both in rural and urban areas, we will support capacity building in more general health systems research in terms of data capture, completeness, quality improvement in routine data collection, analysis and

use, and linking to urban and national decision-makers. Qualitative and quantitative results such as DHS⁷ analysis and incorporation of a mental health approach will also enrich the information directed towards policymakers and results will be further disseminated among stakeholders in Guinea.-This will further strengthen health services (and thus contributing to SDGs 3, 5 and 11). We can ensure this research will be conducted in a professional manner, leading to the expected results as the conduct of research is the core business of ITM and its partners. ITM will provide quality assurance by backstopping the research projects through follow-up by accomplished scientists with specialization in the above mentioned fields.

In order to do research, to manage research, to promote research and to apply its results, education is needed. Research and education feed into each other. ITM will support the Faculty of Health Sciences and Techniques (FSTS) of the Gamal University in Conakry through our collaboration with CEA-PCMT. Strengthening the education capacity of CEA-PCMT for the delivery of quality short courses, Master and PhD programs of national and regional relevance is a key component of this program.

In the past ITM provided support to CEA-PCMT with the development of new curricula. In the current implementation phase CEA-PCMT will require support, follow up and evaluation to bring these curricula in line with the “Bachelor-Master-Doctorate system” and with the **African and Malagasy Higher Education Council** CAMES requirements. Reinforcing the capacity of lecturers and the managing team of the CEA-PCMT is also needed for the successful use of these new curricula that are developed according to a competence-based approach. International linkages with other similar institutions will be developed in order to strengthen networking such as with the school of public health of the university of Lubumbashi.

Building on the e-learning program that was developed in the previous program (2017-2021) with additional funding from ENABEL, technical and pedagogical capacities will be established at the CEA to support the design and delivery of e-learning and blended learning to Guinean and regional students. To this end, an e-learning center will be equipped including acquisition of the Moodle platform, server and content production equipment.

Conditional for the research and education activities is competent **management**, loyal and experienced staff, and the **material resources** needed to do research and give training. These necessities are critical to the positive outcome of the program. Over the course of this five-year program, Guinean partner institutions will substantially increase capacity to communicate effectively the relevant evidence they generate to the policymaking community and will have strengthened learning tracks in their curriculum which enable building capacity in knowledge translation and public health policymaking.

The combination of education and research to strengthen capacities is fundamental, it is the ‘hardware’ of the program. Equally important to build a strong foundation is the institutional capacity strengthening covering basic skills as management, fund-raising, communication skills, and a sound remuneration system. As the management of both partner institutions was engaged in the drafting of the program, they are committed to the achievement of this result.

At the next level the institutions and individuals will work on strengthening the capacity to be effective ‘co-creators’. This includes a process of validation of the research results: once produced in reports or papers, it cannot, and should not, be expected to find its way to application on its own. This requires a set of skills that include stakeholder analysis, communication techniques, selection of the right partners, etc.

The idea is NOT that ITM, CEA and Maferinyah lead this process. The idea is that we investigate how this process takes place in Guinea, identify the main stakeholders (for instance civil society organizations international organizations etc.), and participate by delivering our research results to contribute to transformative change – that leads to applied, evidence-informed policies.

We build on collaboration with key partners of this program, such as FMG-Memisa, Damian Foundation, Enabel, EU. Partnerships and co-creation with international and local NGOs, donors, and UN agencies build the synergy and complementarity needed to work on this process – these actors can build on the knowledge we deliver – while we understand that our role is not in campaigning and advocacy.

The science for GRIPP is available and the process requires a team of individuals from CEA and Maferinyah that applies this process, helped by ITM expertise and the expertise we are building up in all DGD 2022-2027 funded settings. Both partners need to strengthen their role as knowledge brokers for the health sector and will be supported accordingly.

Our ToC is based on the assumption that **education leads to competent individuals**, and that a carefully prepared **GRIPP process will make them interested in becoming ‘agents of change’**. Besides skills and motivation this also requires capacitated institutions to **take up their role as drivers of change**. And finally we need smart and continuous monitoring of stakeholders: what role stakeholder institutions are expected and allowed to play will define their efficiency in bringing about real and lasting change.

To summarize, the activities we undertake with our partners to valorise the outcomes of research and education are in our **sphere of control (short term outcomes)**, and the **mid-term outcome** is to have the relevant capacities installed at the end of the 5-year programme. That creates our **sphere of influence**, where we work closely with the by then identified most important stakeholders to advocate for application of relevant evidence-based policies. The **long term outcome** is to indeed

see increased uptake of evidence-based policies in the health sector in Guinea – but that depends on many (political, financial) factors beyond our direct control.

Baseline information is mainly collected through document review at the level of CEA and Maferinyah, as the partners are also the target groups of the results. In addition, a capacity assessment will be conducted at the start of the program to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression. At the level of ITM, it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore, we included a mandatory indicator on this aspect.

Description of Efficiency

It is worth to emphasize that the approach to strengthen Higher Education, Research and Science in Guinea is all about people, and sharing knowledge. All activities require the input of people – and only to a very limited extend machinery or materials that help to educate people. The budget is therefore based on activities of teachers and researchers, and on the operational costs they will have to make (transport, teaching materials, costs of training, digital options etc.).

Quality education is not cheap. The combination of Higher Education and Science helps to strengthen a new generation of women and men who **need the status ascribed to academic positions in Guinea to play their role in transformative change** towards sustainable development. It is important to realize that “ *the centrality of the role of university education in the future of society is indubitable as institutions of higher learning are, in practice, prime springs of new knowledge and skills (...). The university is charged with the responsibility of creating rich learning conditions that prepare learners for their place in society by providing access to scientific knowledge of high quality—an environment that bridges knowledge generation and the application of such knowledge in society*” (M. Cross & A. Ndofirepi (Eds.), Knowledge and Change in African Universities, 1-13. © 2017 Sense Publishers).

Working with CEA-PCMT on curriculum development allows us to address a paradox that arises from the debate on decolonization, where universities in Africa can be seen as “being semblances of western epistemologies propelling an encumbering and debilitating Eurocentric education, characterised by an attendant tenacity to exclude and marginalise an indigenous presence and ‘ways of knowing’ in higher education” (Hauser, Howlett, & Matthews, 2009; Nyamnjoh, 2004). The risk is that this position excludes a productive connection between different views on learning, on the value of different epistemologies, and the potential of seeing them as complementary rather than mutually exclusive. In working closely together between Conakry and Antwerp we understand that Eurocentric development models and western hegemonic epistemologies are no longer self-evident (Nabudere, 2003). But this collaboration is aimed at developing new, relevant curricula together, finding ways to respect indigenous presence and ‘ways of knowing’, and thus seek real cross-cultural “co-creation”. That justifies granting advocates for inclusion of scientific evidence a position where they will be heard; one needs to pass through the initiation rites of master and PhD studies. From that position one can address the questions about validity and ownership of knowledge, and find new ways to accept and apply co-created knowledge. This process is made visible and productive in the approach to ‘Getting Research into Policies and Practice’, where methods for co-creation and society-wide validation are developed as we go forward.

The risk that PhD students spend much time on academic exercises that are less relevant for development can be mitigated by linking the theme of the PhD trajectory to a research program that is part of the proposed package. One of the goals of the project is support the establishment of a PhDs school with CEA-PCMT, which increases the multiplier effect they have within and beyond the institutions they work with (2017-2021 midterm evaluation).

To support this approach Antwerp-based staff needs to be budgeted. Given that only a limited part of the staff time of ITM staff is budgeted on the program, efficiency is maximized, and ITM staff is committed to find additional funding – which increases efficiency. ITM does not work with technical assistants in the partner country. Instead, we opt to offer technical assistance and programme management from a distance, with regular exchange visits, hence reducing personnel costs.

Description of the expected Impact

‘The long term impact of our program lies in the translation of research evidence into policy, hence improving the living conditions of the Guinean population. Reaching this impact goal will affect the lives of all people in Guinea, with a specific focus on the most vulnerable populations – they are the end-users of improved health policies. In the approach to contribute to this long term change we have equity, inclusion and gender equality as central notions . One third of all students of CEA-PCMT must be female - a condition from the World Bank, main donor of CEA. Women at all levels – researchers, students, but also and especially women in rural and urban-slum areas will engage in the process of GRIPP, co-creation (JSF HES4SD - SG4), which helps them to achieve results based on their skills, helps to create bonds with a range of different stakeholders, and helps to achieve a higher sense of efficacy: doing research and applying the results ignites a chain of change. At the level of influence well-trained people work in well-managed institutions that actively promote the links between science and society (JSF HES4SD - SG6). What is beyond our control and influence is the actual uptake of evidence-informed policies, but the program contributes

to the creation of influencers in Guinean society that will not only join us in hoping for this societal effect but are well connected to civil society partners that can improve methods of government accountability.

Description of Sustainability

Since program target group and partners coincide, technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups control the intervention. Together with ITM, they co-implement the project. In order to ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal and will remain the key responsible party to its implementation.

ITMs partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programmes, and then take it up a notch with each new cooperation.

The practical way of working closely together ensures buy-in from both Maferinyah and CEA-PCMT and secures local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim is to reach the phase out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds, which is the ultimate proof of sustainability.

Past experience learns that both partner institutions are on the right track to towards sustainability. In 2017, Maferinyah started its first trajectory and the results in 2021 are visible in an impressive portfolio of research projects, educational trajectories and publications successfully finished. In the research trajectory, the Maferinyah staff has been involved in 28 publications during the previous program. 326 health professionals (whereas 140 were originally targeted) have been trained on primary health care and sexual health, research methodology and reproductive health management (e-learning courses). 42 staff of Maferinyah (out of 18 initially targeted) have benefitted from various courses given in the 2017-2021 period. Four staff members from Maferinyah have taken Master in Public Health training (one in health systems, 2 in epidemiology and 1 in clinical research) and one staff member is currently conducting his PhD work since 2018. Two of these staff members are employed by CEA-PCMT, all others are still working with Maferinyah.

CEA-PCMT was created in 2019 as part of World Bank funded Africa Higher Education Centers of Excellence (ACE) Project, a WB collaboration with governments of participating countries to support Higher Education institutions. The center's objective is to establish at UGANC a regional program of excellence in training and research to sustainably improve the prevention and control of communicable diseases in Guinea and West Africa. To this end, CEA-PCMT builds on the expertise and skills of faculty and researchers from its national, regional and international networks. In Guinea, this includes the CNFRSR Maferinyah, University Teaching Hospital, the National Health Security Agency (ANSS), the National Institute of Public Health and the national diseases control programmes (HIV, TB, Malaria) among others. Since its beginning, CEA-PCMT has set up a team of 19 people, secured the World Bank performance-based funding (1,2 million USD to date and attracted external funding (>300 K Euros) from IDRC (Canada), ENABEL and ITM.

Description of the Partnership Strategy

As part of our capacity-building strategy, a capacity assessment will be conducted at the start of the programme to identify key gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

During the development of the present proposal, we discussed key areas for reinforcement with the partners. Hence, the areas of focus were defined by their representatives. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programs, and then take it up a notch with each new cooperation.

ITMs partnerships trajectory approach aims to strengthen sustainability and create long-term collaborating partners. ITM and Maferinyah have created a strong bond since the Ebola outbreak in 2014. The partnership in 2017-2021 was a result from that acquaintance, and in the last five years many different initiatives were taken together that went beyond the original programming.

This practical way of working closely together ensures buy-in from both Maferinyah and CEA-PCMT leadership and created personal bonds between staff members. It secures local ownership hence anchoring sustainability and long-term perspectives. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim is to reach the

phase out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds, which is the ultimate proof of sustainability.

Moreover, in line with the 'Switching the Poles' strategy of ITM, and in line with the current emphasis on decolonization, the trajectory helps to come to a situation where ITM hopes to be a preferred partner of these institutions in joint research programmes; as partners in international consortia; as provider of teachers and modules for training – in other words, there is a healthy self-interest at ITM to develop these partnerships towards equity.

And indeed, past experience learns that both partner institutions have started on the right track towards this situation. In 2017, Maferinyah started its first trajectory and the results in 2021 are visible in an impressive portfolio of research projects, educational trajectories and publications successfully finished. In the research trajectory, the Maferinyah staff has been involved in 28 publications during the previous program. 326 health professionals (whereas 140 were originally targeted) have been trained on primary health care and sexual health, research methodology and reproductive health management (e-learning courses). 42 staff of Maferinyah (out of 18 initially targeted) have benefitted various courses given in the 2017-2021 period. Four staff members from Maferinyah have taken MPH training (one in health systems, 2 in epidemiology and 1 in clinical research) and one staff member is currently conducting his PhD work since 2018. Two of these staff members are employed by CEA-PCMT, all others are still working with Maferinyah.

CEA-PCMT was created in 2019 as part of World Bank funded Africa Higher Education Centers of Excellence (ACE) Project, a WB collaboration with governments of participating countries to support Higher Education institutions. –The center's objective is to establish at UGANC a regional program of excellence in training and research to sustainably improve the prevention and control of communicable diseases in Guinea and West Africa. To this end, CEA-PCMT builds on the expertise and skills of faculty and researchers from its national, regional and international networks. In Guinea, this includes the CNFRSR Maferinyah, University Teaching Hospital, the National Health Security Agency (ANSS), the National Institute of Public Health and the national diseases control programmes (HIV, TB, Malaria) among others. Since its beginning, CEA-PCMT has set up a team of 19 people, secured the World Bank performance-based funding (1,2 million USD to date and attracted external funding (>300 K Euros) from IDRC (Canada), ENABEL and ITM.

The establishment of CEA-PCMT was at the initiative of the World Bank, but the staff required was only found in Maferinyah .

This program focuses on collaboration with two partners, as each of them has its unique specificity with regard to the program pillars: Maferinyah when it comes to research, and CEA-PCMT when it comes to education. ITM has sufficient capacity to closely work with both, as separate promoters are appointed to support each partner to ensure appropriate time for dialogue, based on adequate expertise. In addition, a strong financial management team works towards efficient and timely spending and accountability.

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council in which ITM's partners are represented and which discussed the thematic JSF process.

Comments on description of the partnership strategy

Submitted by DGEO-MaartenY on Wed, 10/20/2021 - 09:31

Draft partnership agreement

Would it be possible to provide a (draft) partnership agreement in which the shared goals between the partner and the ITM, as well as the organisations' respective roles and responsibilities are described?

Submitted by ITG-IMT on Mon, 10/25/2021 - 13:09

Response draft partnership agreement

A draft partnership agreement can be found in annex of the full programme. At the moment the partnership agreement and its annexes are being updated. The process of approval by management is ongoing. A draft will be shared with DGD for comment by December 1st.

Description of Synergies

The HES4SD framework joins forces between academic actors and Belgian partners to contribute to academically inspired and science-driven societal change. ITM is the only partner of HES4SD present in Guinea, and we aim to build on the work done in partnership with Belgian actors in the JSF 2017-2021.

We will seek synergies in scholarship programs (such as individual scholarship programs and research strengthening; teaching and training capacity and service delivery; information strengthening; infrastructure and technology structures; management

capacity building; strengthening national and international academic and scientific-society interfaces and networking; policy support).

The proposed program will (indirectly) contribute to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country program.

The research proposed is in synergy with the Global Themes selected by ITM under the outcome 'Global Programme: Synergy': equity, climate change and urban health. There is a focus on urban health and equity in the research on maternal and sexual health, equity and Universal Health Coverage are central aspects in health system research, and climate change is at the core of the surveillance and febrile illness work. Apart from this, a modest budget (10K per theme per year) will be part of 'unmarked funds' to be awarded each year for initiatives connected to the three themes, to ensure synergy with other DGD funded ITM outcomes, linking them through the Outbreak Research Team and GRIPP.

Synergies and complementarities with JSF actors

Together with the geographic JSF actors, working in the sectors of health, agriculture, entrepreneurship/vocational training, social security and research, we propose to put into practice a holistic approach. In order to ensure complementarity and to make the most of the expertise of the organizations involved and their local partners, we want to express the clear link between our different fields of work.

In practice, the JSF partners will actively and regularly exchange to maintain a dialogue on respective interventions and synergies. A geographical and thematic mapping will be developed for this purpose. With the local partners in the JSF options to share training for their staff will be defined and collaboration on the development of project proposals and funding will be continued (e.g. with TRIAS and WSM for Enabel on social security).

JSF partners working with the same beneficiaries will regularly and in agreement with the latter, exchange and, where possible, coordinate their interventions, especially in the area of capacity strengthening. A particular effort will be made to work with the same target groups of women, to improve their life circumstances in a holistic way.

ITM is already planning projects on improved social security, at the request of Enabel, mainly with TRIAS and WSM. CEA-PCMT, Maferinyah and the local partners Fraternité Médicale Guinée, La Fédération des Organisations Paysannes des Vivriers et Saliculteurs de Basse Guinée, Jeunes Solidaires, Fédération des Planteurs et Fruitières de Basse Guinée, Confédération Nationale des Travailleurs de la Guinée, and in addition a number of regional actors (e.g., the African Centre of Excellence for the Prevention and Control of Communicable Diseases (ACEC), Dynamique Mutualistes) are planning to contribute to the prevention of precariousness in terms of health and socio-economic status of vulnerable groups that have been or are likely to be impacted by COVID-19 in the Conakry-Kindia-Mamou area. In Guinea there is a double social impact of the pandemic, whereby the most vulnerable groups are the most affected, even though these vulnerable groups were already the most at risk. This new reality made us step up already existing plans to work together to create synergies in access to credible information on the COVID-19 pandemic, access to prevention kits, ensuring the continuation of quality services in health centres, mutual health insurance schemes, access to inputs and product storage space for small-scale farmers, access to financial resources for micro-entrepreneurs, and support for the coordination of advocacy initiatives with the Government and other stakeholders. The aim is to improve the effect of TRIAS, MEMISA, WSM and ITM activities on the Conakry-Kindia-Mamou axis. This also connects the Decent Work, and She Decides agenda's and contributes to collective learning and increased participation of local partners.

Development of research projects with JSF actors and their local partners: the geographic JSF and ITM have agreed to work together in the field of documentation of experiences and research. This synergy may involve research on different approaches and themes. The research results will be used to feed the dialogue with the Ministry of Public Health and Social Action on health and social protection policies. They will also provide elements to improve the implementation of the programme and adjust interventions. In this way, synergy will contribute to build the evidence base and actually advocate for UHC and the quality of care in Guinea (Action Damien, Memisa, ITM).

Synergy is also in place between ITM and Action Damien in an effort to jointly support the national reference laboratory through trainings and a global inventory of the laboratory's needs. Strengthening the diagnostic capacity supported by the Institute will have positive effects, not only for TB patients, but also for other diseases in the country.

Gender mainstreaming in all projects: ITM and the JSF actors are committed to taking action to ensure that all projects, regardless of the field, integrate the gender dimension and direct or indirect non-discrimination against women. The organizations will also work together to strengthen and support local partners in the fight against stereotypes of women's roles and the promotion of gender equality. Together with CAPACITA, they will examine the possibility of strengthening the gender focal points of the different ministries. Providing the evidence base for Enabel's 'She Decides' program (contract research 2020-2023), ITM works specifically on Enabel's gender agenda, and focuses on women's empowerment - which includes women's

decision-making in the health sector.

Capacity building and support for community health care providers to access quality reproductive and sexual health services: The geographical JSF partners will collaborate in building the capacity of health care providers/community workers and supporting partners to ensure rights and access to quality reproductive and sexual health services, with particular attention to the most vulnerable groups (EVRAS, family planning, STI prevention, early HIV and TB screening for pregnant women). A synergy also exists already and will be further strengthened in this sense with ENABEL.

Women and girls: ITM works closely with FMG on action and operations research to improve understanding of effective ways to address violence against women, sexual and reproductive health and effective ways to combat Covid-19. ITM works with partners on action research and operational research to improve synergies between different sectors, in order to increase the results of projects focusing on women's health, education, entrepreneurship, leadership and representation.

Description of how individual or collective recommendations and lessons are to be taken into account

In the 2017-2021 period, Maferinyah organized online courses on primary health care, sexual and reproductive care services organization and research methodology. These courses attracted a great deal of interest at the national level, particularly in terms of capacity strengthening for local health services managers and health care providers without them having to leave their posts; the flexibility of the course and its easy adaptation to the emergency context, including the COVID-19 pandemic. However, some challenges were noted including the limited human resources capacities (for teaching) of the Maferinyah Centre. Under the new programme, we plan to integrate these courses into the University of Conakry and that teachers will be involved in the delivery of the courses. To this end, the CEA-PCMT, which is a structure of the University of Conakry and has experience in developing course content (Masters and PhD programmes) will lead this activity. This course, especially the one on research methodology, could also be open to the Master and PhD students that the CEA-PCMT will recruit in Guinea and in the sub-region. All this would contribute to the recognition of this course/diploma at the sub-regional level.

The Maferinyah center also conducted several research projects including on maternal and child health, health workforce and febrile illness. An important lesson learned was about the sensitivity of study outcomes that pointed at institutional and policy challenges. Having the outcome of studies – such as finding the reasons behind the poor presence of staff in public health services rural areas – accepted by the policy makers turned out to be a challenge in itself - and in that respect both Maferinyah and CEA-PCMT are eager to work on better GRIPP skills.

Maferinyah and ITM were asked by Enabel to provide the evidence base for the Enabel She Decides project. Maferinyah staff was – and is – very instrumental in the search for synergies with actors such as Enabel to understand health from a holistic perspective: that is, taking the inclusion of livelihood and social protection, as well as a clear view on gender equity and related women rights issues as important determinants of health. In responding to the Covid crisis and doing the research required by Enabel and JSF partners such as Memisa and the Damina Foundation, we have learned the importance of the link between research and education, and the new programme strengthens that lesson - while also connecting the rural focus of Maferinyah with the University and National and- International focus of CEA-PCMT. Especially the challenges of urban health and equity can be better addressed by a real exchange between rural education and research and the academic level brought in by CEA-PCMT in Conakry – as is shown in the work package in maternal and sexual health.

The program has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue, this programme gives particular attention to the valorizations of knowledge. Through its focus on “Getting Research Into Policy and Practice (GRIPP)” (in all components of the ITM programme 2022-2026) ITM will strive to maximize this aspect in its programme, and will also establish the preconditions to learn more about the best possible strategies to achieve this (a.o. through indicator development, and as main topic of the mid-term evaluation of the ITM programme 2022-2026. Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
FrameCollaborationBTC-ITG ALLsigned_20161007	Collaboration Agreement	https://fundhub.openaid.be/sites/default/files/2021-07/FrameCollaborationBTC-ITG%20ALLsigned_20161007_4.pdf
TOC_ITM_Guinea_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Guinea_22-26.pdf

Title of the annex	Type of document	File
RA_ITM_Guinea_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Guinea_22-26.pdf
FACTSHEET_ITM_Guinea_22-26_CNFRSR Maferinyah	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Guinea_22-26_CNFRSR%20Maferinyah.pdf
FACTSHEET_ITM_Guinea_22-26_CEA-PCMT	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Guinea_22-26_%20CEA-PCMT.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The budget is structured according to the results as shown in the Theory of Change. Three main results areas are research, education and institutional capacity strengthening. The budgeted costs are to support the staff of the partner organizations to get the planned work done: the human resources needed, the transport means, and educational costs required do not require large investments. Modest investments are done in communication equipment, which proved an essential element in continuing work in the 'pandemic' years 2020 and 2021. These investments also help to economize on in-country travel, which is expensive and time-consuming in Guinea., and they support further development of the very successful e-learning modules. The costs are not simple copy-pasted for every one of the five years: we have tried to include flexibility in view of the unpredictable future in a country that is prone to disease outbreaks as Guinea. These flexible funds (20% of the local budget) are to be spent in line with the described result areas but can focus on specifics of the situation at hand. Additional funds will be sought on the solid basis of DGD funding, as we did in the 2017-2022 period.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym Maferinyah

Full name Centre National de Formation et de Recherche en Santé Rurale de Maferinyah

Budget available

2022	2023	2024	2025	2026	TOTAL
133600,00	152083,07	121725,00	120725,00	95725,00	623858,07

List of cooperative partnerships for the outcome

Acronym CEA-PCMT

Full name Centre d'excellence africain pour la prévention et le contrôle des maladies transmissibles

Budget available

2022	2023	2024	2025	2026	TOTAL
216500	124600	124600	116900	87400	670000

Strengthening Collaborations for Syndemics in Cuba (SCSCuba)

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Strengthening Collaborations for Syndemics in Cuba (SCSCuba)		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-9-CU		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Cuba		
Sector :	12250 - Health - Infectious disease control	Budget share :	60%
Sector :	12382 - Health - Research for prevention and control of NCDs	Budget share :	25%
Sector :	13040 - Reproductive Health & rights - STD control including HIV/AIDS	Budget share :	10%
Sector :	12264 - Health - COVID-19 control	Budget share :	5%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

General objectives

N/A

Geographic location of the outcome's intervention zone

Cuba

Lat/Long :	23.13518, -82.35767
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Outcome summary

Description of the outcome

The long-standing collaboration between ITM, IPK and INHEM has enhanced the institutions' capacity to improve population health by means of qualified professionals, and policy-relevant research. With internationally recognized expertise, both IPK and INHEM, acknowledge the ever-increasing complexity of the epidemiological situation in Cuba. Where widespread chronic conditions coincide with lingering infections, in environments that fail to promote health. The COVID-19 pandemic has exposed the interconnectedness of environmental issues with the onset of infections of increased severity when affecting a highly vulnerable society burdened with chronic illness. This complexity is often called 'syndemic', referring to the overlap of epidemics in each setting that results in an exacerbation of the burden of disease. The SCSCuba is based on 3 pillars: technical platforms, policy-oriented research, and collaborative networks.

Wording of the outcome

Acknowledging this complexity, IPK and INHEM aim to strengthen their collaboration and synergistically enable institutional capacity to effectively address the current and future syndemics in Cuba [SCSCuba]. The programme is expected to generate

sustainable strategies to drive the improvement in the management of syndemics and achieve better health for all Cubans.

Target groups

SCSCuba will bridge the activities of IPK and IHNEM and enhance performance to inform local and national policies. Multidisciplinary teams will lead in the development of evidence-based prevention and control strategies. The programme also entails several collaborative actions with local, national and international institutions from consolidated networks. To ensure access to health for vulnerable groups and to achieve the long-term goal of better health for all.

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism

SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation
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Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	1
3. Participatory Development / Good Governance :	1
4. Trade development :	0
5. Biodiversity :	0
6. Climate Change - Mitigation :	1
7. Climate Change - Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	0
10. HIV / AIDS :	0
11. Children's Rights :	0
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	No
7. Health - Health financing and Universal Health Coverage :	No
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

The outcome of our programme has a link to the sector, but not to the key objectives described in the strategy paper.

Education

The outcome of our programme has a link to the sector, but not to the priority areas described in the strategy paper on education. As an Academic Institution of Post-Graduate training ITM's mandate relates to Tertiary education, which is not covered by the Strategic Note

Development education

In our program we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the government in our country of intervention (Cuba), but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

The environmental problems identified as priorities in Cuba include soil degradation, deforestation, pollution, scarcity and difficulties related to water availability and quality, loss of biodiversity and the consequences of climate change such as soil salinization, prolonged and more intense droughts, and rising sea levels. In addition, the island is exposed to increasingly frequent natural hazards (e.g. cyclones and earthquakes). This climate change has made the island vulnerable to variations in water availability. During the last decade, the amplification of the El Niño phenomenon has resulted in periods of scarce water resources. Hence, the environment and climate change play an important role in Cuba.

Our SCSCuba program aims to contribute to a better understanding of priority IDs and NCDs and their syndemics and to inform disease prevention and control policies. The majority of these diseases are related to the environment. A better and sustainable environmental management is an essential part of the effort to prevent and control dengue and helminth parasites. Better vector control strategies can help to reduce the use of insecticides. Research on chronic diseases, on TB, on dengue is directly linked to the urban environment. Moreover, control of climate change together with improvements in urban design, food safety and air quality are critical factors for the prevention and control of the main non-communicable diseases (diabetes and cardiovascular diseases). Also, the COVID-19 epidemic has highlighted the strong links between human health and the environment. Living conditions can have a significant impact on the health and vulnerability of populations, e.g. indoor air pollution in the case of COVID-19. Our SCSCuba program will focus on the role of the built, natural and social environment in the dual burden of IDs and NCDs.

Gender

Although not immediately linked to the four areas of focus mentioned in the Strategy Note, gender mainstreaming will be systematically addressed at various levels in our SCSCuba program. The collection and publication of data will be disaggregated by gender (and age), to make sure that a gender perspective will be adopted in health policy. Moreover, quantitative and mixed methods will be used to explore the relationship between gender and other socio-demographic categories to provide more specific and effective health policy recommendations. Both IPK and INHEM will promote the incorporation of a gender perspective into capacity building and education plans, such as recruitment, student selection, international mobility, and scientific publications. While there is no gender-specific difference in the prevalence of the priority IDs and NCDs included in our research projects, we aim at 50:50 selection of males and females in the samples/surveys. In general, our research analysis always aims at describing how health or disease status are affected by gender conditions and how to tackle possibly detected disparities.

Digitalization - Digital for Development D4D

Moving towards a digital society, and data driven research and healthcare, one of the three pillars in the SCSCuba program is dedicated to strengthening data sciences. We will leverage the analytical expertise of IPK and INHEM teams to streamline the full potential of data that has been gathered over the course of previous programmes, and as part of Cuba's data collection systems to inform our own research, and complement field-based interventions with analyses of big data and publically available data sources.

Health

Our long-term goal - "Better health for all Cubans - through improved prevention and control of priority IDs and NCDs, with focus on syndemic approaches" is fully aligned with the Strategy on Health and its One Result. Our program will strengthen individual and institutional capacities, generate relevant evidence-based knowledge on identified health needs and prioritized disease threats affecting the Cuban population. The synergistic approach of combining institutional efforts will not only bring enhanced research outcomes but will also facilitate the translation of results into policy and practice by aligning procedures and stakeholder engagement. Therefore, through the research projects, education and knowledge translation, the SCSCuba programme is in alignment with the core principle concerning the right to health and healthcare, to be achieved through strengthening of the Cuban health system.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

This country's programme engages in the promotion of human rights under the principle of Leave No One Behind. Particularly, our programme emphasizes the right to health and health care included in The Universal Declaration Article 25 " 1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control; 2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection." As this programme's long-term goal is to achieve overall health and well-being for the Cuban population, it focuses on developing prevention strategies to promote a long healthy living and on improving care services and control strategies to provide adequate medical care and the necessary health services. Also, based on the principle of 'Leave No One Behind', this programme promotes the identification and inclusion of vulnerable groups for the development of best respondent interventions to promote health equity across the population. Moreover, this programme will contribute to the promotion of gender equality

through empowering women professionals to lead the process of change to develop policy decision processes gender-equitable and also by promoting the empowerment of women to access women-oriented health care. Lastly, in our programmes we ensure that guidelines or protocols are approved at the national level. By informing these strategies, we strengthen the capacity of duty-bearers to fulfil the right to health.

Decent and sustainable work

This programme adheres to the principles of Decent Work (DW). DW principles engaged in this programme include the possibility of performing a freely chosen job that is productive and fairly paid, therefore providing sufficient income to cover family needs. This fair payment potentially includes social protection mechanisms within the partner institutes. It will respect fundamental rights at work including freedom of association and the right to participate in collective bargaining agreements, as well as it includes equal treatment of all workers without making any distinction based on sex, age, origin, political or religious beliefs. Also, health and safety provisions in the workplace are important pillars for this programme, therefore health and safety measurements will be put in place in all related activities, for instance, safety protocols and guidelines for laboratory work.

Gender

In line with the principles of leaving no one behind and ensuring equitable access to health, this program places particular emphasis on securing training and leadership opportunities for women through platform, research, and network activities. In its current version, 33 out of the 50 activities included in the program's activity plan are led or consider participation of female researchers in different career stages at IPK, INHEM and ITM. Gender considerations will be made to secure equitable participation of researchers in training and networking opportunities at local, regional and global levels. Similarly, the health related social vulnerability framework to be developed as part of the program will explicitly explore the impact of IDs, NCDs and their syndemics in specific population groups, with special attention to gender and age differentials. By improving data collection and analysis in these and other emerging factors deemed critical in each action line, we expect to inform the design of health prevention and control programs that better respond to the needs of priority groups under gender sensitive lenses. Importantly, the syndemics approach that will guide this country's programme should enable us to identify systemic issues leading to negative health outcomes, including power dynamics and socio-economic factors with different impacts on individual decision making in access to services and preventive behavior in which gender plays a substantial role. This gender perspective will also be introduced in exchanges promoted through network activities, particularly around South-South collaborations on HRSV, and the Latin American Network of Chronic Diseases, and the thematic network on health, climate change and urbanisation (that includes governance, equity, sustainability and resilience as cross cutting themes).

Environment

Environmental considerations have been included at different levels in this proposal. At the level of spheres of influence, platform, research and network activities have been framed considering a crosscutting syndemics approach. By bringing a bio-social perspective to health, syndemics conceptualizes the occurrence of disease in relation to interacting social and natural environmental factors that lead to overlapping conditions in specific populations. Environmental factors will be studied, for example, in relation to spatial heterogeneity impacting emerging and epidemic diseases; impacts of built, social and natural environments in the overlap between shared risk factors, IDs and NCDs. By making bio-social interactions visible, we aim to overcome vertical and disease specific approaches to disease control and influence decision making in the design of prevention efforts that consider larger environmental dynamics.

In line with the transdisciplinary and multisectorial approaches promoted by the SGD, the program also intends to facilitate academic exchanges through ITM's Global Thematic Network on Health, Urbanization and Climate Change. This network aims to enable partners to participate in collaborative research and learning practices on these topics, leveraging their knowledge, experience and expertise by closely interacting with colleagues in other settings and supporting each other in setting up interdisciplinary projects and building capacity for research, practice and policy. Participation in this network will constitute an opportunity to disseminate existing expertise and identify knowledge gaps that can be addressed to cooperation activities.

Lastly, decisions regarding mobility and travel will be in line with ITM's pilot policy to minimize flying towards carbon-neutral travel.

Common outcome between distinct programmes

No formal Common Outcome has been developed with other programmes. However the SCSCuba will seek collaboration with the VLIR-UOS Network on Information Communication and Technology (ICT) articulated through three thematic projects (RESICT, ICTSYS and ELINF) that focus on the development of good university practices in ICT related sciences through pilot experiences for its generalization to the MHE (Ministry of Higher Education) system. These programs aim to achieve the consolidation of good practices and their generalization to other sectors of society by increasing their impact and sustainability, and are related with the scope of the activities envisioned as part of SCSCuba platform development on data sciences. Additionally, IPK is active in a South Initiative and a Joint Initiative, both sponsored by VLIR-OUS. The former initiative focuses on Belgian and Cuban scientists collaborating on the identification of study populations, based on an expected difference in

susceptibilities of Cuban population groups inhabiting different provinces and exposed to different diets, products, and toxins and defining factors estimated to influence infection evolution. The latter aims at developing capacity in data science and big data analysis methods for public health, epidemiology, biotechnology and medical research through two components: education and research. Both initiatives are of great added value for the SCSCuba programme, hence, collaboration and synergies will be sought despite the absence of formalization with common outcomes.

Areas of complementarity and synergy with the intervention of ENABEL

Currently, ENABEL activities are not present in Cuba nor activities in other countries related to the context targeted by this country's programme, therefore, no potential synergies have been identified at this moment. Nevertheless, the activities of ENABEL will be re-visited in the short future during this programme to identify potential areas of complementariness and synergies.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC: Strengthening individual and institutional capacities through joint collaboration between ITM, IPK, INHEM and other partners institutions to enable high level education and research as drivers of changes in the prevention and control of infectious diseases and NCDs of public importance in Cuba and worldwide
Indicator title :	OC1 Uptake of research in public policies (disaggregated per partner)
Indicator description :	A scale using self-assessment can be used: 0 - no knowledge to transfer; 1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies (IPK/INHEM); SoV: Policy briefs/summaries
Baseline :	0/0
Target Year 3 - 31/12/2024 :	1/1
Target Year 5 - 31/12/2026 :	4/4

Formulation of outcome or result :	OC: Strengthening individual and institutional capacities through joint collaboration between ITM, IPK, INHEM and other partners institutions to enable high level education and research as drivers of changes in the prevention and control of infectious diseases and NCDs of public importance in Cuba and worldwide
Indicator title :	OC2 Uptake new technologies/tools/methodologies application of knowledge by institute partner staff (disaggregated per partner).
Indicator description :	On the basis of the technological and methodological skills acquired through the platforms development, the partner institutions will be able to use these methods for research project development and transfer into policy and practice. 0 - no uptake; 1 - knowledge has been disseminated; 2 - knowledge has been put into practice; 3 - co-creation (IPK/INHEM); SoV: Research projects developed, Courses given
Baseline :	0/0
Target Year 3 - 31/12/2024 :	1/1
Target Year 5 - 31/12/2026 :	3/3

Formulation of outcome or result :	OC: Strengthening individual and institutional capacities through joint collaboration between ITM, IPK, INHEM and other partners institutions to enable high level education and research as drivers of changes in the prevention and control of infectious diseases and NCDs of public importance in Cuba and worldwide
Indicator title :	OC3 Number of existing and/or newly developed national, regional and international collaborations (Synergies/networks)

Indicator description :	Networking refers to the exchange of relevant research results via online or F2F meetings and/or staff mobility for further education and training as well as the co-creation of research protocols; SoV: Yearly reports on network activities
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R1 Platform development: New methodologies and advanced technologies to support research and control of infectious and non-communicable diseases
Indicator title :	R1.1 Capacity strengthening on administrative and logistic management
Indicator description :	This indicator refers to a centralization and optimization of the administrative and logistical management of both institutes for the joint projects. We expect it to be implemented at Y3 and fully operational at Y5; SoV: Budget file, Organizational plan, Partners year report
Baseline :	0%
Target Year 3 - 31/12/2024 :	50%
Target Year 5 - 31/12/2026 :	100%

Formulation of outcome or result :	R1 Platform development: New methodologies and advanced technologies to support research and control of infectious and non-communicable diseases
Indicator title :	R1.2 Proportion of platform technology and methodology/tools transfers on track
Indicator description :	Technology transfer refers to the dissemination of knowledge (validation and maintenance of technical equipment or tools, SOPs, guidelines,...) towards partners. We define 'on track' as implemented in Y3 and fully operational by Y5. Fully operational means that the technology works and is regularly maintained. We express the proportion as a percentage; SoV: Laboratory reports, quality control reports, SOP
Baseline :	0%
Target Year 3 - 31/12/2024 :	50%
Target Year 5 - 31/12/2026 :	100%

Formulation of outcome or result :	R1 Platform development: New methodologies and advanced technologies to support research and control of infectious and non-communicable diseases
Indicator title :	R1.3 Number of joint research projects on diagnostics and molecular surveillance of infectious diseases
Indicator description :	This indicator refers to projects conducted using the new technologies/tools/methodologies transferred; SoV: Project administration, official study documents
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R1 Platform development: New methodologies and advanced technologies to support research and control of infectious and non-communicable diseases
Indicator title :	R1.4 Number of training/course/workshop developed
Indicator description :	This indicator refers to knowledge dissemination towards partners on the new technology/methodology/tool developed; SoV: Training/Course/Workshops reports
Baseline :	0
Target Year 3 - 31/12/2024 :	7
Target Year 5 - 31/12/2026 :	11

Formulation of outcome or result :	R1 Platform development: New methodologies and advanced technologies to support research and control of infectious and non-communicable diseases
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Indicator title :	R1.5 Number of articles published in peer-reviewed international journals and of presentation to conferences
Indicator description :	This indicators refers to production of results and external knowledge dissemination resulting of the mastering of the new technology/methodology/tools; SoV: Scientific publication in online bibliographic database (PubMed, Web of Science); Abstracts/Posters presented to international conferences
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R2 Knowledge generation for research to action - Surveillance, prevention and control of priority diseases from a syndemic perspective
Indicator title :	R2.1 Number of joint research projects developed on the four different research topic: emerging viral diseases; drug resistance in TB/STI; NCD; dual burden
Indicator description :	This indicator refers to projects conducted on the four research thematic developed in the programme for knowledge generation and research to action/policy; SoV: Project administration, official study documents
Baseline :	0
Target Year 3 - 31/12/2024 :	5
Target Year 5 - 31/12/2026 :	10

Formulation of outcome or result :	R2 Knowledge generation for research to action - Surveillance, prevention and control of priority diseases from a syndemic perspective
Indicator title :	R2.2 Number of training/course/workshop developed
Indicator description :	This indicator refers to knowledge dissemination towards partners on the four research thematic; SoV: Training/Course/Workshops reports
Baseline :	0
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	8

Formulation of outcome or result :	R2 Knowledge generation for research to action - Surveillance, prevention and control of priority diseases from a syndemic perspective
Indicator title :	R2.3 Number of articles published in peer-reviewed international journals and of presentation to conferences
Indicator description :	This indicator refers to production of results and external knowledge dissemination resulting of the mastering of the new technology/methodology/tools; SoV: Scientific publication in online bibliographic database (PubMed, Web of Science); Abstracts/Posters presented to international conferences
Baseline :	0
Target Year 3 - 31/12/2024 :	6
Target Year 5 - 31/12/2026 :	12

Formulation of outcome or result :	R2 Knowledge generation for research to action - Surveillance, prevention and control of priority diseases from a syndemic perspective
Indicator title :	R2.4 Number of new tools developed for surveillance, prevention and control of priority diseases
Indicator description :	This indicator reflects new tools developed as part of the collaboration with partners; SoV: SOP, guidelines
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R2 Knowledge generation for research to action - Surveillance, prevention and control of priority diseases from a syndemic perspective
Indicator title :	R2.5 Number of knowledge dissemination event organised and lead by the partners
Indicator description :	This indicator reflects the external visibility of the partner into research; SoV: Event reports
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	8

Formulation of outcome or result :	R3 Network and synergy
Indicator title :	R3.1 Number of policy briefs and other dissemination products (dissemination workshops) aimed at other knowledge users (not scientific papers; users to be defined) (IPK/INHEM)
Indicator description :	Number of policy briefs and other dissemination products (dissemination workshops) aimed at other knowledge users (not scientific papers; users to be defined), in absolute number, accumulative over the years. Other dissemination products include expert consultations and technical reports. Other knowledge users are defined as health and social workers, and the communities where the activities are taking place. SoV: database of policy brief and other products.
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	R3 Network and synergy
Indicator title :	R3.2 Number of joint projects or proposals developed by network partners
Indicator description :	Networking refers to the exchange of relevant research results via online or F2F meetings and/or staff mobility for further education and training as well as the co-creation of research protocols; SoV: Yearly reports on network activities, Protocols approved by EC, Official study documents, Mission reports, Meetings/Workshop reports
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	6

Formulation of outcome or result :	R3 Network and synergy
Indicator title :	R3.3 Level of external visibility through conferences; workshops; webinars; other knowledge sharing events; other platforms; advocacy (indicator to be operationalised)
Indicator description :	This indicator refers to number of contributions to these events (e.g. abstracts, posters, lectures, reports, etc)
Baseline :	0
Target Year 3 – 31/12/2024 :	8
Target Year 5 – 31/12/2026 :	15

Activities, targets groups and beneficiaries

Classification of activities

Platform development: Increased collaboration between IPK and INHEM in operations, infrastructure and expertise through the development of platforms facilitating logistics, diagnostics and surveillance, and data sciences. The will include a technical platform to strengthen diagnostic and molecular surveillance of IDs and a data science platform to strengthen capacities for data analysis on IDs, NCDs and their syndemics. Individual and institutional capacity strengthening will be incorporated through the preparation and participation in joint courses, workshops and conferences, as well as joint (IPK-INHEM) mentorship of MSc theses and PhD.

Research activities: Will be based on the platforms and tightly connected with networks and GRIPP activities to enable

knowledge generation for research into action including surveillance, prevention and control of priority diseases from a syndemics perspective. Research activities that will be emphasized entail 1) Controlling emerging/epidemic viral diseases (arboviruses, COVID-19); 2) Improving capacity to treat TB infection and to detect and prevent drug resistance in TB and STI; 3) Curbing the rise of NCDs; 4) Addressing the burden of infection, malnutrition and chronic diseases.

Collaborative networks: Networking will promote local synergies on IDs, NCDs and syndemics as well as strengthen local activities with VLIR/ARES; S-S collaboration concerning routine data analysis for the design and impact evaluations of interventions through the international network between IPK-INHEM and other partner countries, as well as transdisciplinary approaches to address IDs and NCDs with emphasis on HRSV with other partner countries; and outreach through the Latin American Network for multidisciplinary research on chronic diseases and other related networks. Research and collaborative outputs will develop the knowledge, evidence and experiences for further translation and implementation of these outputs into policy and practice.

Target group(s)

IPK-INHEM staff and students. IPK has a staff of 975 (70% W), of which 423 are health professionals, 126 are researchers, 174 docents as well as 170 Masters and 56 PhD. INHEM hosts a staff of 243 (71% W), of which 121 are MDs, 4 nurses, and 71 graduates. A total of 95 (39%) staff members are categorized as researchers. Docent staff counts 74 (30%) individuals, of which 10 are tenured, 38 associates, 16 assistants, and 10 instructors. INHEM also hosts 14 PhD and 86 Master candidates.

Beneficiaries

- Health system, including the Ministry of Health (MoH), Higher Education (MHE), and Science Technology and Environment (MSTE); policy makers and program managers of disease control programs at different levels
- Local governments, by increasing accountability in relation to the provision of public services
- academic and research institutions in Cuba (e.g. Instituto Finlay), and partners of networks led by IPK/INHEM
- patients, their families, communities, and the Cuban population at large

Title of the reference annex :	TOC_ITM_Cuba_22-26
Title of the reference annex :	RA_ITM_Cuba_22-26

Description of the Relevance

The current ITM institutional collaboration with IPK/INHEM is directed to capacity strengthening, focusing on the prevention and control of the dual burden of IDs and NCDs, which have strong social determinants and numerous shared risk factors, and require a syndemic approach. While Cuba still struggles to reduce (re)emerging IDs, NCDs are present in epidemic proportions, increasing the demand for care and cure. Particularly cardiometabolic diseases such as heart disease and type 2 diabetes (T2D) are highly present in Cuba and keep rising, for instance, 10% of the adult population have T2D and 30% hypertension. Moreover, overweight and obesity are a growing public health problem, especially in adolescents with a national prevalence of 20.3%. Currently, Cuba is lacking preventive strategies for NCDs and existing control strategies use single- instead of multi-component and synergistic interventions, an approach known to be the most effective to combat NCDs. While many IDs have been eliminated or are being adequately controlled, global phenomena such as climate change can, and have already led, to an increased risk of (re)emerging IDs, with recent outbreaks of Dengue, Chikungunya, and Zika. Cuba’s impressive gains toward elimination of TB and other IDs are threatened by lack of access to the latest diagnostic and therapeutic technology, and novel cost-effective technical platforms for IDs are highly needed. Parasite infections are reasonably under control, but their incidence can easily increase under certain adverse socio-economic conditions or environmental changes. Moreover, antimicrobial resistance is becoming a global threat, e.g. in TB and STI, with *Mycobacterium tuberculosis* and *Neisseria gonorrhoeae*, listed on the WHO priority pathogens list. Identifying the prevalence of antimicrobial resistance to the current treatment and as such optimizing treatment strategies for these infections is mandatory.

Hence, Cuba is facing a substantial shift and increase in burden of disease, with major consequences for the country’s health system, against a background of socio-economic challenges, aggravated by the ongoing US economic embargo and the current COVID-19 pandemic. Innovative approaches are needed to address these complex multifaceted health issues. The Cuban health system can be strengthened by building on its resilience to existing and emerging health threats, and expand its autonomy to prevent, control, diagnose, monitor and provide care for both IDs and NCDs. Competencies need to be developed to use syndemic rather than vertical approaches, use tailoring interventions to reach vulnerable (sub)populations (considering gender specific impacts) and addressing social and environmental factors sustaining such vulnerability. New models should be explored and further evidence generated to inform policy and practice to combat the dual ID-NCD burden in Cuba.

The overall aim of the SCSCuba programme, developed through the **ToC, is to contribute to the JSF HES4SD** Strategic Goals SG4 (Enabling Higher Education and Science Institutions to operate as drivers of change). Also, the related activities, described in the logical framework, contribute to the SG3 (Increased capacity of Higher Education and Science Institutions), SG5 (Co-creation, transfer and application of relevant knowledge), SG6 (Science Society interface strengthened), SG1 (Increased individual capacity) and SG2 (Enabling individuals to act as change agents) through the strengthening of research capacities in

health of the Cuban research institutes and MOH.

With very few international partners present in Cuba, ITM has had a **unique and long-standing collaboration** with IPK/INHEM that has contributed to the growth of strong partner institutes over time, gradually but certainly moving from capacity strengthening towards institutional collaboration in the partnership trajectory. Capacity strengthening is now gearing towards advanced technical and data science expertise to unleash the vast potential of data analysis in informing disease prevention and control, and strengthening the synergistic collaborations between IPK and INHEM in their joint fight against the double burden of IDs and NCD that is currently ravaging the country. There is also more focus on the coordination of local and international networks, and GRIPP to bring research to real effective strategies. Also, more focus will be put on strengthening capacity to acquire external funding, which is a challenge for Cuba as they have limited access due to the blockade.

Specifically, to favour the development of individual capacities, this programme will facilitate and provide access to different **educational programmes**, such as master and doctoral programmes, which will boost the research and innovation activities in the research institutions and universities, aiming for an impact within other societal sectors (environment, economy, health). These interventions are relevant and should in the short, medium and long-term lead to changes towards strengthened equitable access to high quality, efficiently managed and sustainable health services for the Cuban population and a **strengthened position of the Cuban health approach as an international reference** for its results and management of public health and disease control programmes, with focus on the ID-NCD burden.

Gender mainstreaming strategies and **environmental change** are of relevance to this programme. In Cuba, the ratio of males to females was 98.6 males per 100 females in 2020. Men represented 75% of notified TB cases in 2019, they are also at greater risk for some STIs, HIV, heart disease and have higher all-cause mortality compared to women. By contrast, women suffer more from some NCDs such as T2D. Different activities need to be carried out targeting the most vulnerable groups. For instance, the health promotion strategies for the prevention of NCDs should promote the inclusion and participation of women. Gender differentials in disease risks, diagnostic access, and treatment support will be assessed and gender-transformative strategies developed to mitigate disparities. Moreover, this programme will foster equality among genders within the individual and institutional capacity strengthening, e.g. by providing educational and leadership opportunities to promote equitable participation. Climate and other environmental changes are the main drivers of many (re)emerging IDs and they can also influence disease prevention and control measures. Our programme contributes to better knowledge about the environmental drivers impacting on the dual burden of IDs and NCDs and aims to inform policy decision-makers, particularly the MSTE, to achieve a sustainable and healthy environment.

The expected results of the collaboration are of substantial relevance for the overall health of Cuba and also **align with priorities set by MOH**. These priorities include improving the response to the threat of the risk of (re-)emergence of IDs led by global phenomena, enhance prevention and control strategies of selected IDs to the threat of ongoing socio-economic and political changes impacting on health and to the accelerated ageing of the population that further shifts morbidity patterns towards NCDs and their syndemics. The support to MOH through the continuous translation of evidence into health policy recommendations will result in a strengthened relationship with both partner institutes, and stronger national health policies for disease control and health service organisation, facilitating the change towards better health for all Cubans.

Description of Coherence

The present five-year programme is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in low- and middle-income countries (LMICs) and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics (e.g. Declaration of Helsinki, Guideline 1 of the CIOMS International Ethical Guidelines for Health related Research involving Humans). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect of this last aspect, any research adheres to GDPR principles. Moreover, concerning the external coherence, within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved as stated below.

The collaboration between IPK, INHEM, ITM and their partner institutions provide complementary disciplines, expertise and competencies required for high-level education and research in the field of the prevention and control of both IDs and NCDs. The collaborative work and synergies among these institutions is a comparative advantage as they together could bring a unique contribution to achieve both the country programme and joint strategic framework (JSF) objectives. These institutions have proved their capacities to articulate themselves and their activities with other national and international actors and initiatives. The project will also engage with the multi-country IDs and NCDs ongoing network activities, as well emerging collaborations around the urbanization and climate change themes. And where possible ITM, IPK and INHEM will cooperate with the governmental and academic actors in Belgium (e.g., VLIR-UOS and ARES) and in Cuba (e.g., Finlay Institute, FLACSO and ENSAP). Specifically, this programme will seek collaboration with the VLIR-UOS Network on 1) Information Communication and Technology (ICT) that focus on the development of good university practices in ICT related sciences through pilot experiences

for its generalization to the MHE; 2) South initiative focusing on Belgian and Cuban scientists collaborating on the identification of study populations, based on an expected difference in susceptibilities of Cuban population groups and exposed to different diets, products, and toxins and defining factors estimated to influence infection evolution; 3) Joint initiative aiming at developing capacity in data science and big data analysis methods for public health, epidemiology, biotechnology and medical research through the components of education and research. Capacities strengthening and research activities will follow policy plans at the country and institutional levels, as well as international quality and ethical standards. This phase of collaboration will emphasize the development of complex methodological designs that facilitate application of systemic perspectives on disease prevention and enhance the country's capacity to address larger societal challenges at global levels.

The results and best practices resulting from the previous collaboration frameworks (FA3 and FA4) have been used in the formulation of SCSCuba to achieve convergence between IPK and INHEM. Synergistically working towards reducing the burden of IDs and NCDs within an equity perspective, are aligned and coherent with public health policies of the Cuban government.

Description of Effectiveness

As the target groups and partners of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a **strong track-record when it comes to achieving results through its programmes**. From the evaluations of past interventions, such as [the one for the third framework agreement funded by DGD](#), it becomes clear that together with our partners, we are capable of delivering, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between IPK-INHEM and ITM, the effectiveness criterion never scored below B.

Baseline information is collected at the level of IPK and INHEM mainly, as the partners are also the target groups of the results. Baseline information is collected mainly through document review at their level. In addition, a **capacity assessment** will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression. At the level of ITM it was decided to focus the mid-term evaluation on the aspect of GRIPP, therefore we included a mandatory indicator on this aspect.

Through the collaboration SCSCuba programme with ITM, both IPK and INHEM will be able to strengthen high-level education and research as drivers of changes in the prevention and control of infectious and non-infectious diseases of public importance in Cuba and worldwide. We postulate that ITM and the partner institutes have a shared vision on the relevance of enhancing capacity for better health research. Also, the partnership IPK-INHEM will be empowered to lead the process of change for becoming better performing research organizations to translate evidence and knowledge into decision-making influence. We consider that **MOH at national and local level will be willing to support** operational research and to incorporate relevant evidence into policy and practice. As in previous experiences in collaboration with the MOH and government subnational authorities, the IPK-INHEM research groups have led the design, implementation and evaluation of the interventions approved by the MOH, creating favorable conditions for the success of this program. Furthermore, we assume that amidst economic constraints and reforms, Cuba will manage to preserve universal health coverage and fully free access to health services and education. As previously stated, these assumptions are based on our longstanding experience of cooperation with IPK-INHEM and the MOH. Joint operational research successfully conducted within the past country programmes has fed important changes to disease control programmes and health services organization. Moreover, scientific staff who benefited from the collaboration have progressively taken a leading role in research, and have adopted international evidence (including European frameworks) on how to build capacity for better research outcomes. The alignment between the values and vision of the Belgian Development Cooperation, ITM and the Cuban partner institutes also form the basis for our assumptions. Currently, there is a very favorable national environment for research and the application of research results.

Under the current conditions of Cuban health system (universal, free, with experienced health personnel, good and available health data system) and the way this programme is designed, we can ensure that **intervention objectives are verifiable, realistic and measurable** through validated indicators according to generally accepted criteria such as SMART, CREAM or SPICED. The collection of quality data will enable us to design an appropriate triangulation of data streams to support the identification of results to be attributed to the programme. Also, through the collaboration programme with ITM, both IPK and INHEM will be able to acquire essential equipment and consumables and to have a stable access to scientific literature.

The SCSCuba integrates activities towards aligning platform development, research into action, and collaborative networks. Through this emphasis, this programme will guarantee the training of young human resources for the IPK, INHEM and other Cuban institutions considering gender equity, and creating conditions for sustainable cooperation among them. Also, it will facilitate the exchange between junior staff and specialists from both IPK-INHEM with those from the ITM and the linkage of both institutions to research initiatives with other partners of the program, as well as research groups in other countries. Moreover, attaining these specific objectives will eventually lead to medium and long-term substantial health benefits. Effectiveness of the programme in terms of education, social and health benefits should be attained under the principles of **leaving no one left behind and equity in health**. We expect that our activities will not only improve the health of Cubans but also that of other

countries by application of education and research results through south-south collaboration, network exchanges and other forms of international dissemination of scientific results as publications, scientific exchange and Cuban Development cooperation in health. Through this programme, the strengthening of high-level education, research capacities and skills, and the new technology implementation will result in a strong theoretical basis and expertise to guide future research projects and provide a specific exchange of expertise within the regional and south-south collaborations. Similarly, outcomes of this programme include qualified specialists capable of independently conducting research and informing decision-making with scientific evidence to continue improving local health.

In order to link these short-term goals with larger societal impacts, the programme will focus on a better understanding of IDs, NCD and their syndemics and precise identification of priority groups based on the formulation of an **integral framework of social vulnerability for health**. These overarching inputs will inform the development of multicomponent prevention strategies and methodologies based on a syndemic approach, as well as the identification of the common risk factors of the emerging IDs and NCDs to improve population health and reduce the adverse social impacts of health problems. For this purpose, it is also necessary to improve capabilities on surveillance (tools), collection, analysis and use of data for decision-making, development of analytical models for modelling IDs and NCDs, and evaluation of impacts of IDs with an outbreak potential and new vaccines application (ei. Cuban vaccine against COVID-19), areas in which all partner institutions have extensive experience. The programme will also provide local population data and evidence to adapt the current control strategies to accelerate the process towards disease prevention, control or elimination, and strengthen the articulation among national and international networks.

In the area of advanced technologies, it is intended to apply new methodologies and technologies for diagnosis and characterization of pathogens virulence, antimicrobial resistance and host-pathogen interactions of infectious diseases such as arbovirolosis, COVID-19, STIs, TB and intestinal parasites, for an overall improvement of case management and better targeting control efforts in Cuba. **IPK and INHEM are well placed to include these new methodologies** as the two centers entail national reference laboratories for microbiology, parasitology and food hygiene, as well as execute national surveillance of the diseases with epidemic and pandemic potential. Also, the two local partners are responsible for introducing in the health system new diagnostic technologies associated with their area of competence. Furthermore, the proposed activities in this programme are framed under the syndemics perspective in order to increase capacity to work in an interdisciplinary way, bringing together clinical, epidemiological, parasitological, bacteriological, molecular, virological, economic, social and environmental factors to inform programme formulation. Experience and lessons learned from previous collaboration programmes have shown that this can be achieved, particularly thanks to the complementarity of disciplines among these institutions and the opportunities that this cooperation provides. Therefore, we expect to further strengthen the interdisciplinary cooperation of IPK-INHEM with Cuban governmental and academic institutions, as well as with other southern partners.

The current epidemiological context has revealed the need for a wider perspective in addressing the prevention and control of diseases in Cuba, from a priority attention to infectious diseases to accounting also for chronic NCDs and their synergistic interactions. This process, happening gradually and demanding further discussion and multidisciplinary action among different stakeholders in the country, can be accelerated by the implementation of new actions proposed by the SCSCuba programme. Besides, COVID-19 pandemic has also underlined the need for and the advantage of collaborative work across institutions and health professionals. The current programme focuses on learning needs at the institutional and individual level as well as on research gaps previously identified by both IPK and INHEM. Moreover, there is a **consensus, at the highest level of the Cuban Government and the MOH, on the need for change in policies** addressing NCDs and IDs through scientific methods and evidence-based information. The institutional and governmental readiness to address these issues will lead to a positive response at the national level to the programme and the commitment at national level to translate research results into policy and practice.

The JSF HES4SD identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Additional explanations on the results based approach and choices for baseline values can be found in annex 'Responses December'.

Description of Efficiency

The budget for this programme covers: 500,000 euros for platform development covering mainly equipment, operational resources, education and training; 700,000 euros for research activities designated to knowledge development, testing of interventions, and other research project related costs; 250,000 euros for collaborative networks and GRIPP including

workshops, international mobility, synergy projects, and translating research into policy and practice.

In Cuba, MOH funding does not fully cover the necessary investment in research equipment and professionals, and due to the current blockade, access to equipment is restricted. Therefore, resources for essential equipment, consumables, transport, operational money, and scientific literature are severely constrained. This programme will allow the Cuban partners to have access to otherwise 'inaccessible' equipment and resources, in order to conduct scientific work following international quality standards and to enhance their education and research practices. Equipment and resources will be cautiously taken care of and optimally used, contributing to its efficient use. This programme will also introduce cost-effective methods in current strategies (e.g. screening for TB and STIs), with substantial impact on population's health. Furthermore, by including an overarching emphasis on health related social vulnerability, the program intends to identify priority groups and systemic factors that can inform allocation of public resources and render larger impacts at the population level.

Salaries for Cuban researchers and fieldworkers' expenses come from government sources and therefore do not require external funding. However, Cuban institutions have limited financial means to provide their junior researchers with scholarships and to cover travel costs for training and strengthen exchanges within regional and international research networks or for access to cutting-edge technologies and methodologies in foreign platforms and/or for the international dissemination of their own scientific results. Providing these opportunities will not only enhance individual and institutional capacity, but can also generate sustainable impact at a national and international scale, e.g. through PhD scholarships.

As the costs for capacity building and related research are shared between the government and the partners, research lines are integrated within existing programme activities and aim to improve their efficiency. Programme structures, staff and processes will be optimized, resulting in efficient use of the available resources and boosting resilience and sustainability of Cuban public health strategies. Moreover, the focus of the activities lies in individual and institutional capacity, and trained IPK-INHEM members will transfer acquired knowledge and skills to other colleagues within their institutions and networks. Experiences from previous collaborations have shown an efficient multiplicator effect of trained individuals acting as agents of change. The return on investment from training will be maximized via this capacity cascade approach. Optimizing the use of innovative technologies and methodologies through platform development at the national reference level coordinated by MOH provincial teams, will lay the basis for an overall improvement of case management and disease control efforts in Cuba.

GRIPP is central to the SCSCuba programme: results of all research activities are intended to inform health policies. These activities will be developed in close collaboration with relevant stakeholders, who have a great influence in the decision-making processes, which makes the translation of research findings into policies very effective. This effect will go beyond institutional strengthening and will have a multiplier effect via policy implementation.

Description of the expected Impact

The expected impact of this project is to achieve the long-term goal of better health for all Cubans. This is done by synergistically addressing the syndemics approach, leading to the development and/or improvement of impactful prevention and control strategies for IDs and NCDs. We expect to build and strengthen individual and institutional capacities to create actors of change focused on improving the overall health of Cuba based on a solid multidimensional, transdisciplinary, and syndemic approach for the creation of knowledge to inform service delivery and health policies. In the long run, we expect a systematic and interdisciplinary application of preventive and control strategies with a well-established syndemics approach in place, fewer epidemics, reduction of social inequalities related to IDs and NCDs and equitable health coverage, being led, promoted and influenced by the sustainable cooperation between IPK and INHEM throughout generations.

On a broader scale, the expected impacts include 1) Gender equality, including empowered women, at all levels of decision-making processes in a wide array of disciplines; 2) Well-established syndemic strategies for prevention and control of IDs and NCDs; 3) Health prevention and control interventions responding to the needs of specific population/priority groups with special attention to gender and age differentials identified by the HRSV framework; 4) Syndemic approaches to disease control and influence decision making in prevention efforts that consider larger environmental dynamics; 5) A health system allocating resources to the most efficient and effective health strategies; 6) Settled national and international partnerships, including North-South, South-South and triangular cooperations, continuously targeting capacity building to achieve sustainable goals towards better health for all.

Description of Sustainability

The fact that both partners, IPK and INHEM, are an integrated part of the Cuban Health system is of utmost importance to assure sustainability of the program's results. As mentioned under other sections, the programme target groups and partners coincide. Therefore, technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups completely control the intervention. Together with ITM, they co-implement the project. In order to ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal,

and will remain the key responsible party to its execution. Specifically for technical sustainability, this programme will provide not only resources and essential equipment, but sufficient training and capacity for their proper use and care leading it to its sustainability and long-term profit. Also, this programme supports and enhances network synergies and collaboration with international partners, therefore providing beneficial opportunities for continuation of external financial support for the proposed activities, therefore having a multiplier effect of this programme. The commitment of the promoters and the involved scientists to the proposal and the explicit policy support it receives, offer the best of guarantees for sustainability. Our professional and scientific exchange in the past has been mutually strengthening and beneficial and it will continue to create durable added value for IPK, INHEM and ITM. Prevention, health service and disease control staff of MOH who directly participate in field work perceive becoming a “field site” as an opportunity for increasing one’s know-how and skills through informal exchanges, and hoc workshops and discussions during feedback of results. Moreover, the Cuban health system is rationally managed and provides quality care and universal coverage. The operational research carried out within the past DGD country programmes has constantly fed important changes to the country’s disease control programmes and health services organization. This ensures that successful pilot experiences and innovative research findings are subsequently **translated and sustained in national health policy to the benefit of the whole population**. As in other domains of policy formulation in Cuba, due attention for values such as gender equity and environment are also guaranteed.

While increasing research capacity, the SCSCuba will be based on a solid operational platform that will ensure the continuity of the activities through improved logistics and project management. The technological platforms on diagnostics and data sciences, entailing the development of new diagnostic and genomic characterization tools, implementation of advanced technology, and improved data sciences capabilities will lead to better strategies for the prevention and control of diseases. Institutional strengthening and increased research capacity of IPK and INHEM are a cornerstone for long-term sustainability. The acquired technological know-how through the technical platforms will increase collaboration with external parties for the evaluation of (new) diagnostic platforms for infectious disease diagnosis and data sciences. This will ensure the continuation of the institutes as reference centers for disease prevention and control. Regional networks will be strengthened as well via the SCSCuba by means of available resources for exchange meetings and the development of collaborative actions parallel to the SCSCuba.

Description of the Partnership Strategy

Both INHEM (since 1998) and IPK (since 2003) are longstanding partners with ITM through the DGD Programme. ITM approaches partnerships along the lines of a **partnership trajectory**. Partnerships gradually move from an initial phase where the emphasis lies on institutional capacity strengthening towards a consecutive phase with the emphasis on institutional collaboration. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed. In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer etc.) and on continued capacity building. Over time, partners will acquire specific capacities, knowledge and expertise. this capacity will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as a hub for a network. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice.

A capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

IPK and INHEM are semi-autonomous national level institutes for post-graduate training, research and service provision in tropical medicine, IDs, NCDs, and public health. The professional and research staff adds up to 1218, from which around 70% are women. Both institutes belong to the Public Health system in Cuba and draw core funding from the MOH and MHE. Broadly speaking, IPK focuses on IDs and clinical medicine (it hosts the national reference laboratories for bacteriology, mycobacteriology, parasitology and virology, the national laboratory for entomology, the national epidemiology group for communicable diseases and the clinic for HIV/AIDS and other infectious diseases), while INHEM concentrates on public health (including environmental and school health), nutrition and health services organization for NCDs. Moreover, they host various World Health Organization Collaborating Centres (WHO-CC), INHEM hosting WHO-CC for Health in Housing while IPK hosting WHO-CC for Study and Control of Dengue and WHO-CC for Tuberculosis Elimination. Supporting national health policy formulation and health cooperation with developing countries and addressing emerging health situations form an explicit part of their mandate and mission. With complementary mandates, both institutes have worked together in previous projects, including within the former DGD-ITM multiyear programme (FA4). The current SCSCuba programme will further strengthen this collaboration to reach sustainable cooperation, mutual strengthening, common capacity building and creation of synergies to address syndemics leveraging the unique strengths of each institution. Such a synergistic approach aims at aligning and strengthening activities related to shared technical and data science platforms, collaborative research on the dual burden of IDs and NCDs, and outreach to other Cuban health stakeholders, as well as internationally through new and established networks.

This programme will also involve third parties, including the Escuela Nacional de Salud Pública, the Instituto Finlay and the Universidad de La Habana, and the Facultad Latinoamericana de Ciencias Sociales (Flacso), in some of the programme activities. These collaborations are relevant because of their specific complementary expertise for multi-disciplinary research, offering opportunities for better outcomes and achieving not only the programme objectives but also the long term goals. The development of a collaborative platform on syndemics will reinforce relationships between partners in Cuban Health System and promote GRIPP, with a particular focus on vulnerable groups.

The partners participated actively in the development of this new five-year program. At the level of the JSF-HES4SD, ITM involved its partners in the development/validation of the thematic JSF process through the general council, in which ITM's partners are represented and which discussed the thematic JSF process. At the Cuba country level, online partner consultations were organized with ITM, IPK and INHEM to discuss the content and criteria of the new DGD program, which was also explained in a joint partner meeting early May. While both Cuban partners have different, but complementary mandates, the elaboration of the detailed ToC and program was done together with both partners, focusing on synergistic, syndemic approaches.

Within ITM's perspective on partnerships, we will work in an equal partnership where the voice of each partner is heard. The starting point of discussions on capacity strengthening is a thorough analysis of the needs and priorities of partners, done together with the partner. During the discussions on the new programme, we always took into consideration what had been realized in former programs. The current programme develops new platforms if needed, but also builds on existing platforms and aims to extend or intensify the knowledge and expertise built. In the partnership, ITM will mainly introduce its scientific expertise to support the platform development and the research capacity building. Moreover, synergy development and networking will have an important place in the process for both partners to become centers of excellence.

Description of Synergies

IPK-INHEM and ITM have a long standing collaboration and partnership for almost 20 years characterized by institutional strengthening and institutional collaboration: sustainable capacity building (e.g. workshops on good data management practices, course on mixed methods); flexibility of IPK-INHEM, ITM and the MOH to maintain a long-term and sustainable collaboration in a dynamic context (epidemiological, political and economic-social changes); synergies with other national and international partners; south-south collaboration and network development (e.g. DENTARGET: Cuba, Belgium, Mexico, Colombia and Brazil); project management following the legislation for Cuba and Belgium and immediate use of research results in response to MOH demands (P&P, demonstration sites), etc.

As described in the section of coherence there was an explicit intentionality while selecting the institutions to be included in the collaborative stakeholders framework. They were selected taking into consideration their expertise and competencies for high level education and research in the field of the prevention and control of IDs and NCDs. There is a commitment of these institutions and an operational plan to strengthen the synergies and complementarities among them to address syndemics leveraging the unique strengths of each institution. Such a synergistic approach aims at aligning and strengthening activities related to shared platforms, collaborative research, and outreach to other Cuban health stakeholders, as well as internationally through new and established networks.

Complementary to the other synergies identified in this chapter, the program will indirectly contribute to the synergies identified in the JSF HES4SD. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g. synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme. Also, the country's programme envisages to contribute to the achievement of JSF objectives. In line with this, IPK and INHEM will develop a syndemic platform to collaborate on the multifactorial challenges, from shared risk factors, social vulnerability and quality of life related to health to the convergence and interaction of IDs and NCDs. This collaboration is based on synergies to strengthen access and improved quality of education, professional training and scientific investigations, and to improve the overall health of the Cuban population.

The tripartite cooperation between Belgium, Cuba and the DRC, will include studies on aspects of *Aedes* spp. using different collection methods for the larval and adult stages of *Ae. aegypti* and *Ae. albopictus*. With these samples, biological material will be obtained to carry out innovative research together with the training of human resources in the countries involved, which will allow us to respond to three fundamental aspects. 1) Bioecology of *Aedes* spp. 2) information on the susceptibility and resistance of *Aedes* sp. to the insecticides in use and 3) to know the epidemiology of arboviruses, such as Dengue and Chikungunya, in two different geographical areas. In general terms, this research would be very beneficial for both Cuba and DRC and for the scientific world as, for the first time, entomological indicators of *Ae. aegypti* and *Ae. albopictus* are investigated/compared in populations of the African continent with populations of a Caribbean island where it is stated that in general the number of species is lower and there are more vacant breeding sites that favor the dispersal and domestication of vector mosquitoes. It will also be possible to investigate the potential influence of behaviour and human activities and their impact on the presence of breeding sites for these mosquitoes in the urban areas and the appearance of arbovirus epidemics.

Description of how individual or collective recommendations and lessons are

to be taken into account

One key mission of the previous programme focused on strengthening IPK and INHEM towards the accomplishments of their academic mission through capacity strengthening and scientific co-operations. Aligned with this, several activities have been implemented to achieve this mission particularly focusing on synergies and collaboration, sustainable capacity strengthening, and enhancing the visibility of the advantages of long-standing international and national/regional partnerships. Related to synergies and collaboration with other (Belgian) actors, interactions with relevant stakeholders (i.e. Cuban external affairs offices, a delegation of the European Commission, VLIR-UOS) have taken place to discuss opportunities and challenges of the collaborative projects, share experiences and identify solutions based on the exchange of ideas, and identify synergies for common capacity building and projects. These interactions have made the collaborations more fruitful. Concerning sustainable capacity strengthening, capacity building workshops (e.i. good practices in data management) have been facilitated by ITM where staff from IPK, INHEM and provincial staff of MOH have attended. These activities have stimulated the drive to strengthen both institutes in different fields and also generated focal points for further training in each institution for the continuation of knowledge dissemination. Moreover, different activities have been organized to increase the visibility of advantages of long-standing collaborations at the national/regional and international levels. Lessons learned among these activities include long-standing relationships are advantages to surmount periods of uncertainty, where additional flexibility, trust and understanding are required to adapt to unique circumstances; high levels of commitment to meet shared objectives and a sense of team spirit to overcome obstacles as the US blockade; the integration of the Cuban partners as a part of larger academic and research networks is considered key to optimizing resources as well as establishing a forum for scientific discussions and cross-learning; the acquisition of innovative comparative knowledge that South-South collaborations provide. Some challenges identified include the language barrier within international collaboration seems to persist, however, travelling and increasing the frequency of online meetings have been identified as opportunities for improvement in this area.

The experiences and lessons learned above stated from previous collaborations will be the basis of this programme. We will take them into account and focus on the continuation of their improvement. For instance, activities like the following will continue: IPK-INHEM will continue in close collaboration with local MOH institutions and Universities to strengthen the access and quality of education, professional training and scientific investigations and to promote innovation for reaching a sustainable development; interacting sessions to promote synergies with other projects, funding agencies and national and international institutions (ie, FLACSO-UH, TDR, PAHOI, VLIR); organization of sustainable capacity building activities (ie, workshops on good data management practices; mixed methods course); promotion sessions of South-South collaboration and network development (ie, DENTARGET: Cuba, Belgium, Mexico, Colombia and Brazil; Trilateral collaboration IPK-ITM-INRB (DRC)); systematic monitoring of acquisitions of resources; project management in accordance with the legislation for Cuba and Belgium, among others stated in this programme's proposal.

Finally, the programme has integrated the recommendations from JSF's approval dialogue. As recommended, this programme gives particular attention to the valorisation of knowledge (cf. Getting Research Into Policy and Practice (GRIPP)) and includes a stakeholder and context analysis.

More about collective lessons can be found in annex 'Responses December'.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
TOC_ITM_Cuba_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Cuba_22-26.pdf
RA_ITM_Cuba_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Cuba_22-26.pdf
FACTSHEET_ITM_Cuba_22-26_IPK	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Cuba_22-26_IPK.pdf
FACTSHEET_ITM_Cuba_22-26_INHEM	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Cuba_22-26_INHEM.pdf
TOC_ITM_Cuba_22-26_UPDATE	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2022-03/TOC_ITM_Cuba_22-26_UPDATE.pdf
RESPONSES_DECEMBER_ITM_CUBA	Other	https://fundhub.openaid.be/sites/default/files/2022-03/RESPONSES_DECEMBER_ITM_CUBA.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The total budget of the programme (1.675.728,25€) will be divided over the 3 main components as follows.

Platform development: 500,000 € of which 250,000 € will be allocated to the development of the technical platform and 225,000 € to the development of the data science platform. The remaining 25,000 € will support the strengthening of the institutions for covering operational and logistics costs.

Research activities: 711.522,37€ will cover knowledge development, research projects, and staff mobility. The budget mainly includes operational costs and limited investment costs. The ITM Research Office will provide cross-cutting support to partners in all areas of research management through direct support and organisation of training.

Collaborative networks and GRIPP: 250,000 €. From this, 25,000 € are for local synergies, 100,000 € for South-south collaborations, 100,000 € for regional and international outreach, and 25,000 € to translate research into policy and practice. Specific costs in this component include international mobility, workshops, networking events, small synergy projects with high added value to other Belgian development actors, scientific support and guidance, specific research costs, etc.

IPK and INHEM are collaborating on the three lines and the distribution of budget is 1.041.697,30 € for IPK and 634.030,94 € for INHEM associated activities.

In order to overcome embargo restrictions many investment costs, consumables and travel tickets are bought in Belgium ITM (and shipped to Cuba) resulting in the following distribution: LOC@ITM = 672.901,11€; ITM = 879.138,87€; IPK = 86.096,03€; INHEM = 37.592,24€.

22,85% of the budget is dedicated to ITM staff to assure scientific support to the implementation of the program activities (the equivalent of technical assistance provided by corporations in other development cooperation projects). This amount covers only a fraction of the real time ITM staff dedicates to the program.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym INHEM

Full name Instituto Nacional de Higiene, Epidemiología y Microbiología

Budget available

2022	2023	2024	2025	2026	TOTAL
6500	5500	10500	9500	10500	42500

Acronym IPK

Full name Instituto de Medicina Tropical "Pedro Kouri"

Budget available

2022	2023	2024	2025	2026	TOTAL
22966,66	18200,00	21066,67	19200,00	14466,67	95900,00

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Better policies and less infectious diseases in Peru and Latin America

Contacts

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Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Better evidence, better policies and less infectious diseases in Peru and Latin America		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-8-PE		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Peru		
Sector :	12182 - Health - Medical research	Budget share :	40%
Sector :	12181 - Health - Medical education/training	Budget share :	20%
Sector :	12110 - Health - Health policy and administrative management	Budget share :	40%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	3. Increased capacity of Higher Education and Science Institutions
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Thematic/geographical :	THEMATIC JSF
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5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Comments on general

Submitted by Ambabel-Peru on Sat, 10/30/2021 - 00:34

Quantification of target groups

This question refers to the description of "Target groups", which does not include space for comments.

Can you provide any quantified targets?

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:33

Quantification of target groups

This Programme will target at least 8 academic and health institutions, including Universities, Tertiary care hospitals, Reference laboratories and Disease control programmes across Peru, aiming to prioritize those located in regions other than Lima (cf. Leaving No One Behind). Our target is to establish a research partnership or training partnership with 3 institutions during the first 3 years and a total of 8 institutions by the end of the 5-year Programme. Examples of the proposed target Institutions:

- o National Tuberculosis Programme, Ministry of Health (National level, Peru)
- o Peruvian National Health Institute (National level, Peru)
- o Hospital Belén, Ministry of Health (MoH; La Libertad)
- o Hospital Antonio Lorena, Ministry of Health (Cusco)
- o Universidad Nacional San Antonio Abad del Cusco (Cusco)
- o Hospital Santa Gema, Ministry of Health (Loreto)
- o Hospital Regional Lambayeque, Ministry of Health (Lambayeque)
- o Hospital Nacional Adolfo Guevara Velasco (Cusco)
- o Universidad Nacional Toribio Rodríguez de Mendoza (UNTRM; Amazonas)
- o Prevention and control of Metaxenic and Zoonosis diseases Direction, Ministry of Health (National level, Peru)

- Regional Direction of Health (DIRESA; Loreto)

We estimate that this programme will directly benefit approximately 260 researchers/health care personnel. Following a decentralized approach, our goal is that the proposed educational and research activities will reach scientists, researchers and healthcare personnel from regions outside Lima, especially the Andean and Amazon regions prioritizing those actively involved in health services. The estimate of 260 individuals is based on:

- 40 researchers/healthcare personnel trained through different short courses (20 women and 20 men).
- 20 graduated students from the Master in Infectious and Tropical Disease Control (MCEIT) programme at least 10 of them being from regions outside Lima (5 women and 5 men).
- 200 attendants to the international colloquium organized by ITMAVH (striving for a gender balanced attendance).

This estimation takes into account only those individuals directly benefited through a DGD scholarship for the proposed training. It is important to mention that by strengthening our education office and improving our education platforms, a larger number of individuals may benefit indirectly by receiving high quality training at ITM AVH.

Geographic location of the outcome’s intervention zone

Peru, Nacional

Lat/Long :	-12.04474, -77.03929
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Outcome summary

Description of the outcome

The Instituto de Medicina Tropical “Alexander von Humboldt” (IMTAVH) is a national and regional referral centre in infectious diseases with special expertise in public health concerns such as malaria, tuberculosis, leishmaniasis, dengue, HTLV-1, COVID-19 and bacterial diseases alongside antimicrobial resistance. Through its longstanding partnership with ITM, the IMTAVH has been able to reach a robust critical mass of scientists involved in research and teaching. However, it still holds a limited reach to translate its research into national guidelines, protocols and measures.

This multidisciplinary proposal aims to contribute to better health policies and services. The programme wants to do this through improved education and research practices, improved services to society, knowledge translation into practice and strengthened networks. This will lead to better prevention and control of infectious diseases in Peru and in the Latin American region, by increasing the availability of more and better evidence and the decision maker's willingness to use it.

To achieve this goal, we will provide scholarships to top-tier educational programmes in infectious disease control and molecular epidemiology to Peruvian regional applicants and personnel working in key positions within the health sector. We will expand our research capacities by developing new research platforms and including next-generation sequencing and Eco Health research. We will also translate our research into policy briefs targeted to decision makers and pursue synergies with key stakeholders, institutions and key collaborators, striving for the conduction of high-impact research that can benefit multiple nations. By organizing annual colloquiums, we expect to foster and nurture national and international partnerships to continue to expand the reach of our results.

Wording of the outcome

The objective of the programme is to consolidate IMTAVH’s education, research and synergy. The aim is to get research into policy and practice capacities and to become a driver for change for the prevention and control of infectious diseases in Latin America. And finally, to contribute to healthy lives and well-being.

Target groups

The target group consists of the general population, students, researchers and higher education institutions.

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	2
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	1
7. Climat Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	0
11. Children's Rights :	0
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No

9. Covid-19 :

Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Development education

The IMTAVH has a solid plan for the development of education platforms with an special decentralized focus that is targeted to key professionals in the health field, promoting a multiplier effect in Peru's regional and province settings. These platforms also hold a unique approach leveraging on the use of technology and distance-learning, allowing for young professionals to engage and become a part of top-tier large educational programs and advance in their careers.

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Infectious diseases are directly influenced by climate change. In Peru, diseases that were commonly limited to certain rural tropical and jungle regions have had an epidemiological shift and can now be found in cities where this was rare. Our programme contributes to better knowledge about these diseases in terms of seasonality, patterns of transmission, and vectors, knowledge that is critical for regional governments to take appropriate action, allocate pertinent resources and incorporate new knowledge into practices and policies.

Gender

Our programme follows the priorities for gender equality set by the Belgian Development Cooperation, holding a special focus and effort on the priority for education and decision making. Our programme already positions women in critical roles for its development, as the malaria, tuberculosis and antimicrobial resistance components are led by women. Through proper training, we will empower women to take an active role in public health decisions of our region and encourage them to deploy their acquired skills to achieve societal impact. As a consequence of this, we have included specific gender-disaggregated indicators that illustrate our position.

Digitalization - Digital for Development D4D

Accurate data is essential for program and policy development, as it serves for continuous evaluation, audit and quality improvement. Within its national disease control programs, the Peruvian Ministry of Health stores large amounts of routinely collected information. However, most of this is not translated into actions. In our programme, we use data as a means of effective communication between an identified problem and its roots in order to generate possible solutions. We seek health determinants and the understanding of phenomena to provide innovative ways to address them, thus contributing to better quality of care and policy improvement.

Health

Our programme highlights the importance of health and quality health care as fundamental human rights. Health repercussions have a direct impact on a family's economy, dynamics and overall well-being. In the field of infectious diseases, consequences of infections generate out of pocket expenditure that is seldom calculated in the health sector, reducing people to poverty. As a non-profit institution that leads infectious disease research in the country, we hold a unique position to provide critical feedback on health policies for the benefit of the population, as well as to provide health services and capacity development, position that has been plausible with fructiferous international partnerships. Our programme contributes in strengthening the health sector and in providing tools for an integrated control of various neglected, infectious and tropical diseases, promoting the improvement of general well-being.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

The IMTAVH is aware of the need to adopt a human rights-based approach. As mentioned in Chapter II STATES PARTIES' OBLIGATIONS of the UN document "Substantive Issues Arising in the implementation of the International Covenant on economic, social and cultural rights" (General Comment No. 14 (2000); COMMITTEE ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS), when referred to Core Obligations, paragraphs 43f (To adopt and implement a national public health strategy and plan of

action, on the basis of epidemiological evidence, addressing the health concerns of the whole population;..., shall give particular attention to all vulnerable or marginalized groups.) and 44c,e (c. To take measures to prevent, treat and control epidemic and endemic diseases; e. To provide appropriate training for health personnel, including education on health and human rights). Empowerment and giving voice to the community is the key to their development, as mentioned in the Universal Declaration, article 25. We have identified rights-holders as students from regions of Peru with economic disadvantages and indigenous communities and duty-bearers as the Ministry of Health. Our training capabilities will be promoted with an emphasis on giving a platform to women, BIPOC, LGBTIQ+, people with disabilities, Quechua and Aymara speakers. Reaching a diversity of trainees with a considerable and consistent proportion of participants from Peruvian regions beyond Lima. We aim to prioritize equal access to information by institutions and/or individual groups from regions of Peru that have less access to education, training and highest risk for transmission of several infectious diseases, by promoting active roles in the design, planning, monitoring and evaluation processes of the different projects, developing their capacity through policy briefing skills, empowering the implementation of their research, ensuring alumni diversity, and generating their capacity to participate through meaningful education.

Decent and sustainable work

UPCH is a non-profit private higher education institution with essential duties in terms of research, education and dissemination of knowledge in health, science and technology. UPCH's workers are professors and administrative personnel that are hired either through public posting or direct appointment and are provided with a monthly salary over the minimum considered wage for our country (estimated around 237 USD). Every worker is lawfully insured within the Social Health Insurance (EsSalud), a public health insurance where employers contribute in a monthly manner and which extends to the worker's family nucleus. Additionally, when partnering with our institution, workers choose from a variety of pension systems (both public and private) in order to ensure they destine part of their salary's funds to be available for them as pension once they retire.

In terms of institutional policies, UPCH has two major policies in place that are directly linked to Decent Work: (1) the Regulation for security and health at the workplace and (2) the Regulation for prevention and intervention of sexual harassment for professors, students and graduates. As part of its research institutes, the IMTAVH shares UPCH's policies for hiring personnel and ascribes to its institutional policies and regulations. Moreover, due to the nature of our programme where our researchers and personnel work with infectious diseases, there is a strong awareness on biosafety. Personal protective equipment is available for everyone that is at risk of biocontamination. Additionally, all new workers undergo an occupational medical evaluation and induction training.

Given the COVID-19 pandemic, our institute has strived to remain in line with worldwide recommendations and has prioritized working remotely when feasible.

Gender

Several women are holding key positions at IMTAVH and our program, which further capitalizes on offering high-quality training for both women and men. IMTAVH has a long tradition of pursuing equal opportunities for women in education and decision making, in line with SDG5. As a result, several women hold top positions. In 2019, the IMTAVH elected Dr. Theresa Ochoa, a widely recognized woman researcher in the field of pediatric infectious diseases as Director. Recently, the National Council of Science, Technology and Technological Innovation (CONCYTEC) issued a booklet including 24 Peruvian Women Scientists as part of its science popularization program which included 5 women scientists and professors of UPCH, 2 of them being Dr. Theresa Ochoa and Dr. Dionicia Gamboa (Head of the Malaria component). Women are also leaders of the majority of the proposed programme components.

Our proposal has embedded within its aims to provide high quality education programs by distance learning and tele-education initiatives, tackling potential gender inequalities that negatively impact education opportunities. We aim to carry the gender theme forward to other institutions by offering top-quality training in a gender-sensitive environment. We expect that this training experience will contribute to the empowerment of women in our alumni's regions and home institutes. To make this position explicit, five of our program indicators (OC3, R2.1, R2.3, R4.3 and R5.4) are gender sensitive. We will also integrate gender in our research protocols by thoroughly assessing if women are underrepresented and provide innovative measures to ameliorate this.

Currently, women account for around 33% of our institute's main members and 39% of its associate members. However, the board of directors is composed mainly of women (4 out of 5 members) and both research and education offices have women as office heads. We are confident that in the next few years we will see an increase in these proportions.

Environment

The rise of temperature is affecting human and animal disease patterns. Climate change will increase vector-borne diseases in the coming years, therefore the objectives of the programme: promotion of vector biologists, mosquitoes database, surveillance and implementation capacity of mosquitoes resistance to pesticides will be needed for the country adaptation to these changes.

The wide diversity of species of living organisms, the genetic diversity within a species and the diversity of ecosystems in Peru require abundant human resources, genomic analysis, building surveillance and transfer of knowledge.

Boundaries between countries seem thinner and the need to exchange knowledge has increased. Travel remains one of the main carbon emissions of our program, having a negative effect regarding the environment. However, in order to reduce travel emissions carbon footprint, the institution will follow the lead of the ITM adopting travel policies with a vision of evaluating need, frequency and mode of travel with the target to reduce our emissions from business travel.

More details on the links between the Peru programme and the environmental theme can be found in annex 'Responses December'.

Common outcome between distinct programmes

All SDG targets are interconnected. We will look for synergies with other actors related to other outcomes of the ITM 2022-2026 programme. We already identified possible outcomes in the following programs:

- Benin: (1) to strengthen dialogue and collaboration (i) between various stakeholders in the health sector at all levels of the health pyramid and (ii) between the health sector and other sectors/disciplines, having an impact on the health of populations within the One Health approach and (2) to improve the quality of health care by strengthening the skills of human resources in health.
- Guinea: (1) to strengthen the prevention, diagnosis, management and control of contagious diseases (TB, HIV, HPV, COVID-19, etc), promote their integration into the health system and participate in coordination mechanisms between the spheres of emergency and development put in place by the health authorities and (2) to strengthen the capacities of health care providers to offer quality, comprehensive, continuous, integrated, patient-centered, gender-sensitive care and respect for the principle of leaving no one behind.

Common results of these partnerships would include joint research and publications with high impact, joint participation in scientific meetings where issues such as stakeholder dialogue, quality health care and health system integration are discussed, publication of guidance frameworks on how to integrate the role of academia in the health sector and continuous collective deliberation regarding barriers for implementation of common interventions.

Areas of complementarity and synergy with the intervention of ENABEL

For several years, ENABEL has directly contributed to improving the health of Peru's most vulnerable populations by supporting access to health care for the poorest. Although Belgium has ceased its bilateral cooperation with Peru and Enabel is no longer present, our proposal aims to build on these past activities while also complementing its ongoing efforts in other contexts, subscribing to its aims of developing staff competencies, assisting health ministries, and transforming data into knowledge and evidence for sound decision making contemplated in its Health, Governance and Digitalization sectors. We strive to directly complement ENABEL's Health Data intervention in Benin by publishing policy briefs and enabling decision-makers to make informed decisions, as well as providing the general public with understandable health information.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC: To consolidate IMTAVH's education, research, synergy and getting research into policy and practice capacities and become a driver for change for the prevention and control of infectious diseases in Latin America.
Indicator title :	OC1: Contribution to evidence-base of public health strategies
Indicator description :	1a. Evidence supporting the rational base of public health strategies; 1b. Capacity for uptake of scientific evidence by public health instances; 2. Evidence-informed health policy or clinical guidelines (local, regional, or national).; SoV: Policy guidelines referring to policy briefs (annexes of annual reports) or publications mentioning programme support (registered in MEDLINE database) or developed in collaboration with alumni (annual reports and digital platform for alumni follow up)
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	OC: To consolidate IMTAVH's education, research, synergy and getting research into policy and practice capacities and become a driver for change for the prevention and control of infectious diseases in Latin America.
Indicator title :	OC2: Improved routine diagnosis of infectious diseases
Indicator description :	1. Availability of validated diagnostic tests; 2. Implementation of tests in clinical setting, disease prevention, and/or disease control; SoV: annual reports and MEDLINE database; possibly also policy document; test kits at the Beta prototype phase ready for V&V (verification and validation) and production; SOP in case of in-house test kit; case management and laboratory guidelines.
Baseline :	0
Target Year 3 - 31/12/2024 :	2 tests available
Target Year 5 - 31/12/2026 :	2 tests implemented

Formulation of outcome or result :	OC: To consolidate IMTAVH's education, research, synergy and getting research into policy and practice capacities and become a driver for change for the prevention and control of infectious diseases in Latin America.
Indicator title :	OC3: Balanced diversity and gender in student and employed population at IMTAVH
Indicator description :	Balance with respect to Gender, Place of birth / residence, Private / academic / public sector; SoV: IMTAVH website, annual reports, and digital platform for alumni follow up
Baseline :	Unknown
Target Year 3 - 31/12/2024 :	% of students at IMTAVH of a specific gender/employment/geographical category not <15% // for employees focus on gender only
Target Year 5 - 31/12/2026 :	% of students at IMTAVH of a specific gender/employment/geographical category not <25% // for employees focus on gender only

Formulation of outcome or result :	R1. platform development
Indicator title :	R1.1 Proportion of IMTAVH researchers trained in research integrity and ethics (ToC SC 1.4)
Indicator description :	Proportion of IMATvH's main and associate researchers that attend at least 1 workshop jointly organized by ITM and IMTAVH in the field of research ethics and integrity; SoV: (1) List of attendance to workshops provided by the IMTAVH Education Office (2) Workshop material (presentations and documents)
Baseline :	0%
Target Year 3 - 31/12/2024 :	40%
Target Year 5 - 31/12/2026 :	80%

Formulation of outcome or result :	R1. platform development
Indicator title :	R1.2 Development and implementation of standardized procedures for the realization of high-quality educational programs at IMTAVH (ToC SC 1.1, 1.2 & 1.5)
Indicator description :	1. Planification and development of first draft of document, 2. SWOT analysis and benchmarking of quality, 3. Final document of standardized procedures, 4. Implementation of procedures in one IMTAVH program ; SoV: (1) Standardized procedures document (2) List of IMTAVH programs that followed the standardized procedures provided by the IMATvH Education Office
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R1. platform development
Indicator title :	R1.3 Digital platform for course registration and alumni follow-up (ToC SI 1.3)

Indicator description :	1. Planification and development of digital platform, 2. Test phase and iterative improvement, 3. Platform implementation in at least 1 course or program, 4. Platform implementation in >50% of courses, 5. Full implementation for all courses; SoV: (1) Meeting minutes for development and improvement processes. (2) Digital platform open source code. (3) Digital platform images and/or video showing features (4) List of IMTAVH courses that use this digital platform provided by the Education Office
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R1. platform development
Indicator title :	R1.4 Published sample collection and analysis protocols for surveillance, in support of public health decisions (ToC SC 1.7)
Indicator description :	Protocols and analysis pipelines in the public domain developed at IMTAVH-ITM, with a description of relevance. This can be in peer-reviewed papers or specific bioinformatics platforms in open source; SoV: Scientific paper or platform where the pipeline was made public.
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R1. platform development
Indicator title :	R1.5 Number of SOP for genome sequencing and open source bioinformatic pipelines published in IMTAVH public repository (ToC SC 1.10 & SI 2.1)
Indicator description :	Protocols and methods simple, scalable to answer workflow solutions for research groups that need NGS and bioinformatic analysis.
Baseline :	0
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	1

Formulation of outcome or result :	R2. Education projects
Indicator title :	R2.1 Number of IMTAVH course alumni active in Peruvian health services and programs (ToC SI 1.3)
Indicator description :	Count participants who graduated from one of the IMTAVH courses. Only count alumni clearly active in Peruvian health services and programs; SoV: Course reports - IMTAVH Office of Education
Baseline :	0
Target Year 3 - 31/12/2024 :	10 females 10 males
Target Year 5 - 31/12/2026 :	20 females 20 males

Formulation of outcome or result :	R2. Education projects
Indicator title :	R2.2 PhD in molecular epidemiology (ToC SC 2.4 & SI 2.2)
Indicator description :	0 = not started; 1 = PhD initiated ; 2: PhD progress on track ; 3 : fully completed before end of 2026; SoV: PhD diploma
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	R2. Education projects
Indicator title :	R2.3 Number of students graduating from the MCEIT master program, from peripheral regions (ToC SI 1.4)
Indicator description :	Count graduates; SoV: Course reports - IMTAVH Office of Education

Baseline :	0
Target Year 3 - 31/12/2024 :	3 females 3 males
Target Year 5 - 31/12/2026 :	5 females 5 males

Formulation of outcome or result :	R2. Education projects
Indicator title :	R2.4 Number of trainees in ITM short-term rotations of Genomics/Bioinformatics (ToC SI 2.1)
Indicator description :	Count trainees; SoV: Course certificates
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.1 Diagnostic tools for vector-borne diseases are validated in field setting to generate tools with the potential to translate in new and better diagnostic capacity (ToC SI 3.1)
Indicator description :	1. Production of prototype test, 2. Field validation study completed, 3. Results published ; SoV: Scientific paper with results of the tools used in diagnostic routine
Baseline :	0
Target Year 3 - 31/12/2024 :	2 (2)
Target Year 5 - 31/12/2026 :	3 (2)

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.2 Number of publications in peer review journal that address priority infectious diseases problems in Peru (ToC SI 4.2)
Indicator description :	The publications will be as result of research results or strategic policies formulation at IMTAvH-ITM that are submitted to peer review journals; SoV: Bibliometric database (PubMed)
Baseline :	0
Target Year 3 - 31/12/2024 :	8
Target Year 5 - 31/12/2026 :	16

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.3 Number of joint IMTAvH-stakeholders publications in peer review journal that address problem solutions to priority infectious diseases problems in Peru (ToC SI 4.2)
Indicator description :	The publication will be as result of joint research results or strategic policies formulation of IMTAvH and local stakeholders that are submitted to peer review journals; SoV: Bibliometric database (PubMed)
Baseline :	0
Target Year 3 - 31/12/2024 :	4
Target Year 5 - 31/12/2026 :	10

Formulation of outcome or result :	R3. Research projects
Indicator title :	R3.4 Number of oral and poster presentations in scientific meetings to present results of research that address priority infectious diseases problems in Peru (ToC SI 4.1 and 4.2)
Indicator description :	Presentation of research results or formulate strategic policies or surveillance plans at scientific meetings in Peru or abroad; SoV: Abstract books
Baseline :	0
Target Year 3 - 31/12/2024 :	11

Target Year 5 - 31/12/2026 :	25
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Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.1 IMTAVH members and policy makers trained in communication skills to public and policy makers. (ToC SC 4.1 & SI 4.1)
Indicator description :	1. Develop training trajectory, 2. Enroll IMTAVH researchers and policy makers, 3. Formally assess researchers and policy makers; SoV: Training records.
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	3

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.2 Number of policy briefs elaborated by IMTAVH presented to Peruvian health authorities (ToC SC 4.2 & SI 4.1)
Indicator description :	Count of policy briefs publicly disclosed and/or sent to official health authorities; SoV: Public records with policy papers.
Baseline :	0
Target Year 3 - 31/12/2024 :	7
Target Year 5 - 31/12/2026 :	12

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.3 Health-related decision or advisory committees with a permanent IMTAVH representation among the members. (ToC SC 4.3 & SI 4.1)
Indicator description :	Take into account official health instances, at whichever political or geographical level; SoV: Committee membership lists
Baseline :	1 female 0 males
Target Year 3 - 31/12/2024 :	3 females 1 males
Target Year 5 - 31/12/2026 :	5 females 2 male

Formulation of outcome or result :	R4. Getting Research Into Policy and Practice
Indicator title :	R4.4 International / National / Regional health-related guidelines citing IMTAVH research (ToC SC 4.4 & SI 4.3)
Indicator description :	Consider guidelines from official health authorities such as the Ministry of Health, PAHO, DIRESA, INS; SoV: Published guidelines
Baseline :	0
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	R5. Synergy & network
Indicator title :	R5.1 Research/academic staff from IMTAVH-ITM actively participating in national, regional or international conferences (ToC SI 4.1)
Indicator description :	Number of IMTAVH researchers presenting co-organising, reviewing abstracts, proposing sessions, in tropical and infectious diseases conferences; SoV: Research Office records
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R5. Synergy & network
Indicator title :	R5.2. Grant applications with other research institutions from different regions of Peru and/or LATAM and/or from the South (ToC SI 5.1)

Indicator description :	Number of joint research grants applications with other Peruvian and/or LATAM and/or the South research institutions ; SoV: Research Office records
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	R5. Synergy & network
Indicator title :	R5.3. Manuscripts writing with other research institutions from different regions of Peru and/or LATAM and/or from the South (ToC SI 5.1)
Indicator description :	Number of joint manuscripts with other Peruvian and/or LATAM and/or the South research institutions; SoV: Bibliometric database (PubMed)
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	R5. Synergy & network
Indicator title :	R5.4 Attendance to the international colloquium organized by ITMAVH (ToC SC 5.3 & SI 5.1)
Indicator description :	Number of attendants to the international colloquium organized by ITMAVH ; SoV: Annual reports
Baseline :	0
Target Year 3 - 31/12/2024 :	50 females 50 males
Target Year 5 - 31/12/2026 :	100 females 100 males

Formulation of outcome or result :	R5. Synergy & network
Indicator title :	R5.5 Number of established national and International partnerships.
Indicator description :	Memory of Understanding (MoU) signed with national and international research institutions; SoV: Memory of understanding signed documents
Baseline :	0
Target Year 3 - 31/12/2024 :	2 national - 1 international
Target Year 5 - 31/12/2026 :	5 national - 3 international

Activities, targets groups and beneficiaries

Classification of activities

Platform development. We plan to expand the use and capacity of NGS in Peru by establishing an NGS/Bioinformatics core facility for research support on tropical & infectious diseases, to become part of the global effort to produce genomic surveillance data to better inform intervention strategies. Other research platforms will be developed to support data for action, operational research, EcoHealth and surveillance studies in different regions of Peru. Education projects will share the common goal of increasing professionalization of IMTAVH postgraduate training and education and expanding its reach to Peruvian regions, beyond Lima, the capital, and to other Latin American countries. This will result in increased impact of training in populations that are usually left behind from top education programs and increased synergies and networking with regions and countries in Latin America. We also propose to build capacity within the IMTAVH through 1 PHD, 20 MSc in infectious disease control and a number of short-training scholarships in the areas of molecular genomic epidemiology, bioinformatics, vector biology, and other infection control courses. This human and platform capacity will allow us to conduct specific research projects that contribute to disease control and surveillance strategies through the deployment of Point-of-Care diagnostic tools, genomic surveillance data and improvement of the quality of routine data.

Getting Research into Policy and Practice (GRIPP) is a central pillar of our Programme. We plan to leverage the established relationships of IMTAVH researchers with the MoH to facilitate translation of research results into new national/international protocols and guidelines, by strengthening IMTAVH capacity to communicate research results among policymakers and relevant stakeholders. Finally, we will organize an annual colloquium (alternating Lima with Cusco and Iquitos) to pursue synergy with national and Latin American researchers and institutions.

Target group(s)

This Programme will target different academic and health institutions, such as Universities, Tertiary care hospitals, Reference laboratories and Disease control programs across Peru, with a decentralized approach. Following this approach, the proposed educational and research activities will consistently include an important number of scientists, researchers and healthcare personnel from regions outside Lima, especially the Andean and Amazon regions, aiming to maintain a 50-50 gender balance

Beneficiaries

This Programme will benefit the Peruvian and Latin American population. Because vulnerable rural and peri urban populations are disproportionately affected by infectious diseases, a larger proportion of beneficiaries will be part of these vulnerable populations. In Peru, there are 99 men per 100 women, therefore we expect to have a similar ratio of male-to-female beneficiaries.

Title of the reference annex :	TOC_ITM_Peru_22-26
Title of the reference annex :	RA_ITM_Peru_22-26

Comments on activities, targets groups and beneficiaries

Submitted by Ambabel-Peru on Sat, 10/30/2021 - 00:37

Quantification of target groups

Can you provide any quantified targets?

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:34 in reply to quantification of target groups by ambabel-peru

Quantification of target groups

This Programme will target at least 8 academic and health institutions, including Universities, Tertiary care hospitals, Reference laboratories and Disease control programmes across Peru, aiming to prioritize those located in regions other than Lima (cf. Leaving No One Behind). Our target is to establish a research partnership or training partnership with 3 institutions during the first 3 years and a total of 8 institutions by the end of the 5-year Programme. Examples of the proposed target Institutions:

- National Tuberculosis Programme, Ministry of Health (National level, Peru)
- Peruvian National Health Institute (National level, Peru)
- Hospital Belén, Ministry of Health (MoH; La Libertad)
- Hospital Antonio Lorena, Ministry of Health (Cusco)
- Universidad Nacional San Antonio Abad del Cusco (Cusco)
- Hospital Santa Gema, Ministry of Health (Loreto)
- Hospital Regional Lambayeque, Ministry of Health (Lambayeque)
- Hospital Nacional Adolfo Guevara Velasco (Cusco)
- Universidad Nacional Toribio Rodríguez de Mendoza (UNTRM; Amazonas)
- Prevention and control of Metaxenic and Zoonosis diseases Direction, Ministry of Health (National level, Peru)
- Regional Direction of Health (DIRESA; Loreto)

We estimate that this programme will directly benefit approximately 260 researchers/health care personnel. Following a decentralized approach, our goal is that the proposed educational and research activities will reach scientists, researchers and healthcare personnel from regions outside Lima, especially the Andean and Amazon regions prioritizing those actively involved in health services. The estimate of 260 individuals is based on:

- 40 researchers/healthcare personnel trained through different short courses (20 women and 20 men).
- 20 graduated students from the Master in Infectious and Tropical Disease Control (MCEIT) programme at least 10 of them being from regions outside Lima (5 women and 5 men).
- 200 attendants to the international colloquium organized by ITMAVH (striving for a gender balanced attendance).

This estimation takes into account only those individuals directly benefited through a DGD scholarship for the proposed training. It is important to mention that by strengthening our education office and improving our education platforms, a larger number of individuals may benefit indirectly by receiving high quality training at ITM AVH.

Description of the Relevance

This multidisciplinary programme aims to contribute to the SDG 3 of ensuring healthy lives and promoting well-being for all, by driving better prevention and control of infectious diseases in Peru and Latin America, and therefore reducing the burden of prevalent infectious diseases and increasing the preparedness to respond to potentially new or emerging infectious diseases threats in our region and globally.

The COVID-19 pandemic has highlighted the fragility of our health system and the inequalities that exist in terms of health care

access and quality between different regions of Peru and between different countries in Latin America. Consequently, our programme gains relevance because our activities and short-term objectives are focused on building capacity (through implementation of new platforms and education) and establishing and strengthening key partnerships, following the principle of LNOB. As such, we propose to expand the reach of our educational programs to train researchers and health care personnel from different regions of Peru, prioritizing those with less resources and training opportunities, contributing with the SDG 4. Moreover, we aim to also contribute to the SDG 5 of achieving gender equality, by ensuring that at least 50% of the targeted individuals and beneficiaries (researchers and health care personnel) of this programme are women. By achieving this, we will contribute to ensure women's effective participation and equal opportunities for leadership at all levels of decision-making in the health sector of Peru and Latin America.

Because the pandemic made evident to the general population the shortcomings of our health care system, it has resulted in a strong political and popular willingness to consider the improvement of our health care system as a national priority. This unprecedented scenario has the potential to drive a significant change, if the public sector and the academia engage more with sustainable interventions that do not only rely on financial support but also by on human resources, governance and institutional arrangements.

Our partnership with ITM has gradually moved from an initial phase where emphasis was on institutional capacity strengthening towards a subsequent phase with emphasis on institutional collaboration. As such, our partnership constitutes a successful example of Switching the Poles, with IMTAVH researchers now identifying the health priorities for our country and proposing research projects to address these problems through South-South and triangular collaboration with ITM partners. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed.

The present programme is strongly linked to the 6 strategic goals of the JSF HES4SD. Fundamentally, this programme proposes to strengthen the capacities of IMTAVH (SG 3; (cf. involved actors JSF page 24-25)) by expanding its research and education capacities, through the development and implementation of new research and educational platforms (ToC, sphere of control), in order to enable IMTAVH as a real driver for change (SG4). The programme will also increase the capacities of individuals (Strategic Goal (SG) 1). More specifically the programme will strengthen the capacities of researchers and health care personnel from different regions of Peru and Latin America (cf. involved actors JSF page 24-25) through different educational and training activities.

The educational approaches proposed build upon IMTAVH experience and ITM collaboration, and specifically in the 2020-2021 experience of remote teaching for undergraduate and graduate programs as well as short courses, forcibly implemented with the pandemic. Specifically, the Master in Disease Control (MCEIT), the UEM course and the AIM course, to be transformed in these 5 years, have societal change as their ultimate objective. As mentioned before, following the principle of LNOB, special efforts will be made to offer these training opportunities across different regions of Peru and Latin America, contributing to ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all (SDG4) and contributing to close the gender gap among scientists in Peru (SDG5). By increasing the individual capacity of individuals involved in partner organisations and stakeholders, we aim to increase their potential to be agents of change (SG 2), by applying their newly acquired knowledge and skills. In becoming change agents, individuals may assume responsibilities and act as committed global citizens.

The first four strategic goals significantly contribute to Co-creation, transfer and application of relevant knowledge (SG 5). As research does not automatically lead to knowledge utilisation/uptake this programme will give specific attention to this goal by integrating specific strategies to "Get Research Into Policy and Practice (GRIPP; SG6)". One important strategy is to align our research and educational plans and activities to current national and global efforts to end other emerging health threats. This strategy is especially important considering the negative impact that the pandemic has on the prevention and control of these diseases, due to the disruption of control programs, especially in LMIC. For example, in Peru there has been a reduction of notified cases of malaria in the year 2020, which could mean a sub registry and lead to a deficient control and subsequent rise in mortality. (CDC Perú, 2021)

Specific national and international programs to which our activities will complement are:

- National Plan to combat antimicrobial resistance, which is aligned to the Global Action Plan on Antimicrobial Resistance (WHO/PAHO)
- Malaria Zero plan, which is aligned to the Global Malaria Action Plan (WHO/PAHO)
- Global Plan for Insecticide Resistance Management (WHO)
- WHO Global Tuberculosis Program objective of strengthening surveillance systems and use of routine data for action, END TB strategy
- Global efforts to improve articulated genomic surveillance and data to action
- Integrated Management Strategy for Arboviral Disease Prevention and Control in the Americas (PAHO)

The intersection between human infections, the environment, animals, and the social context is cross cutting to the IMTAVH objectives and research initiatives and this is reflected in this multidisciplinary collaborative proposal. Peru's extensive and varied geography makes it susceptible to climate change events and potential emergencies of new infectious diseases that can pose a local or global health threat. Advances in genomics and bioinformatics have transformed infectious disease epidemiology in the last decade and have been proofed to be key tools in the response to emerging health threats. Since 2018, we have incorporated whole-genome and amplicon sequencing methods in our research on malaria, AMR, TB, and SARS-CoV-2. We now aim to establish an NGS and bioinformatics core facility at IMTAVH to further support ongoing study areas at IMTAVH, promote training in bioinformatics, and trial new sequencing technologies, to ultimately, generate robust genomic evidence to support local and global surveillance programs, better inform control strategies and improve our preparedness to emerging health threats.

Description of Coherence

The present five-year programme is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP.

Within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health-related Research involving Humans (2016). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect of this last aspect, any research undertaken also needs to adhere to GDPR principles.

UPCH institutional strategic plan was reformulated in 2020, due to COVID-19 pandemic, including 10 strategic objectives aligned with the SDGs and the UN agenda. This programme fits within this new strategic plan and it will complement other ongoing projects in collaboration with ITM and University of Antwerp (UA). VLIR TEAM & JOINT projects, both have academic and research activities related to malaria in native communities in Loreto and are also intended to establish a national network on molecular epidemiology of infectious diseases, including now SARS-CoV-2 (P. Tsukayama and S. Chenet from Amazonas). This project set up the basis for the Malaria consortium and the NGS core at IMTAVH that will be strengthened within this programme and will look to complement global efforts for genomic surveillance and data to action.

Other projects in line with this programme are (i) NIH-D71, 2-year grant to plan and develop a Master in Science for medical students (M. Montes). It is directed to a different audience but will look for collaborative activities with MCEIT. (ii) NIH-U19, International Center of excellence for malaria research (D. Gamboa) oriented to understand residual malaria in Peru-Brazil. This program will support malaria field work activities. (iii) CAPES: Implementation of a sentinel surveillance laboratory for arbovirology in the armed forces hospital with exchange of technical-scientific cooperation in teaching & research with the Institutes of Biological Sciences and Tropical Pathology of Public Health of the Federal University of Goias-Brazil.

The research and educational projects within this programme will continue supporting the Malaria Zero plan (aligned to the Global Malaria Action Plan (WHO/PAHO), the Global Plan for Insecticide Resistance Management (WHO), the Global Action Plan and National Plan on Antimicrobial Resistance, the Integrated Management Strategy for Arboviral Disease Prevention and Control in the Americas (PAHO) and the WHO Global TB Program objective of strengthening surveillance systems and use of routine data for action. The Peruvian Ministry of Health, the Regional Directions of Health (DIRESAs) from Loreto, Amazonas and Lambayeque are key stakeholders and our main local partners allowing access to communities, hospitals and reference laboratories to collect data and/or samples and to validate/implement the tools that will be developed within this programme. Within this programme our activities will look to establish complementarity and collaboration with the Global programme on education (Alliance) and the thematic global network on health, climate change and urbanisation.

Description of Effectiveness

This programme has several ambitious goals. To monitor the advance and impact of our programme, we have carefully crafted quantitative and qualitative indicators that measure not only the completion of the proposed activities, but the impact of those on the desired mid-term changes. We strongly believe that our current capacities and strong expertise will allow us to contribute to the needed change in control of infectious diseases in Peru and Latin America.

This programme will contribute to education and research improvements in Peru and Latin America. To achieve both goals, we have proposed to develop platforms that will leverage the expertise and assets of IMTAVH. In terms of educational platforms, we will measure our progress with qualitative indicators that will be helpful to monitor the development and implementation of standardized procedures for the realization of high-quality educational programs and a Digital platform for course registration

and alumni follow-up. Each of these platforms will build up on existing work and structures, to strengthen them, institutionalize them and expand its impact. The proposed activities and baseline indicators are based on an analysis of strengths, weaknesses, opportunities and threats of the IMTAVH educational goals. We expect to reach these platform development results based on the joint experience of the IMTAVH and ITM and the support of the Office for Education at IMTAVH. The Office of Education has been strengthened in recent years, with a direct impact on an increased number of courses and educational programs given by the IMTAVH, both degree seeking, short trainings, workshops and webinars, and an expanded network of collaborators, alumni and potential future students, that receive mailing lists with educational opportunities. This Office is currently composed by a part time leader and a part time officer, we propose to strengthen it by having a full-time experienced officer to warrant the success of our proposed activities.

The Office for Education will work closely with researchers to develop each of the proposed educational projects. Through distance and blended educational initiatives, we aim to train 30 female and 30 male professionals who hold an active role in Peruvian health services and programs, as well as 7 female and 6 males in the Master in Infectious Diseases Control with diverse backgrounds, adhering to the principle of Leaving No One Behind and paying special attention on regions beyond Lima, the capital of Peru, where most of this kind of training is unfortunately centered. The IMTAVH's robust and successful experience in training has resulted in a vast number of alumni from all over the world, the Latin American region and Peru, who will be convened to recruit and select the most appropriate trainees for each course, based on their work in health programs, and their potential as agents of change. Furthermore, the platform development to increase the quality of our educational programs and a strengthened follow up of alumni will synergize with the educational activities to reach our goals. We aim to train one PhD candidate in molecular epidemiology, as we have already done in the past. PhD graduates from previous programs are now leading the research units and have become agents of change, as a result of the training they received.

In order to be able to lead policy changes and implementation, our research demands the utmost integrity and rigor for it to lay the foundation of change. Due to this, the IMTAVH and its members are fully committed to strengthening both research integrity and ethics practices, striving to reach a mass of at least 80% of main and associate researchers that are trained in these fields. Furthermore, these activities will be aligned to our institutional agenda, allowing it to embed in our research culture and ensure a long-term change.

Our mid-term goal of improved research practices aims to specifically expand our research capacities to address knowledge gaps and implementation gaps that are important for infection control and surveillance strategies in Peru and Latin America. In that sense, we propose to expand the use and capacity of NGS in Peru to produce genomic surveillance data that supports public health decisions and response to health emergencies.

For this, the different research units have set up the milestones to develop/validate genome sequencing protocols in their research activities and base on the previous experience and, having a NGS core facility, we can optimize our resources and reach these goals. In addition, we will keep strengthening the human resources in NGS techniques, bioinformatic and the use of pipelines for analysis and interpretation of data for Genomic surveillance expanding our research capabilities at IMTAVH together with our collaborators.

To start with this, in 2020 the IMTAVH signed a specific agreement to collaborate with UNTRM on Genomic surveillance of SARS-CoV-2 and other research institutions including the Peruvian national institute of health (INS). In addition, activities from one of the research units are part of a consortium recently established that includes the main institutions in Peru (UNTRM, UNAP, NAMRU6, UPCH, INS, MOH) with collaborators like University of Antwerp, Temple University, CDC-USA, Pasteur Institute, among others as startup of NGS milestone. This partnership will allow a fluent exchange of lab protocols, scalable and improve sample-to-answer workflow solutions, analysis pipelines for quality control and/or further validation.

Research Projects objectives and expected results will be achieved on time because of IMTAVH and ITM partners are well assembled through many years of past collaboration. Furthermore, most activities here proposed were build up on previous collaborative research. Another remarkable aspect within the ToC framework is that expected results will be applied for both better prevention and effective control measures against studied diseases. Molecular epidemiology and cutting edge but affordable technologies will be applied to clinical and epidemiological research of relevant diseases to Peru and LATAM region. A considerable proportion of beneficiaries belong to populations with less economical resources and who are more seriously affected by infectious diseases. Furthermore, diseases like malaria, dengue and leishmaniasis are prevalent in rural areas or semi-urban settings where current diagnostic procedures cannot be deployed because lack of specialized human and equipment resources. On the other hand, resistance of pathogens to antibiotics and other drug treatments present in TB, intrahospital bacteria and malaria is an increasing problem that demands a short time to implement rapid control measurements in vast geographic areas. The population genomic approach using NGS and bioinformatics will render considerable amount of information to propose effective control strategies in short time. The entomology component will use a similar approach to understand the insect vectors population dynamics concerning insecticides resistance spread. The climate change is relatively a rapid process that requires this high throughput data generation technology to foster rapid reaction of governmental health authorities.

The proposed activities to get research into policy and practice (GRIPP), build up on experiences and lessons learnt from

previous years and from previous framework agreements. The IMTAVH has a high and increasing scientific productivity and educational reach and its researchers have an active participation in policy advising in infectious disease. Nevertheless, the specific activities proposed aim to expand the impact of these assets with formal training of IMTAVH members in communication and policy briefing, and standardize and professionalize the development of policy briefs for all scientific publications by IMTAVH members. To reach these goals, we will liaise with experts in communication and policy briefing and with policy makers to organize practical workshops in which these skills are developed.

The uptake of evidence in health guidelines in Peru has expanded in recent years, and the Grading of Recommendations Assessments, Development and Evaluation (GRADE) approach is established as the method to develop guidelines at the Ministry of Health and the Institute of Health Technology Assessment has expanded substantially. Therefore, research is used as input to develop policies, and in recent years IMTAVH has contributed with published evidence to the development of several guidelines. Therefore, we expect this will continue and that the research will contribute to the design and implementation of evidence-based policy in infectious diseases programs.

As per July 2021, five IMTAVH members are appointed to different advisory boards at the Ministry of Health. We expect this interaction of researchers and policy makers will continue and improve in time. The current political instability in Peru, constitutes however an important risk. Therefore, we are proposing a conservative target of increasing to a total of 7 members being appointed to different national or international advisory boards.

We aim to substantially increase our synergies beyond UPCH, with other academic and research institutions in Peru and Latin America. For this, at least five researchers, representing different fields of expertise each one will attend regional conferences to discuss research problems or to explore new initiatives that should lead joint proposals on priority topics that affect several countries, including malaria, tuberculosis, antimicrobial resistance, leishmaniasis and arboviruses. Once identified potential collaborative research projects, our strengthened Office of Research will search for funding opportunities, either to foster scientists' mobility or to elaborate for multiple partners in Peru and Latin America. We expect to submit at least two joint proposals with other partners and to publish at least two manuscripts with other partners. Furthermore, we will organize two international colloquiums where research findings will be presented and top priority public health and scientific topics will be discussed. We will invite Peruvian and Latin American researchers, policy makers and other stakeholders to participate both as presenters as well as attending the conferences. We expect that through these strategic activities, our synergies and networking will be expanded. We expect at least 100 participants in each colloquium. The IMTAVH is successful in organizing such events, in addition to hosting a ITM colloquium on Neglected Diseases in 2012, we organized an international course on TB and HIV for the 50 years of the institute with over 100 participants each, from multiple regions in Peru and other countries in Latin America.

To closely monitor the effectiveness of our programme, an internal reporting of the progress will be shared, presented, reviewed and analyzed on annual basis together with all the programme members.

The thematic JSF HES4SD identified 3 common approaches which are all relevant for the programme: the JSF (1) as it will contribute to academic inspired and science-driven societal change, our programme (2) as a more operational approach to delivering on the JSF's ToC, and (3) collective learning processes, synergy and complementarity with a variety of actors, instrumental in achieving the outcomes and impact. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

Our proposed activities are integrated and synergized with other ongoing research projects, educational activities and institutional goals that will contribute indirectly to alleviate the financial burden of the proposed interventions.

The Research Units plan to implement their activities looking for an efficient use of resources in the field and lab activities, and considering the investigators and staff's time. In order to optimize the use of resources, we plan to strengthen the Research and Education Offices by allocating a budget to strengthen the support to the different educational activities embedded in this program.

A common activity among the different research units is to incorporate genomic and bioinformatic tools into their projects. The institute needs to fill the skills and knowledge gaps of persons trained in this area. Currently, the NGS core facility relies on a young investigator, who is also conducting its own research group. By incorporating a PhD student to work on a research project in this area (Malaria Molecular genomic epidemiology), we will reinforce this core and guarantee its sustainability. Additionally, the training of 2 master students on bioinformatic analysis -sponsored by side-projects- will provide additional support to this core by assisting to the different activities involving NGS. The allocated budget in this Core is essential for the robust development of bioinformatics at IMTAVH with a long time frame and increased capacity that will give strong returns on investment. The successful experience from the Unit of Molecular Epidemiology is proof that .

The inclusion of PhD students in past and current programmes supported by DGD has strengthened the research capacity in the different research units and laboratories, finally translated into institutional growth measured by grand submission and publications. The opportunity to have a program funding the training of human resources is very valuable and fundamental to generate and expand research innovation and development, that is aligned with the institute's strategic objectives and projects for the 2020-2024. The training of young investigators and their later incorporation as staff of the IMTAVH have resulted in the growth in innovation and technology transfer of the institution.

Another important portion of the budget is allocated to scholarships with an emphasis on assigning them to applicants from different regions in Peru. We strongly believe that highly trained researchers can become key agents of change. While funding mobility represents an extra cost, we believe this is extremely cost/effective, as it will be oriented to enable participation of researchers from other Peruvian regions that usually have less access to high-quality advanced education, thus contributing to improve education equity.

Strengthening the quality and scope of the MCEIT and IMTAVH courses is likely more efficient than training in masters abroad, a commonly preferred option, but also more expensive than local training. A main advantage is that this allows people to not leave their jobs during the training. Having a high-quality master in infectious diseases in Spanish, delivered with distance education with regional reach is a priority for a more efficient spending in education by providing anytime anywhere training to bridge the educational gap in respective regions and nations. From the institutional perspective this is very important because it incorporates Scientists, Biologists and Doctors who return to the Faculties and IMTAVH network, contributes to the Teaching Program as an important strategic objective of IMTAVH, gives greater visibility to the Institute and broadens the network of professionals at the national and regional level.

Description of the expected Impact

We expect to impact on the health and well-being (SDG3) of the Peruvian and Latin American Population by improving diagnosis and treatment of the most common and important infectious and tropical diseases in Peru and Latin America, reducing the burden of prevalent infectious diseases and increasing the preparedness to respond to potentially new or emerging infectious diseases threats in our region and globally. Proper and early diagnosis as well as adequate management of these infections decreases the risk of complications and death associated with them. An additional impact on SDG3 is through better prevention and control of infectious and tropical diseases prevalent in the region. To reduce the burden of these infections we will establish a network of collaboration with UPCH as a regional hub of research and education. Learning from the current COVID-19 pandemic we highlight that the main impact of the current proposal is to increase the preparedness to respond to potentially new or emerging infectious diseases threats in our region and globally.

Aligned with the JSF principle of **Leave No One Behind**, our proposed activities aim to prioritize institutions and individual groups from regions of Peru that might have less access to education and training and highest risk for transmission of several infectious diseases, with the aim to also contribute to the SDG4 to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. In Peru and Latin America there is an important gap in gender equality among scientists and researchers. According to the UNESCO Institute for Statistics, 28.8% of women are employed at the scientific sector. Within our institution, we are closing this gap. With our proposed Program we aim to contribute to achieve gender equality and empower female researchers (SDG 5) across Peru and Latin America to become drivers of change and role models for girls in their own regions.

Comments on description of the expected impact

Submitted by Ambabel-Peru on Sat, 10/30/2021 - 00:38

Expected impact, and scale of the intervention

Can you provide greater detail on how you aim to maximize scale and impact of your research and teaching results?

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:37 in reply to expected impact, and scale of the intervention by ambabel-peru

Expected impact, and scale of the intervention

By placing an emphasis on regions for all training programmes including the MCEIT, we aim to **maximize the scale of our educational results** to all the country, far beyond Lima where most educational opportunities are usually offered. By training future disease control leaders as well as researchers, from other institutions and in particular public institutions, the benefit of the training goes to a larger population. In the 2021 edition of the Master (MCEIT), we already have 10 students from regions outside Lima (4 from regions in the jungle of Peru, 5 from Andean regions and one from a coastal northern region). Furthermore, 14/25 candidates work in the public sector, in posts where they can directly apply the learning and transfer the knowledge acquired to their peers. The intention in the following years is to continue and consolidate this trend.

To **maximize the impact of our teaching results**, we propose to focus our training programmes on: i) infectious diseases that are considered health priorities in Peru and Latin America, such as tuberculosis, antimicrobial resistance, leishmaniasis, malaria and arboviruses; and ii) research methodologies that have an important potential to leverage research in Peru and that currently have very limited training opportunities in our country. For example, we plan to provide training on molecular epidemiology/genomics/bioinformatics applied to research of infectious disease

following previous activities done in 2019 financed by VLIR-UOS in Loreto ([EBQ course](#)), Arequipa ([EPONGE workshop](#) in collaboration with ITM researchers) and Lima ([NGS and Bioinformatics for Malaria research and surveillance in Peru](#) in collaboration with ITM researchers). In 2020/2021, UPCH established a system for genomic surveillance of SARS-CoV-2 using Illumina technology to support the national COVID response strategy, and later trained collaborators in the Amazonas (Universidad Nacional Toribio Rodríguez de Mendoza, Chachapoyas) and Arequipa (Universidad Nacional de San Agustín) regions on these methods, leveraging available Illumina sequencers in their laboratories. Together, we have sequenced 1000+ viral genomes from these regions and contributed to the urgent necessity of genomic surveillance of SARS-CoV-2 during the pandemic. In the years to come, we plan to scale this genomic surveillance network to additional partners and pathogens.

To **maximize the scale of our research results** we will strengthen research capabilities of external target institutions where we have started collaborative networks through the 2017-2021 programme and that have both research infrastructure and human resources to be empowered to become autonomous scientific investigators (Cusco, Loreto). This process will permit us to gain expertise on how to conduct capacity building outside our institution and will allow us to later scale this effort to other target institutions (Amazonas, Lambayeque, La Libertad).

To **maximize the impact of our research results** we will increase the knowledge and skills of our researchers on policy briefing and translating research results to policy. For the first time, we will offer short courses on policy briefing and GRIPP to researchers at ITM, to formally train them on these skills, which will increase the impact of their research findings. Furthermore, we will further develop our capacity of interacting and collaborating with disease control programmes and health directions from protocol development to study results dissemination and interpretation.

For example, in the area of Antimicrobial Resistance, building on our recent research results, we plan to establish a collaboration with the Peruvian National Health Institute to implement a nationwide quality assurance programme to improve the quality indicators of blood culture processing, which could benefit patients across the country.

On the other hand, our proposal includes translational research projects that aim to validate and implement point of care diagnostics of highly relevant infectious diseases such as Leishmaniasis and Arboviral infections in high-burden areas, where the impact of early implementation and training on novel diagnostics can have a biggest impact.

In addition, we plan to maximize the scale and impact of the Peruvian activities by establishing synergetic partnerships via ITM's thematic global networks (Alliance; data for action; climate change, urbanization and health) and via other academic collaboration programmes such as those supported by VLIR-UOS.

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:35

Expected impact, and scale of the intervention

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To **maximize the impact of our teaching results**, we propose to focus our training programmes on: i) infectious diseases that are considered health priorities in Peru and Latin America, such as tuberculosis, antimicrobial resistance, leishmaniasis, malaria and arboviruses; and ii) research methodologies that have an important potential to leverage research in Peru and that currently have very limited training opportunities in our country. For example, we plan to provide training on molecular epidemiology/genomics/bioinformatics applied to research of infectious disease following previous activities done in 2019 financed by VLIR-UOS in Loreto ([EBQ course](#)), Arequipa ([EPONGE workshop](#) in collaboration with ITM researchers) and Lima ([NGS and Bioinformatics for Malaria research and surveillance in Peru](#) in collaboration with ITM researchers). In 2020/2021, UPCH established a system for genomic surveillance of SARS-CoV-2 using Illumina technology to support the national COVID response strategy, and later trained collaborators in the Amazonas (Universidad Nacional Toribio Rodríguez de Mendoza, Chachapoyas) and Arequipa (Universidad Nacional de San Agustín) regions on these methods, leveraging available Illumina sequencers in their laboratories. Together, we have sequenced 1000+ viral genomes from these regions and contributed to the urgent necessity of genomic surveillance of SARS-CoV-2 during the pandemic. In the years to come, we plan to scale this genomic surveillance network to additional partners and pathogens.

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On the other hand, our proposal includes translational research projects that aim to validate and implement point of care diagnostics of highly relevant infectious diseases such as Leishmaniasis and Arboviral infections in high-burden areas, where the impact of early implementation and training on novel diagnostics can have a biggest impact.

In addition, we plan to maximize the scale and impact of the Peruvian activities by establishing synergetic partnerships via the FA5 thematic global networks (Alliance; data for action; climate change, urbanization and health) and via other academic collaboration programmes such as those supported by VLIR-UOS.

Description of Sustainability

The IMTAVH belongs to the Universidad Peruana Cayetano Heredia (UPCH), a nonprofit private educational institution that depends entirely on its own sustainability. The university provides us only temporary financial support to onset initiatives or to cover funding gaps for ongoing projects or programs. Therefore, all activities to be adopted by the IMTAVH must be sustainable. The Platform Development and Education Project here proposed are sustainable because they obey a significant demand for specialized postgraduate studies from Peruvian professionals, among them those who will follow an academic career in universities. By law it is mandatory to have at least a MSc degree except for MDs to become a university professor, a fact that will ensure mid- and long-term persistence. Furthermore, the IMTAVH is well known for the quality and innovative educational initiatives. This program will enhance our capacity to provide the MCEIT master course and the NGS, bioinformatics and Molecular Epidemiology short courses to expand our teaching offer. Important contributions to IMTAVH young team members mobility and hardware, software and minor equipment will propel our current teaching and research units in those fields of knowledge. In addition, participation of scholars from different regions of Peru will expand our areas of influence. By experience we consider this approach a good one to build up new and long-standing collaborations. As a whole, IMTAVH visibility will be increased, attracting more opportunities for local funding. On the other hand, all considered projects are translational research that will work on public health problems that are of serious concern for public health both at rural and urban places. In addition, the results will be used by IMTAVH and ITM partners to apply for grant applications to research funding agencies. Results from our teaching and research activities will be effectively disseminated using an upgraded web page and other devices where scientific results use plain language to provide access to the general population. Society needs to understand our contribution to get public sympathy, which is a powerful backing to ensure continuous support. On top of that, international networking through participation of researchers from regional countries in molecular epidemiology courses or through international colloquia with participation of IMT partners will provide a remarkable support to sustainability.

ITMs partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programmes, and take it up a notch with each new cooperation. By taking into account the needs assessment, we ensure buy-in from both ITM and IMTAVH and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim is to reach the phase out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds.

More details on specific approaches to sustainability (financial sustainability, institutional sustainability, exit strategy) can be found in annex 'Responses December'.

Comments on description of sustainability

Submitted by Ambabel-Peru on Sat, 10/30/2021 - 00:39

Sustainability

Can you provide greater detail on how you envisage the social dimension of sustainability, which is required to ensure that research results do effectively translate into public health policy?

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:37 in reply to sustainability by ambabel-peru

Sustainability

We have had successful experiences with translating research results into public health policies in the area of Malaria, Tuberculosis and Antimicrobial resistance. Learning from these experiences we envisage a **multi-level social dimension of sustainability**, where we systematically orient our efforts to work and collaborate with **three lines of actors: front-line providers, regional decision makers, and central/national policy makers**.

For example, in 2014-2016 programme (FA3), the Tuberculosis component invited decision makers at the National Tuberculosis Programmes as co-authors of publications, while in the 2017-2021 programme (FA4), they were invited as co-investigators at an earlier stage, when research proposals were being drafted. This has substantially increased the impact of the component's research as it is better aligned with specific and current needs of the Tuberculosis programme. Training sessions to all Tuberculosis staff from research sites (health care centres where we conduct research) have been conducted at least annually by the IMTAVH Tuberculosis Unit. We plan to continue these training sessions to expand recent scientific knowledge among staff that does not routinely access published literature in English but does implement prevention and control activities on a daily basis. Similarly, we have identified hospitals in the jungle of Peru that would benefit from training in arboviral molecular detection or who could collaborate with the validation study of point of care diagnosis of Leishmaniasis. Building early collaborative relationships with **front-line providers** can provide important insights and it can also help with supporting translation of research into practice, as the end users have been actively involved in the validation of the test method.

An example of successful collaboration with **regional decision makers** is the case of the malaria research group. A strong relationship with the Loreto Regional Direction of Health (DIRESA) has been established since 2008. We will continue nurturing our close collaboration with DIRESA - Loreto. The open channel of communication with this stakeholder allows us to communicate our research plans and findings at least twice a year, which has served to strengthen their strategies or implement new ones based on the evidence gathered for the prevention and control of diseases, mainly malaria and dengue, which are the most prevalent in this region. In addition, these periodic meetings allow us to gather their research needs to support and/or improve their control strategies, and consider them when proposing our new research projects. It is also important to mention that the malaria research team has had also important experience collaborating with **central/national policy makers**, as they participated in the [Expert Advisory committee](#) of the Malaria Zero Plan (2017-2021), an initiative from the Ministry of Health to eliminate malaria in Loreto, that recently received the prize Malaria Champion of the Americas 2021 from PAHO for the work in [the municipality of Andoas, Loreto](#). We are currently participating as reviewers of the proposal "Elimination of malaria in Peru 2021- 2030" which would allow continuity to the actions that are developed in Loreto and extend to the rest of malaria endemic regions in Peru. Most of the evidence used for these plans came out from the research projects carried out by the malaria team within and outside FA4 in Loreto and we plan to support UNTRM and DIRESA - Amazonas to gather local evidence to be incorporated in the activities outlined in this new national plan.

We propose to leverage on these experiences replicating these successful approaches with other research components. Moreover, we envisage a more systematic and institutional approach to the different levels of actors, which could provide an important support to researchers to translate their research results into public health interventions.

Description of the Partnership Strategy

IMTAVH has long-standing collaborations with ITM that involve research projects in important infectious diseases, conducting complex health analyzes for a variety of projects, and supporting career development for more than 20 years. The last collaboration brought us different sights on how to write a proposal within the context of TOC under the support and coaching of ITM, a valuable experience to be used in the future. Platform Developments and Education projects will involve the concourse of both IMTAVH and ITM to provide their interdisciplinarity. On the other hand, collaborative Research projects outcomes will be important for planned GRIPP and Synergy activities. Furthermore, regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF process through the general council in which ITM's partners are represented and which discussed the thematic JSF process.

IMTAVH and ITM partnerships on educational programs started with researchers trained in master and doctoral ITM programs. Short postgraduate courses which are now annually issued in Peru were co-organized. The Master in Infectious and Tropical Disease Control at IMTAVH, received input and advice from ITM to redesign its curricula regarding disease control. Moreover, the experience in eco epidemiology, and mathematical models of infectious diseases are being taught at IMTAVH's master. Likewise, IMTAVH's experience in tuberculosis operational research has been shared by the Master at ITM and ITM. The programme will strengthen the quality of long-distance education, increase capacities in research ethics, reach students from regions beyond Lima and beyond Peru and formalize the IMTAVH alumni community.

The Molecular Epidemiology (ME) and Antimicrobial Resistance (AMR) courses require planning and execution by both partner institutions with different expertise to improve the education of participants from different regions of Peru. They will promote MoH health personnel participation and in the case of ME it will go further beyond because the course aims to attract young molecular epidemiology researchers from LATAM, contributing to networking strategy and sustainability

NGS and bioinformatics Platform Development Techniques will play a key role to promote the change. Both technologies have demonstrated to provide unsurpassed knowledge to understand infectious disease transmission. The ITM will transfer to IMTAVH genomic surveillance to promote novel tools that have outstanding performance when health emergencies occur. The IMTAVH's NGS and bioinformatics platforms will provide core support to other research and public health institutions working on infectious diseases.

On research projects, Leishmaniasis IMTAVH and ITM research teams have the longest standing collaboration back to the first DGD program. RDT developed in the previous programme will be deployed in Leishmaniasis endemic areas. The ITM know-how primary health posts interventions in different partner countries will be useful for diagnostic test validation. Chemotherapy

failure and parasite survival biomarkers will be explored assessing occurrence of LRV viroid diversity among infected patients and amastigote specific immune dominant biomarkers.

Malaria teams from IMTAVH and ITM collaborate since 2003, from basic research to field work including clinical studies, implementation research and human resources training at postgraduate level. The IMTAVH Previous programs were focused on looking for treatment alternatives, studying parasite genetic diversity, developing new “point of care” diagnostic tools and understanding the malaria reservoir. In this program we will incorporate NGS to understand/monitor changing transmission patterns (time-space) due to Malaria Zero Plan interventions. The MoH in Loreto is a key partner to access communities for data collection and/or sampling. We aim to establish the same partnership with other institutions from the amazon region.

Virology units from IMTAVH and ITM started the partnership with HTLV-1 research and extended it to the arbovirus research field. Research on arboviruses diagnostics, an expanding problem in Peru, has been performed in two hospitals located in the coastal and Amazonian environments. This collaboration will be reinforced through ITM technology translation to those hospitals to develop and validate diagnosis closer to the patients. Additionally, we will include NGS to search for infections caused by other novel arboviruses.

The Tropical Laboratory Medicine of ITM and the Antimicrobial resistance team have forged a limited but robust local network over the last decade. The two PhDs formed through FA programs will step forward from past collaborative research projects to GRIPP and joint educational projects to train the trainer in IPC, antibiotic stewardship and laboratory surveillance.

The IMTAVH ITM partnership will stimulate insect vector biology, transversal to several insect transmitted diseases. Personnel training at Antwerp and through e-learning with courses jointly designed to address relevant problems in Peru. The IMTAVH will implement theoretical and practical workshops to promote knowledge in Peruvian institutions. Networking will be promoted (Wageningen University, the Netherlands).

The IMTAVH and ITM TB teams generated knowledge on different aspects of tuberculosis and multidrug resistant tuberculosis prevention and control in Peru. The collaboration with the National TB Program rendered multiple joint publications and a study on the overlapping risk of tuberculosis and SARS Cov2 in Lima. The IMTAVH-ITM partnership will be expanded to the socio eco health unit at the ITM with the shared interest of understanding the social environmental and individual determinants of the high risk of tuberculosis existing in Peru.

Description of Synergies

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified here, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme. Existing synergies and potential future ones with different types of national and international actors will be sought at various levels. Without effective efforts to address the important determinants of health and to improve certain areas of disease prevention, we will face even greater challenges in managing ever-increasing demands to solve important aspects of different diseases in Peru. Synergy can benefit areas such as disease control, advocacy and ethics, including routine use of data to improve the information flow on simplified and standardized approaches in support of extending the benefits on common objectives as widely, equitably and efficiently as possible. While the research provides some examples of synergies between different actors and decision makers in infectious diseases, there is plenty of scope for developing these synergies further in the interests of improved research and even more health in Peru.

Where possible synergies with VLIR and ARES will be developed. The synergies with current VLIR projects have been established during the DGD program 2017-2021. At present it is impossible to define specific synergies with this actor, as VLIR uses another project logic, based on specific project calls during the execution of the DGD program 2022-2026. If opportunities arise, it is clear we can team up with VLIR, as has happened during the DGD program 2017 2021, but we cannot predict if, when, and how this can be implemented, as this depends on the call topics and geographic location of the grantees. As mentioned in our introduction text, VLIR and ARES cover many areas not linked to infectious diseases, and as a result we can collaborate only on a subset of their activities.

Synergies with disease control programs at the Ministry of Health (malaria, tuberculosis, antimicrobial resistance, others) and IMTAVH exist for several health problems and will be sustained and expanded in 2022-2026, as this has already resulted in scientific and programmatic contributions to improve the health of populations. Disease control program authorities and staff are always invited to participate in courses and workshops organized by the IMTAVH. Currently, 15 out of 28 students from the Master in Infectious and Tropical Disease Control are working in disease control programs or public hospitals and laboratories. Four of them receive partial scholarships from the IMTAVH and are mentored by IMTAVH researchers formerly trained at ITM.

Synergy between disease control programs and health facilities are necessary to access communities to collect data and/or

samples for specific research projects. Other collaborations start with the joint design of studies. These synergies are long standing and have resulted in joint publications supported by the previous programme and other projects in malaria, tuberculosis, antimicrobial resistance, among others.

Specifically, we will sustain existing synergies with the Regional Health Direction from Amazonas, a region in North Eastern Peru, having the local university as our main liaison; synergies with the Tuberculosis Program at national level and with two health directions in Lima; synergies with the Multisectoral Committee to combat Antimicrobial resistance, and the 15 tertiary care hospitals that were part of the VIRAPERU study supported by the previous programme.

Further synergies exist with other collaborators. The Malaria laboratory at IMTAVH has two projects funded by the Flemish Interuniversity Council (VLIR) (Team & Joint) with Universidad Nacional de la Amazonía Peruana as partner and one new project with UNTRM financed by the Peruvian National Council of Science. In the last 2 years the head of the Malaria Supranational Reference Laboratory from Peruvian National Institute of Health has participated in workshops/courses on Molecular epidemiology (wet/dry analysis) in Lima and at the CDC-USA (another partner from the Peruvian Malaria consortium). We meet regularly and he expressed interest in implementing these techniques at INS.

Synergy of the IMTAVH and the Belgian Embassy in Peru increased during the SARS Cov2 pandemic. The Belgian Embassy supported the Hospital Cayetano Heredia (public hospital of the Ministry of Health, with whom Universidad Peruana Cayetano Heredia has a teaching agreement, and where IMTAVH campus is located). Support was provided to a telemonitoring platform developed to monitor and follow up COVID19 patients that were seen at the hospital but did not fulfill criteria to be admitted. This platform was developed by IMTAVH and will be expanded in the future. IMTAVH experts provided expert advice on COVID19 prevention strategies and shared experiences with vaccination strategies in Belgium and Peru. This synergy with the Belgian Embassy allows us to be informed on activities by other Belgian actors, for potential future synergies and collaborations.

More details and examples:

Synergies are established with various institutes active in the health sector in Andean and Amazon regions. These include:

- Tertiary care hospitals in Lima and other regions (Hospital Cayetano Heredia, Hospital Belen de Trujillo, Hospital Regional de Pucallpa, Hospital Regional de Loreto, Hospital Antonio Lorena, Hospital Regional Lambayeque).
- Universities from the Andean and Amazon regions (Universidad Nacional de San Agustín, Arequipa; Universidad Nacional San Antonio Abad del Cusco; Universidad Nacional Toribio Rodríguez de Mendoza, Amazonas).
- Reference laboratories and Disease control programs (National Tuberculosis Programme, Peruvian National Health Institute, Prevention and control of Metaxenic and Zoonosis diseases Direction; National Multisectoral Committee for Antimicrobial Resistance, Regional Direction of Health in Loreto).

Scholarships and student support are just means to an end, rather than the final goal of the intervention. By capacitating health sector professionals from neglected affected regions in our education programs, we aim at a more productive collaboration with institutes in Andean and Amazon regions. This is in support of applying generated knowledge in health (SG5), and linking with a healthier and happier population (SG6). The direct student support is therefore just a first step in the chain of the TOC.

Description of how individual or collective recommendations and lessons are to be taken into account

This proposal builds on extensive experiences and lessons learnt from previous programme, and earlier collaborations including those with other partners. The programme has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. As recommended, this programme gives particular attention to the valorisation of knowledge. Through its focus on “Getting Research Into Policy and Practice (GRIPP)” we will strive to maximize this aspect, and will also establish the preconditions to learn more about the best possible strategies to achieve this, a.o. through indicator development, and as main topic of the mid-term evaluation in 2024. An important lesson learned from the previous programme is that early partnership with policy makers significantly increases the possibility to get research into practice. This partnership can take different forms (*i.e.* formulation of research questions together, support with training, participation or researchers as technical consultants in national and regional committees). This has proven beneficial for different research groups such as antimicrobial resistance, tuberculosis and malaria. During this proposed programme we expect to expand the implementation of this strategy to all the research groups, by establishing a more coordinated institutional effort to initiate and support partnerships with stakeholders and policy makers. Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

During the previous programme, the COVID-19 pandemic taught us that unexpected challenges can present throughout the implementation of a 5-year programme, and that flexibility is a valuable asset for an institution, research group, and even research or educational project. Given the political uncertainty that now is present in Peru, we believe it is important to maintain a certain degree of flexibility in the planning of our activities for the present programme.

During this period of uncertainty, the cohesion between research groups within the IMTAVH significantly increased, as we were all rowing in the same side. The benefit from this stronger cohesion has surpassed the COVID-19 problematic, resulting in important proposals for institutional growth. To replicate this positive interaction, we propose to maintain periodic meetings where all the responsible researcher for each component presents the progress made, reports challenges and receive feedback from the group. We also propose to maintain the annual IMTAVH-ITM meetings, where progress and indicators for research and education are reviewed. Areas for improvement, synergies and new initiatives will be proposed during this meeting. Indicators will be reviewed continuously and actions will be taken early if risks or potential risks occurrence is identified.

Comments on description of how individual or collective recommendations and lessons are to be taken into account

Submitted by Ambabel-Peru on Sat, 10/30/2021 - 00:40

Lessons learned, individual and collective

Can you further explore which lessons you learned from the 2017-2021 cycle, with particular regard to translating research findings into public policy and protocols, in an effective manner? Which processes did not unfold as you had planned and, self-critically speaking, what will you do differently in the future 2022-2026 period?

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:43 in reply to lessons learned, individual and collective by ambabel-peru

Lessons learned, individual and collective

There have been multiple lessons learned in the 2017-2021 cycle. We have now switched from a disease focused approach to an institutional goals-oriented approach to increase interaction between components and thus the impact of our research findings.

Despite several successful PhD candidates trained in the 2017-2020, some were not, and we have now switched to a single PhD candidate. Also, now we request to fund a larger number of local (IMTAVH, UPCH) master scholarships, as this will not only provide opportunities for top candidates throughout Peru, but it will also improve the quality of the master, which impacts not only those who receive scholarships but all master students.

In the 2017-2021 period we also identified we had strengthened international partnerships, but our collaboration with other national and Latin American institutions is still limited. The regional (within Peru and within Latin America) and inter-institutional focus of our current programme proposal, will provide opportunities for new partnerships. For example, we will aim to present preliminary study results not only in international conferences in Europe and North America but also in those conducted in Latin America.

On the other hand, the impact of translating research into MoH policies were achieved with different success rates. Some disease components like AMR, malaria and TB were able to reasonably advance on their initiatives to contribute to national policies. In contrast, the leishmaniasis and virus components made research advances but they did not reach yet the expected policy impact. The health system disruption caused by the pandemic is one explanation for this lack of expected results that comprised field work activities in collaboration with health centres in disease endemic areas. The risk analysis made at the initial stage did not anticipate such a situation. In this programme it will be important that each of these components look for a more institutional approach to the MoH responsible for these important public health problems.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
RA_ITM_Peru_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Peru_22-26_0.pdf
TOC_ITM_Peru_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Peru_22-26_0.pdf
FACTSHEET_ITM_Peru_22-26_IMTAVH	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Peru_22-26_IMTAVH%E2%80%AF%20.pdf
Responses_December_Peru	Other	https://fundhub.openaid.be/sites/default/files/2022-04/Responses_December_Peru_UpdateMarch.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The total budget of the Peru country programme is 1.675.728,25€ of which a 35,03% has been allocated to ITM, 63,19% to the local partner IMTAVH and the remaining 1,78% to LOC@ITM. The budget has been developed based on the Results and its activities. Each activity has been budgeted according to the category or categories by the nature of the expense and it has been projected for the five years. The budget is composed of A3-Investment costs (=1,78%), B-Salary costs (=54,14%) C1-Operating costs (=24,06%), C2-Travels (=5,12%) and C3-Grants (=14,90%); the Grants correspond to a PhD scholarship on molecular/genomic epidemiology, as well as Scholarships for MCEIT Students and other courses offered by the IMTAVH. We also have an equipment cost in 2022. Regarding personnel costs, we have included two Senior personnel who will strengthen our Research Office to facilitate our GRIPP and Network & Synergy activities, and laboratory and fieldwork personnel as well as the administration procedures on Research Projects. All the costs are grouped by Budget Units, which summarize the costs by types of expenditure for every year.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym IMTAVH

Full name Instituto de Medicina Tropical Alexander von Humboldt of Universidad Peruana Cayetano Heredia

Budget available

2022	2023	2024	2025	2026	TOTAL
236963,40	295990,40	265965,40	233661,40	125499,40	1158080,00

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Comments on budgetary information

Submitted by Ambabel-Peru on Sat, 10/30/2021 - 00:43

Theory of change

Can you further explain how this model will respond to the central problem statement framed as: "despite reaching a robust critical mass of scientists involved in research and teaching, it faces limitations to translate its research into national guidelines, protocols and measures."?

Can you further explain how the program will capitalize on opportunities, and neutralize negative trends and blocking actors? For example, the section on relevance (page 15) refers to "Because the pandemic made evident to the general population the shortcomings of our health care system, it has resulted in a strong political and popular willingness to consider the improvement of our health care system as a national priority. This unprecedented scenario has the potential to drive a significant change..." It is relevant to explore this into further detail, however, the current document does not do so.

Submitted by ITG-IMT on Wed, 11/10/2021 - 14:47 in reply to theory of change by ambabel-peru

Theory of change

Question 6 a (referring to the Theory of Change): Can you further explain how this model will respond to the central problem statement framed as: “despite reaching a robust critical mass of scientists involved in research and teaching, it faces limitations to translate its research into national guidelines, protocols and measures.”?

The FA5 (ITM 2022-2026 programme) model implies a substantial change with respect to previous programmes because Institutional effort and support will be oriented to implement research-to-policy objectives. Moreover, proposed teaching and promoting health policies requires a concerted institutional approach where different disease-oriented research components concur. In fact, FA5 will expand our training to different regions of Peru, outside of Lima. This strategy will be possible thanks to FA3 (2014-2016)/FA4 (2017-2021) DGD programmes where PhD degrees were obtained in Belgium through the ITM Antwerp - IMTAVH research collaboration. In FA5, we will build up on this young doctoral new generation from FA3 / FA4 and other doctoral programmes, to promote development of future infectious disease researchers on diagnosis, prevention and disease control.

By training researchers in policy briefing and science communication skills we will bridge the limitations of translating research into practice. By providing institutional support to promote close interaction with decision makers and to advance collaborative initiatives, researchers will be better equipped to select priority questions to reduce the impact of infectious and tropical disease in Peru and the Latin America region.

Some examples of evidence generated by our research groups and that translated into policy and practice are depicted in the Malaria Zero Plan in Loreto and in the new plan “Elimination of malaria in Peru”:

1. The change in the use of rapid diagnostic tests (RDTs) based on research results that showed that some parasites were not detected due to their structural characteristics.
2. The active searches for malaria cases by microscopy that were done by DIRESA every 10 days, three consecutive times in the time of high incidence, are now done in the time of low incidence, thanks to a study that reported that it was more cost-effective to do it at low transmission season to identify the reservoirs (infected individuals but without symptoms and with low parasitaemia), this saves resources and logistics.
3. The issue of individuals infected with malaria but without symptoms and with very low parasitaemia reported by research projects, allowed modification of the diagnostic procedures: before the diagnosis of thick blood film was based on 100 microscopic fields, currently 300 fields are read before reporting a negative result for malaria.
4. Use of LAMP techniques to identify (and treat) asymptomatic low parasitaemia infected individuals using a community approach (looking for infected individuals in their communities).

As explained in questions 3 and 4, we are proposing a coordinated effort to facilitate the translation of research to policy across all our research components, using the successful experiences as guidance to create a more organized and institutional plan to support all research components. Aligned with this aim, is the proposal to strengthen our Research Office for GRIPP strategies, by recruiting a Senior personnel and a Research administrator that will support this effort.

Question 6 b (referring to the Theory of Change): Can you further explain how the program will capitalize on opportunities, and neutralize negative trends and blocking actors? For example, the section on relevance (page 15) refers to “Because the pandemic made evident to the general population the shortcomings of our healthcare system, it has resulted in a strong political and popular willingness to consider the improvement of our healthcare system as a national priority. This unprecedented scenario has the potential to drive a significant change...” It is relevant to explore this into further detail, however, the current document does not do so.

The COVID 19 pandemic brought an unprecedented awareness of the necessity of having more professionals with higher qualifications in epidemiology (including molecular epidemiology), capacity for critical review of the evidence and interpretation of modern diagnosis technologies. Media transmissions during the long lockdown familiarized a vast audience with biomedical terms and made clear that our country required a larger number of health personnel capable of achieving efficient communication to citizens. This is feasible only if health professionals understand and master modern health disciplines and technologies. This fact opens an opportunity where IMTAVH research and teaching strengths can meet the national demand for a large number of health professionals over a vast territory. Moreover, the leverage of long distance education via digital platforms and also the lessons learned to adequate teaching strategies to adjust to virtual learning has opened novel possibilities to cover larger audiences.

Despite past difficult times, another positive contribution was to enhance the social perception of scientific research value for

the benefit of society. We expect that national funding initiatives will increase to close the gap of the number of scientific researchers and technology professionals. The IMTAVH is a high quality standards research institute devoted to young scientists' education. We propose to use our experience to expand the number of scientists through close collaboration with recognized regional institutions. We are convinced that the international IMTAVH-ITM (Lima-Antwerp) collaboration can be translated and adapted to national partner institutions. The IMTAVH and the regional partners will coordinate to address the decision makers on higher education and science and technology policy makers to look for corresponding support.

Better Health and Wellbeing for all Cambodians

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Health and Wellbeing for all Cambodians		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-10-KH		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Cambodia		
Sector :	12382 - Health - Research for prevention and control of NCDs	Budget share :	20%
Sector :	12182 - Health - Medical research	Budget share :	50%
Sector :	12110 - Health - Health policy and administrative management	Budget share :	30%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

-

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone**Cambodia**

Lat/Long :	11.57939, 104.881447
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Outcome summary**Description of the outcome**

Although Cambodia is developing economically, its population needs better equal access to good quality health services. Since 1998, ITM has partnered with two disease focus institutions and one hospital-based research group. They have developed well, but the need to address underlying structural barriers to more application of evidence-based health policies is still an issue. Therefore, the focus for this programme will shift to the national Institute of Public Health (NIPH). NIPH is our partner since 2017 and has the formal mandate to advise the government on health policies. The Institute represents the Ministry of Health in providing public health and laboratory services, training and research. And is tracking UHC and SDG3 related indicators for the National Social Protection Council.

The aim of the programme is to contribute to better health and well-being for all Cambodians, especially the poor and vulnerable. We want to achieve this through:

1. Developing the capacity of the NIPH local partners. By improving technical skills, resource development and the capacity for quality research in health systems, quality of care and clinical research.
2. Increasing local expertise in getting research into policy and practice (GRIPP).
3. Informing policy development, which when applied, enables better,
4. Managing health and health system problems.

This will increase resiliency and capabilities and will promote sustainability of the Cambodian health system to deliver health services in response to challenges in ecosystems that affect human health. The COVID-19 crisis underlines the need to work closely with relevant stakeholders in the health sector (government ministries, civil society actors in health, the National Social Protection Council, national technical working groups) to strengthen the evidence base for outbreak prevention and control. Equity, climate change and urbanisation are traversal elements in the approach to contribute to achieving the SDG 2030 agenda.

Wording of the outcome

The impact will be better health, well-being and healthy behaviour, better access to affordable, quality health service and financial protection. It will show that NIPH delivers evidence-based knowledge and provides high quality education. As an intermediate result, the capacity to conduct quality research will improve, local expertise through high quality education will augment, institutional capacity in knowledge translation to inform health and social protection policies will strengthen.

Target groups

The target organisation is NIPH and its divisions: NIPH Laboratory School of Public Health (SPH), Health Systems Research Center (HSRC). NIPH counts 149 staff members, (48,3% women.) There are 328 SPH students (13,5% women). The aim is to have more admissions of female students and more provisions of equals access scholarships. The impact focuses on better health and well-being of vulnerable groups including women and children in rural and hard-to-reach areas (cf. section beneficiaries).

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
SDG :	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	SDT :	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	1
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	1
11. Children's Rights :	0
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Education

In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an is highly appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

In our program we focus on interinstitutional cooperation with NIPH and Cambodian centers of learning such as the University of Health Sciences . Through the provision of scholarships, and capacity strengthening of NIPH personnel and staff of partners of NIPH we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

While we do not have any specific activities for children, we recognize them to be among a vulnerable group in Cambodia, together with women. Our program concentrates on access to affordable and good quality healthcare and better financial protection and increased productivity for these vulnerable populations. The specific program components on wellbeing and improved quality of care for people with chronic illness are fully aligned with the Belgian strategy paper on children's rights. Especially in helping young women and mothers to speak out on education and healthcare services concerning their young children – and themselves; and encourage children to have their voice heard and be actively involved in discussions about their health and health care, including sensitive health issues like sexual and reproductive health, HIV/AIDS and other STDs, violence, addictions, harmful (whether or not traditional) practices. We will continue working on a special approach that started this year in organizing women groups that successfully discuss these themes and brings about change in cultural practices.

Development education

In our program we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate. (strategy note) Our programme contributes to better knowledge about the diseases and healthcare delivery, and aims to inform policies to anticipate and prepare better, not only to address the specific diseases but also to deliver good quality healthcare for all in the midst of crises brought about by these diseases.

Within NIPH, attention will be paid to the quality of the working environment; proper waste management including waste segregation, recycling and proper disposal will be ensured and implemented.

Gender

We will contribute to gender mainstreaming by working on the mental well-being of women with chronic conditions, thereby reducing their heightened vulnerabilities (due to their gender and their NCD) and promoting self-care. The foreseen approach includes working on women oriented care and self-care systems, where the issues of GBV and women rights will be included.

Digitalization - Digital for Development D4D

In our program, we will use data of different kinds and origin: research-related data, surveillance data, AMR data, UHC monitoring data, secondary data, etc. These data will be analysed and used to inform policy- and decision-makers, stakeholders, other partners, etc; to help keep track of Cambodia's progress towards UHC and the SDGs included in this program; will be utilised for monitoring and evaluation of the different projects and the program itself; and will also be essential for performance improvement. As such, capacity strengthening should encompass the whole "life" of the data: from collection, to storage, to governance and stewardship. Digitalisation is essential to facilitate analysis, storage, and sharing of good quality data (timely, accurate and useful data). Our planned platform for Data Management will cover these activities. This is congruent with the DGD strategy for D4D.

Health

Our impact - “Better health and well-being for all Cambodians at all ages - through improved healthy behaviour and access to affordable and good quality health services, and better financial protection and increased productivity for the poor and vulnerable” – is fully aligned with the Strategy on Health and its One Result. Our program will strengthen individual and institutional capacities, generate relevant research evidence based on identified health needs of the Cambodian population, and get research results into policy and practice.

Building up capabilities for lab and clinical research, surveillance, and healthcare integration will promote integrated control of specific diseases. QMS, exploring innovative healthcare delivery and our focus on mental wellbeing will increase access to good quality healthcare. Our focus on equity and NIPH’s monitoring of UHC will pave the way towards a sustainable health financing system. We will augment local expertise to upgrade health personnel through capacity strengthening of education and training. Knowledge management and training of local trainers will help ensure sustainability of strengthened capacities and increase the abilities of NIPH for knowledge transfer and, in turn, to build capacities of other local health institutions.

Overall, outputs of our program will strengthen both the health sector and the healthcare system, if our results will be transformed into policies and implemented by relevant government ministries and agencies.

Subsidy bonus allocation: priority themes and strategic priorities**Human rights-based approach**

Cambodia is considered by many, such as the EU, as worsening in terms of basic human rights (law application, corruption, free speech, and peaceful assembly). A rights-based approach therefore makes sense in this particular situation. The geographic JSF formulated for DGD this year provides frameworks to enable Belgian ACNGs to influence the prevalent situation by indirectly intervening in advocacy spaces and strengthening local actors for better institutional governance in accordance with the principles of defending the fundamental rights of the target populations. Working with the NIPH, a semi-governmental institute, does not automatically respond to the advocative and campaigning elements of this rights-based approach. However, that does not take away the principle that in health, the actions will be led by the SDG principles such as embraced by the Royal Cambodian Government (RCG).

Decent and sustainable work

Regarding decent work, the program will promote equal opportunities for employment at NIPH regardless of sex, age, origin, political or religious beliefs. Furthermore, the program’s QMS activities will ensure health and safety provisions in the workplace, both within the NIPH divisions and in local institutions / health facilities that they will strengthen capacities in turn.

Our impact of improved healthy behaviour and better access to affordable and good quality health services would promote better health for the Cambodian population, which would lead to increased productivity.

Under the pillar of social protection, we reiterate that our program’s health equity goals are in coherence with the “National Social Protection Policy Framework 2016-2025” (NSPPF). Our priority areas for the health systems and policy research include UHC & health equity, health financing, and social health protection. Research in these areas, together with the function of NIPH in monitoring UHC and SDG3 related indicators for the National Social Protection Council, will generate much-needed policy-relevant knowledge and evidence that will advance universal health coverage through social protection schemes.

Gender

In education and decision making, the NIPH made great progress in improving the gender balance in the first period (2017-2021). Currently, almost 50% of the NIPH staff are female; some female staff have assumed higher roles and one member of the Board of Directors is female. The number of female students in the SPH have gradually increased, from an all-male student population prior to 2017 (the start of the NIPH-ITM partnership) to 13.5% of the students being female by 2019. We aim to improve these further.

For our planned research on mental well-being and psychosocial aspects of people with chronic illness, we shall focus on the gendered disadvantages of the most vulnerable group - women.

The gender divide is still pervasive in Cambodia; patriarchy is very much evident in that the needs and wants of men are prioritized over those of women and children, and men have an (almost) exclusive position of power. Cultural aspects and culturally-defined gender roles, further portray the gender disadvantages that Cambodian women have. These would be compounded were they to have a chronic life-long condition (and thus are perceived to be more of a burden), thereby increasing vulnerabilities further. Attention to mental well-being of women with NCDs is warranted to help reduce gender inequalities, to increase abilities for self-care and to help ensure that no one is left behind, whatever vulnerable position they may have.

Environment

The SDGs 2030 Agenda recognizes the twin global priorities of delivering environmental sustainability (and specifically mitigating the threat posed by climate change) and the ongoing priority of eradicating poverty, and emphasize the centrality of

securing equity, under the strapline “leaving no one behind”. The NIPH/ITM approach follows the nationalized SDG framework for Cambodia. Cambodia localized the 17 SDGs, with the addition of SDG18 targeting mine actions (<https://csdgs.org/en/>). The CSDGs platform is a UN joint initiative with technical lead by UNDP Cambodia Accelerator Labs, in collaboration with Ministry of Planning, Institute of Technology of Cambodia, and Impact Hub Phnom Penh to raise to support the CSDGs progress and implementation. It led to the support to the RGC to voluntarily review its achievement towards Cambodia’s endorsement of the SDGs at the UN General Assembly in late 2015.

While a formal analysis on the impact of the environment and climate on our program has not been made, considerations on health effects were taken into account (e.g., outbreaks, rapid urbanization) and the program will explore on ways by which the Cambodian health system can address these (e.g., innovative ways to deliver healthcare). Conversely, through implementation of quality management systems, we will assure that program activities will not adversely affect the environment (e.g., proper waste management). We will ensure that training and education of NIPH staff and students as well as the knowledge transfer of QMS by NIPH to other Cambodian institutions will include these environmental measures.

More details on the links with environment and climate change can be found in the annex 'Responses December'.

Common outcome within a common programme

NA

Common outcome between distinct programmes

NA

Areas of complementarity and synergy with the intervention of ENABEL

As Cambodia is not a bilateral country for the Belgian Development Cooperation Enabel has no interventions we might synergize with.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC: NIPH delivers evidence-based knowledge and provides high quality education
Indicator title :	OC1: Uptake/influence of ITM-supported research in public policies (using a self-assessment scale)
Indicator description :	This indicator will be measured through a self-assessment using following scale: 1 - knowledge has been disseminated; 2 - there have been some first exchanges with policymakers after dissemination; 3 - we are actively working with policy makers on translating our findings to policy; 4 - new knowledge has been translated into policy; 5 - new knowledge is being implemented at scale through changed policies; SoV: NIPH-ITM Evaluation Report
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	OC: NIPH delivers evidence-based knowledge and provides high quality education
Indicator title :	OC2: Number of externally funded projects obtained by NIPH
Indicator description :	This is a proxy indicator for increased capacity, performance and external recognition in the areas of research, education and GRIPP; SoV: NIPH Annual Reports (compiled)
Baseline :	5
Target Year 3 - 31/12/2024 :	7
Target Year 5 - 31/12/2026 :	10

Formulation of outcome or result :	R1. To conduct research in accordance with (identified) local needs
Indicator title :	R1.1 Number of scientific publications by NIPH researchers in international peer reviewed journals and Cambodia Journal of Public Health by selected priority areas (NCD, AMR, health workforce, health financing and UHC)

Indicator description :	By scientific publications we refer to manuscripts published in peer-reviewed journals and Cambodia Journal of Public Health (CJPH) that make a contribution to evaluate the impact of current interventions; SoV: Pubmed; CJPH
Baseline :	5
Target Year 3 – 31/12/2024 :	15
Target Year 5 – 31/12/2026 :	30

Formulation of outcome or result :	R1. To conduct research in accordance with (identified) local needs
Indicator title :	R1.2 Cambodia country UHC monitoring indicators by socio-economic quintiles
Indicator description :	The two key UHC indicators (SDG3.8) - health service coverage index and financial protection - with disaggregation by socio-economic quintiles will be computed by NIPH researchers biannually; SoV: UHC progress report
Baseline :	No
Target Year 3 – 31/12/2024 :	Yes
Target Year 5 – 31/12/2026 :	Yes

Formulation of outcome or result :	R1. To conduct research in accordance with (identified) local needs
Indicator title :	R1.3 Number of research protocols approved by the Cambodian National Ethics Committee for Health Research (NECHR)
Indicator description :	Research protocols are submitted for ethics review and approval prior to implementation; SoV: NECHR's letters of approval
Baseline :	10
Target Year 3 – 31/12/2024 :	20
Target Year 5 – 31/12/2026 :	30

Formulation of outcome or result :	R2. To provide and support training and education to augment local expertise
Indicator title :	R2.1 Number of Master students receiving scholarship successfully graduated, by gender
Indicator description :	Scholarships are a means of providing equal access to good quality postgraduate education, and to stimulate augmentation of local expertise; SoV: NIPH SPH masters programs (diploma)
Baseline :	0
Target Year 3 – 31/12/2024 :	6 (ideally 3 female, 3 male)
Target Year 5 – 31/12/2026 :	16 (ideally 8 female, 8 male)

Formulation of outcome or result :	R2. To provide and support training and education to augment local expertise
Indicator title :	R2.2 PhD program curriculum established
Indicator description :	A locally-based good-quality PhD program has the potential of educating and training more healthcare professionals in Cambodia at lower costs, to augment local expertise. It will also serve as an example to other schools offering PhDs in Cambodia; SoV: NIPH SPH PhD Program
Baseline :	No
Target Year 3 – 31/12/2024 :	Yes, developed
Target Year 5 – 31/12/2026 :	Yes, developed

Formulation of outcome or result :	R2. To provide and support training and education to augment local expertise
Indicator title :	R2.3 Number of staff rotations for trainings at ITM or partner institutions
Indicator description :	Assessed during the evaluation (NIPH & ITM to-do); SoV: Certificates or diploma; NIPH-ITM Evaluation Report
Baseline :	0
Target Year 3 – 31/12/2024 :	2

Target Year 5 – 31/12/2026 :	4
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Formulation of outcome or result :	R3. To build & strengthen institutional capacities and ability for change
Indicator title :	R3.1 Knowledge management (Think Tank) and data management platforms established
Indicator description :	Assessed during the evaluation (NIPH & ITM to-do); SoV: NIPH-ITM Evaluation Report
Baseline :	No
Target Year 3 – 31/12/2024 :	Yes
Target Year 5 – 31/12/2026 :	Yes (fully established)

Formulation of outcome or result :	R3. To build & strengthen institutional capacities and ability for change
Indicator title :	R3.2 Quality Management Systems certification;
Indicator description :	ISO 9001:2015 certification by ISO certifying body in Cambodia ; SoV: ISO QMS (9001) certificates
Baseline :	1
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	3

Formulation of outcome or result :	R3. To build & strengthen institutional capacities and ability for change
Indicator title :	R3.3 Continuous Quality improvement - decrease in Corrective and Preventive Action Reports (CPAR)
Indicator description :	Periodic internal and external quality audits may reveal deviations in processes and/or product/quality problems; if so, CPARs would be issued; less CPARs means better quality. ; SoV: Annual Quality Management Report
Baseline :	5
Target Year 3 – 31/12/2024 :	5
Target Year 5 – 31/12/2026 :	1

Formulation of outcome or result :	R3. To build & strengthen institutional capacities and ability for change
Indicator title :	R3.4 Number of GRIPP-relevant courses attended by NIPH staff
Indicator description :	Assessed during the evaluation (NIPH & ITM to-do); SoV: Certificates or diploma; NIPH-ITM Evaluation Report
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	6

Formulation of outcome or result :	R4. GRIPP - Moving from evidence to the application of evidence: co-creation with the stakeholders
Indicator title :	R4.1 Number of policy dialogues with stakeholders
Indicator description :	NIPH will organize policy dialogues with relevant stakeholders in the areas for which evidences are being generated for policy-making ; SoV: Policy dialogue reports
Baseline :	1
Target Year 3 – 31/12/2024 :	10
Target Year 5 – 31/12/2026 :	20

Formulation of outcome or result :	R4. GRIPP - Moving from evidence to the application of evidence: co-creation with the stakeholders
Indicator title :	R4.2 National Health Systems Research Agenda is developed and implemented

Indicator description :	Policy decisions about improvement of national public health systems should be guided by sound scientific evidence; the national health research agenda that NIPH will develop and implement will help guide the Cambodian public health system ; SoV: NIPH-ITM Evaluation Report
Baseline :	No
Target Year 3 – 31/12/2024 :	Yes (developed)
Target Year 5 – 31/12/2026 :	Yes (implemented)

Formulation of outcome or result :	R4. GRIPP - Moving from evidence to the application of evidence: co-creation with the stakeholders
Indicator title :	R4.3 Number of policy briefs and other policy support documents developed and disseminated to various governmental ministries
Indicator description :	Policy briefs are a key tool to present research and recommendations to a non-specialized audience. Together with policy-support documents, they serve as a vehicle for providing evidence-based policy advice to help readers make informed decisions. NIPH will prepare and disseminate these briefs and support documents for all evidences generated. ; SoV: Policy documents with names of NIPH researchers
Baseline :	2
Target Year 3 – 31/12/2024 :	10
Target Year 5 – 31/12/2026 :	20

Activities, targets groups and beneficiaries

Classification of activities

- Platforms for lab public health activities (surveillance), education & training (SPH; NIPH staff), NCDs (mental wellbeing, use of technology), quality management systems, and information & data management will be developed and strengthened.
- Education projects include strengthening of MPH and setting up of PhD programs in the SPH and training of trainers & continuing professional education of NIPH staff through ITM, other partners, South-South & SHCH-NIPH collaborations; where all activities can be lessons turned into training materials, and NIPH staff at all levels can be trainers.
- Collaborative high quality, professional health systems and policy research projects will be undertaken based on identified needs (UHC & health equity, quality of care, health workforce, health financing, social health protection, NCDs and infectious diseases) to generate policy-relevant knowledge and evidence, with expectation that such will inspire good research practices.
- Our ToC builds on concrete research and training capacity to increase ability to get research into policy and practice (GRIPP). We will have a chain of complementary achievements: the experience of improved management; enhanced capacity to generate contextualised evidence for managing health & health system issues; a strengthened evidence base for managing these; effective sharing of evidence with the policy community; needs- and evidence-informed policies; and improvement in the health of the Cambodian population through improved and equitable access to quality services.
- Synergy with educational institutions (multi-country, local universities), international and local NGOs (e.g., Humanity & Inclusion; Louvain Cooperation, Eclasio, MoPoTsyo), development cooperation agencies, and various organizations who are also working in our identified areas (specific research topics: mental health and NCDs [LC], effects of pesticides [Eclasio]); public health education; GRIPP; QMS) will be further nurtured.

Target group(s)

NIPH divisions: NIPH Laboratory, School of Public Health (SPH), Health Systems Research Center (HSRC)

People: NIPH Staff: Total of 149; 48,3% of whom are female

SPH students: Total as from 2018-2021=328; 13,5% of whom are female. Admission of more women students and provision of equal access scholarships for master's students are aims.

Beneficiaries

Impact focuses on better health and well-being of vulnerable groups including women and children in rural and hard-to-reach areas. Beneficiaries thus include:

Cambodian population – approx 17 million (51% female, 76% in rural areas). Specific targets include women who bear the burden of NCDs: of total female population 18 years and over, 17,8% has cardiovascular diseases; 12,8% hypertension and 10,5% diabetes.

Title of the reference annex :	TOC_ITM_Cambodia_22-26
Title of the reference annex :	RA_ITM_Cambodia_22-26

Description of the Relevance

The program is fully consistent with the policies of the Royal Government of Cambodia (RGC) for development as stated in the Rectangular Strategy phase IV (RS-IV, http://iric.gov.kh/wp-content/uploads/2018/09/Rectangular-Strategy-Phase-IV_ENGVersion.pdf) and the National Strategic Development Plan (NSDP) 2019-2023 (https://data.opendevelopmentcambodia.net/laws_record/national-strategic-development-plan-nsdp-2019-2023). It also follows the SDG 2030 agenda and the Cambodia Sustainable Development Goals (CSDGs), the nationalized framework for Cambodia based on Global SDGs.

Specifically, our studies to improve health equity are aligned with the “National Social Protection Policy Framework 2016-2025” (NSPPF). Our research topics also focus on access to affordable quality health care provision. The Cambodian Health Equity Fund (HEF) developed by the Ministry of Health, provides access to free healthcare to around 16.3% of the population who are categorized (under the Identification of Poor household (IDPoor) scheme administered by Ministry of Planning (MoP) as poor.

ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed.

In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer, etc.) and on continued capacity building. Over time, partners will acquire specific capacities, knowledge and expertise. These acquisitions will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; NIPH may, for instance, assume a coordinating role as hub for a network. Our partner will be able to use knowledge built to create the conditions for getting research into policy and practice

We move from four partners in the 2017-2021 period to one partner for the 2022-2026 period, and we aim to collaborate with the former partners where possible. The partnership trajectory in Cambodia started with three partners (SHCH, NCHADS, CNM) in 1998. The partners worked intensively to develop research and laboratory capacity in national institutions, and have each generated their own research, contributing to a localised, Cambodian evidence base to guide public health interventions for specific diseases. **With these three partners, we reached the phase of collaboration and networking.**

Obviously, results of past collaboration between ITM and Cambodian partners were mainly in disease control programs (vertical approaches to health problems). Since the **National Institute of Public Health (NIPH)** became a partner in 2017, we have been able to work on the health system challenges and the increasing recognition of the quality of NIPH’s School of Public Health is now to be strengthened further. The Ministry of Health adopted NIPH’s curriculum for master’s degree in public health training to be a national curriculum to be applied by other academic training institutions in Cambodia. A newly developed short course on management and leadership for health facility managers is considered successful and has been requested by MOH and other health leaders to be further scaled up; and NIPH’s laboratory is recognised as a national public health reference laboratory and received ISO certification in 2020; it is leading in Covid-19 testing and in capacity building for Covid-19 testing in Cambodia.

The focus on NIPH as *one* partner in Cambodia is also based on the increasing request by MOH for NIPH to provide technical advice and participate in health policy development and review. NIPH senior researchers are appointed as members of various national technical working groups for policy development, including a health workforce research working group and Covid-19 training working group chaired by NIPH. Recently, the Ministry of Economy and Finance agreed to allocate government budget to NIPH for research, suggesting its strong recognition of NIPH role in health research. We anticipate that the DGD funded 2022-2026 program will enable the NIPH to continue building on their existing expertise to further develop research and generate evidence for policies for Cambodia on a variety of (public) health topics.

In the research, the program focuses on gendered aspects of non-communicable disease – many of the vulnerable older women in Cambodia have to deal with chronic illness and related mental health problems. This bridges with the application of long-standing research outcomes in Cambodian culture related to local belief and customs regarding rights of women – a gender-conscious approach is both the basis as a topic for further research, with which the program will inform partners of the Joint Strategic Framework such as Eclasio and Louvain Cooperation. Still on gender, our approach to education will encourage and stimulate equal access to SPH courses & scholarships and in training NIPH staff.

Implementation of Quality Management Systems in NIPH and its Divisions (Laboratory, SPH, HSRC) will improve processes and performance. This encompasses all activities such as leadership, safety, human resources, moving towards gender equality, knowledge and information management (including digitalisation), and considerations for the environment. QMS will help assure and ensure good quality outputs in the NIPH laboratory, education and training, and research, towards achieving the overall aim of this project. More details on the links with environment and climate change can be found in the Annex 'Responses

December'.

The GRIPP strategy is based on co-creation with civil society and puts the theory of global citizenship to practice. In joint strategy development for social change, we work closely with the ITM Global Themes of equity, climate change and urban health. This will bring a huge variety of young Cambodian people 'to the table' with whom gender issues, human rights, the environment and equity are always on the agenda, as we found through the years of project implementation in Cambodia.

The link with the strategic goals of the Joint Strategic Framework HES4SD and the stakeholder analysis have been integrated in the Theory of Change section.

Description of Coherence

Internal coherence: The present five-year program is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and country ownership of health care systems, programs and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP. Furthermore, as a research institute, ITM adheres to international standards when it comes to ethics, such as the Declaration of Helsinki and CIOMS International Ethical Guidelines for Health-related Research involving Humans (2016). Ethics and ethics reviews are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect to the last aspect, any research undertaken also needs to adhere to GDPR principles.

In terms of internal coherence, it is worth noting that this program will be highly complementary to ITM's Synergy Program. Whereas the present program includes a focus on more long-term capacity development/collaboration, the Synergy Program will allow the present program to flexibly grasp opportunities for synergistic interventions with other actors (Belgian or other) or funding sources, including activities linked to the collective learning of the thematic JSF HES4SD. The Synergy Program will be a further catalyst for the program's impact. In Cambodia, this is especially relevant for the links with anti-microbial resistance platforms in Vietnam, Benin and other countries, and innovative approach to chronic diseases is linked to similar approaches in Guinea, DRC and Nepal.

External coherence: Within the Thematic JSF HES4SD, we share common strategic goals and strive for synergy and complementarity with the other actors involved. Adherence to the international standards when it comes to (research) ethics apply, together with adherence to GDPR principles as detailed above.

ITM has been actively involved in writing the analysis for the geographic JSF-Cambodia 2022-2026, composed of four Belgian ACNGs: VVOB, APOPO, Louvain Cooperation (LC), and ECLOSIO. Important coherence is in the assessment of health needs and health priorities. NIPH and ITM work closely together on **health equity goals** in coherence with the "National Social Protection Policy Framework 2016-2025" (NSPPF). We have an impressive track record in working on access to affordable quality provision, having contributed in many ways to the Cambodian Health Equity Fund (HEF) policy that was adopted by the MOH and that provides access to free healthcare to around 16.3% of the population who are categorized under the Identification of Poor household (IDPoor) scheme by the Ministry of Planning (MoP) as poor – and research will continue to support and strengthen that approach. In our study towards inclusion of self-care for people with NCDs, we will also focus on women and address the needs of the rising proportion of the ageing population, contributing to the governmental Policy for the Elderly, the "National Ageing Policy 2017-2030".

The active members of HES4SD in Cambodia are ARES and the ITM. The JSF and HES4SD agree on the six strategic goals in the ToC of HES4SD. Within HES4SD, ITM will develop mechanisms to systematically share information on ongoing projects and the launch and results of calls for scholarships and project proposals. Representatives will participate in the strategic dialogues of other thematic and geographic JSFs according to requirements.

Description of Effectiveness

We have identified the necessary preconditions on how our intermediate results, outcome and eventual impact (as illustrated in our ToC) will be achieved. The areas of intervention were based on expressed needs by NIPH, and capacity strengthening will be provided accordingly, with some as a continuation from the 2017-2021 activities. We note that capacity strengthening activities from the previous program (2017-2021) already has had several achievements; for instance, adoption of the NIPH curriculum for master's degree in public health as a national curriculum, MOH and other health leaders requesting for scaling up of developed short courses on management and leadership for health facility managers, etc. (see Description of Relevance). Furthermore, it is worth noting that ITM has a strong track-record in Cambodia when it comes to achieving results through its programs. From the evaluations of past interventions, such as [the one for the third framework agreement funded by DGD](#) (2012-2016), it is clear that together with our partners, we are capable to deliver and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between NIPH and ITM, the effectiveness criterium never

scored below B.

Coming from the above experience, this current program is vested on the argument that more actions geared towards **developing the capacity of the NIPH**, local actors (staff of NIPH, also as *multipliers*) and partners of NIPH (indirect beneficiaries) will further increase local expertise, improve technical skills and knowledge and assure good quality of outputs, thereby producing more meaningful determinations of health needs and better-quality evidence for policy generation; and that the resulting strengthened evidence base and increased local expertise will be effectively shared and utilized to inform policy development; which, when applied, enables better **management of health and health system problems**.

Increasing capacities in NIPH will cement its position: as the representative of the *Ministry of Health* in providing public health and laboratory services, training and research to improve the health of the Cambodian people; and to track UHC and SDG3 related indicators for the *National Social Protection Council*. These will help achieve the impact of improving health, wellbeing and social protection of the Cambodian people especially the vulnerable, making sure that no one is left behind.

In regard to ensuring that inequities will not widen from the implementation and as an effect of our program; contributing to the principle of **leaving no one behind** is central to our work. LNOB has 3 imperatives: end extreme poverty, curb inequalities, and reach the furthest behind first. Universal social protection and UHC, access to quality health care, and reaching out to families coping with chronic diseases is high on the agenda of the Cambodian government. Our program will substantially contribute towards:

[a] narrowing inequities and inequalities, with focus on women, the ageing population and Cambodians in hard-to-reach areas (evidence generation on NCD care, mental well-being and self-care; and on efficient, integrated, effective and equitable care models, including use of technology); and

[b] achievement of Universal Health Coverage for all (evidence generation through annual health examination survey + analysis of secondary data from national surveys and health equity analysis; health financing policy evaluation, and case studies related to impact and key features of social health protection schemes).

Specific activities in the NIPH laboratory, health research, and education and training are designed to achieve the results and outcome, towards achieving the impact, as illustrated in our ToC:

- The capacity of NIPH to conduct good quality, professional and ethical clinical, operational, and health systems and policy research and monitoring & evaluation will be strengthened (**R1**) thereby facilitating generation of reliable and much-needed evidence that can be utilised in policy- and decisions-making;
- Through capacity strengthening of education and training, access to good quality education at SPH will be improved, a PhD curriculum will be developed and implemented, and local expertise will be augmented (**R2**);
- Support from ITM and partners will improve quality management, data and knowledge management, and knowledge translation of relevant information used to inform health & social protection policies; and NIPH will have strengthened institutional capacities and increased ability for change (**R3**).
- Through GRIPP (**R4**), policy dialogues will be convened with stakeholders, evidence generated will be disseminated through policy briefs and other policy support documents, and a National Health Systems Research Agenda (NHSRA) will be developed and implemented; the NHSRA will be led by NIPH, and will help guide the Cambodian government in making policies to improve the public health system.

The importance of NIPH and its products will be emphasized if it and its divisions will demonstrate that they have the capacities to produce outputs of excellent quality – through research, surveillance and monitoring activities of the NIPH Laboratory and HSRC, education and training, and increased individual capacities of NIPH staff and SPH graduates – that can be utilized by different governmental ministries for policy- and decision-making. This will cement the unique position of NIPH with the Cambodian MoH, NSPC and other government ministries/agencies,.

However, the next step – uptake and policy-making by relevant government ministries/agencies – will already be beyond the program's control, noting that with appropriate policies and their proper implementation, better health and well-being for all Cambodians at all ages would be achieved.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realize its objectives, which are all relevant for the present Cambodia program: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM program (2) is a more operational approach to deliver on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in the thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals

Baseline information is collected at the level of NIPH mainly, as they are also the target groups of the programme. Baseline information is collected mainly through document review at their level. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institute has the lead in indicating progression. At the level of ITM it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore, we included a standard indicator on this aspect.

Comments on description of effectiveness

Submitted by DGEO-MarcF on Mon, 10/25/2021 - 02:06

ITM - Cambodia - ToC

1. Assumption 4 mentioned in the narrative of the ToC is not notified in the ToC diagram.
2. SG3 & SG5 are not listed in the diagram of the ToC.
3. SG7 to SG10 referred in the diagram of the ToC are not explained in the narrative.

Submitted by ITG-IMT on Tue, 11/02/2021 - 11:03

ITM - Cambodia - ToC

"1. Assumption 4 mentioned in the narrative of the ToC is not notified in the ToC diagram":

"Our direct partner is a semi-government institution. The organization and its staff are not expected nor equipped to be campaigners or activists. However, they have strong relations in civil society and are well positioned to bridge evidence generated by research through educated agents between NGOs, donors and the government (A4)." Due to some modifications in the graphical visualisation of the ToC-diagram during the last stretch of the programme development (during this exercise all ToC diagrams of the ITM programme were harmonised), this item was overlooked. The assumption is linked to the "R4. GRIPP approach"

"2. SG3 & SG5 are not listed in the diagram of the ToC":

Due to some modifications in the graphical visualisation of the ToC-diagram during the last stretch of the programme development (during this exercise all ToC diagrams of the ITM programme were harmonised), these items were overlooked. The correct interpretation is as follows:

- In the left low corner, the box "Increase NIPH institutional capacity (SG2)" should have mentioned SG 3 , not SG 2.
- SG 5 should have been linked to "R4. GRIPP approach"

"3. SG7 to SG10 referred in the diagram of the ToC are not explained in the narrative":

The strategic goals 7 to 10 of the JSD HES4SD are mainly in our sphere of interest.

- Strategic goal 7 of the JSF HES4SD is "Valorisation of knowledge and increased innovation": through our work on knowledge creation and GRIPP, the link with this strategic goal is explicit and direct.
- Strategic goal 8 of the JSF HES4SD is "Improved evidence-based policies" : through our work on GRIPP, our ambition to improve evidence-based policies in Cambodia is strong.
- Strategic goal 9 of the JSF HES4SD is "Increase contribution to the SDGs": our programme will impact SDG 3 on health but can also contribute to other SDGs such as 4, 5, 9, 11, 17.
- Strategic goal 10 of the JSF HES4SD is "More equitable & inclusive societies": our ultimate envisioned impact is to have an impact on a more equitable and inclusive society in Cambodia, though this would be a long-term impact.

Description of Efficiency

It is worth to emphasize that the approach to strengthen Higher Research and Science in Cambodia is all about people, and all about sharing knowledge. Not only is the main target population made up of students and scientists, but all activities require the input of people – and to a very limited extent machinery or materials that help to educate people. The budget is therefore based on activities of teachers and researchers, and on the operational costs they will have to make (transport, teaching materials, costs of training, digital options etc).

Quality education is not cheap, and especially PhD trajectories may seem extravagant but their inclusion can be justified by their multiplier effect within and beyond the institutions they work with (2017-2021 midterm evaluation). The combination of Higher Education and Science helps to strengthen a new generation of women and men who **need the status ascribed to academic positions in Cambodia to play their role in transformative change** – towards sustainable development. The

role of academics in Cambodia was the subject of a study undertaken by Eam, P., & Ros, V. (2020): “Cambodian Academic: Roles and Identities. Cambodia Development Resource Institute.” The emphasis among academics is on their identity as teacher: “With an obvious dominance of the roles of teacher, Cambodian academics in general are more of a disciplinary knowledge transmitter or conserver, rather than a knowledge producer. Such tendency limits their capabilities to contribute to global academic and scientific communities.” This is one of the important reasons to work with NIPH as a partner.

Working with NIPH on curriculum development allows us to address a paradox that arises from the debate on decolonization, where universities in Asia (akin to universities in Africa) can be seen as “being semblances of western epistemologies propelling an encumbering and debilitating Eurocentric education, characterised by an attendant tenacity to exclude and marginalise an indigenous presence and ‘ways of knowing’ in higher education” (Hauser, Howlett, & Matthews, 2009; Nyamnjoh, 2004). The risk is that this position excludes a productive connection between different views on learning, on the value of different epistemologies, and the potential of seeing them as complementary rather than mutually exclusive. In working closely together between Phnom Penh and Antwerp, we understand that Eurocentric development models and western hegemonic epistemologies are no longer self-evident (Nabudere, 2003). However, this collaboration is aimed at developing new, relevant curricula together, finding ways to respect indigenous presence and ‘ways of knowing’, and thus seek real cross-cultural “co-creation”. That justifies granting advocates for inclusion of scientific evidence a position where they will be heard; in Cambodia, that position is having masters and/or PhD degrees. From that position one can address the questions about validity and ownership of knowledge, and find new ways to accept and apply co-created knowledge. This process is made visible and productive in the approach to ‘Getting Research into Policies and Practice’, where methods for co-creation and society-wide validation are developed as we go forward.

To support these approaches, Antwerp-based staff needs to be budgeted. Given that only a limited part of staff time is budgeted on the program, efficiency is maximized; the ITM staff is also committed to find additional funding for the same goals as proposed here – which increases efficiency. DGD funds for the 2017-2021 program have proven to be an effective leverage for proposal development to find extra funding.

On a separate note, ITM does not work with technical assistants in the partner country. Instead, we opt to offer technical assistance and program management from a distance with regular exchange visits, hence reducing personnel costs.

Description of the expected Impact

It is hoped that our program will contribute to *better health and well-being for all Cambodians at all ages through: improved healthy behaviour; increased access to affordable and quality health services; and better financial protection for the poor and vulnerable.*

Our program will augment local expertise and will conduct research in accordance with identified local needs in the areas of clinical and laboratory research (AMR, infection prevention & control, surveillance of severe acute respiratory infections), health systems (equity, health financing, social health protection, UHC) and to improve quality of care for chronic conditions. Through the unique position of NIPH with the Cambodian MoH, NSPC and other government ministries/agencies, evidence produced will be disseminated making use of GRIPP towards country policies directed to improve healthy behaviour of the Cambodian population, increase access to affordable and good quality health services and better (health) financial protection especially for the poor and vulnerable. The impact we seek is further supported by strengthening of GRIPP capacities of individuals and institutions that are able and willing to be agents of change. We are sure that the increased local expertise in NIPH will have multiplier effects and will ensure sustainability of the results/outputs, outcome and impact. We reiterate that uptake and policy-making by relevant government ministries/agencies will already be beyond the program’s control.

As regards the principle of **leaving no one behind**, our program will work towards narrowing inequities and inequalities, with focus on NCDs, mental wellbeing, better self-care and improved access to healthcare of women, the ageing population and Cambodians in hard-to-reach areas; and towards achievement of Universal Health Coverage for all.

More details on the underlining assumptions regarding the expected impact can be found in the Annex 'Responses December'.

Description of Sustainability

As mentioned under other sections, the program target group and partners are basically the same. Therefore technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups completely control the intervention. Together with ITM, they co-implement the project. In order to ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal, and will remain the key responsible party to its execution. The needs assessment for this program proposal followed the trajectories of the four partners in the 2017-2021 program. The three ‘older’ partners have reached a phase where they have become collaborators rather than beneficiaries of the program. They followed the trajectory from institutional strengthening to institutional collaboration. In addition, we also

follow the logic of moving from disease-specific work (NCHADS in Aids, CNM on Malaria) and NGO-based research (SHCH) to capacity strengthening of the National Institute of Public Health to tackle general/overarching health and health system issues.

As mentioned previously, NIPH has the mandate of identifying needs and generating evidence for health policies and is the representative body of the Ministry of Health in providing public health and laboratory services, training and research to improve the health of the Cambodian people. While generating evidence and translating this into effective health policy is a long process, NIPH's mandate positions them well within the development of health policies for Cambodia.

ITM's partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programs and taking it up a notch with each new cooperation. Strengthening capacity of NIPH as a whole and that of the NIPH Laboratory, SPH and SHRC will help ensure generation of good quality outputs that will be translated into MoH policies. The needs assessment was jointly conducted: NIPH identified areas where capacity strengthening is warranted; the objectives and expected outcomes were mutually agreed upon and the partners prepared the ToC together. This ensures local ownership hence anchoring sustainability. It is good to note that other partners/stakeholders (e.g., SHCH) were also involved in this preparatory stage. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim to reach is the phase out, when our partner will be fully equipped to obtain external (research or education) funding instead of applying for international cooperation funds; has enough capacity to conduct good quality activities independently and get research results into policy and practice; and has acquired sufficient knowledge and skills to provide training and education, and strengthen capacities of other institutions.

Multiplier stakeholders include the students and researchers working with NIPH and educated/trained in the program. They will pass on the knowledge and skills. The same goes for the other local institutions whose capacities will also be strengthened.

Description of the Partnership Strategy

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved NIPH in the development/validation of the thematic JSF HE4SD process through the general council in which ITM's partners are represented and which discussed the thematic JSF process. For this program proposal, we reiterate that NIPH identified areas where capacity strengthening is warranted; the objectives and expected outcomes were mutually agreed upon and NIPH and ITM prepared the programme together.

Results of previous collaborations between ITM and Cambodian partners were mainly in disease control programs (vertical approaches to health problems). Key achievements include:

- The **Sihanouk Hospital Center of Hope (SHCH)** is one of the few labs in Cambodia performing tests to diagnose XDR-TB. It is also involved in and has played a pioneering role for antimicrobial resistance (AMR) research; with results taken up by National Committee on Antibiotic Resistance. SCHC participated in / co-led at least 15 different training programmes and in at least 4 different rounds to develop national guidelines, published more than 30+ papers, and presented of many abstracts/case studies. SHCH will now take on a role to strengthen capacities of other health institutions in Cambodia.
- **National Centre for HIV/AIDS Dermatology and STDs (NCHADS)** staff achieved two MPH degrees, developed SOPs for data management and the protocol for the needs and challenges of children with HIV. Pilot programs in HIV-ARV treatment program have been scaled up nationally. Research by NCHADS on STI control and linked response approaches in HIV control has led to numerous publications and has informed and contributed to the success of HIV control in Cambodia.
- ITM/DGD's longstanding support to the **National Center for Parasitology Entomology and Malaria Control (CNM)** improved research skills and laboratory facilities. Knowledge developed contributed to improved malaria control strategies at national and regional levels resulting in malaria reduction by 50% over the last ten years.

Since the **National Institute of Public Health** (NIPH) became a partner in 2017, we have been able to work on the health system challenges and recognition of NIPH by the Cambodian government is notably increasing.

- NIPH's laboratory is recognised as a national public health reference laboratory and received ISO certification in 2020; it is leading in Covid-19 testing and testing capacity building in Cambodia. However, capacities of the laboratory as regards clinical and laboratory research, e.g., disease surveillance, AMR, still needs to be strengthened. Lab capacity strengthening will be accomplished by ITM and SHCH (one of ITM's former partners); in turn, NIPH together with ITM and SHCH will also strengthen capacities of other laboratories for surveillance (**R1, TOC**)
- Recently, the Ministry of Economy and Finance agreed to allocate government budget to NIPH for research for the first time, suggesting recognition of NIPH role in health research. Our partnership will strengthen capabilities towards this role. (**R1, TOC**). Increasing capacities for research will also help enable NIPH in shaping and implementation of the National Health Systems Research Agenda to produce scientific evidence to improve the Cambodian health system (**R4, TOC**).
- The General Secretariat for National Social Protection Council, under the Ministry of Economy and Finance, officially

requested NIPH to lead in tracking UHC and other related indicators, for which their capacities for monitoring and evaluation will be strengthened (**R1, TOC**)

- The master's degree in public health (MPH) curriculum of the SPH has been adopted as a national curriculum. For this funding cycle, we move towards increasing access of Cambodian scientists to the MPH by offering equal-opportunity scholarships; and a PhD curriculum will be developed and implemented, with the hope that it will follow the same trajectory of being recognised as a national curriculum. These activities will help augment local expertise (**R2, TOC**)
- NIPH is increasingly requested by MOH to provide advice and participate in health policy development and review. NIPH senior researchers are appointed to be members of various technical working groups for policy development, including a health workforce research working group and Covid-19 training working group chaired by NIPH. For these, NIPH deems that institutional capacities need to be strengthened to demonstrate that they are a centre of excellence and thus cementing their position with the different government ministries/agencies (**R3, TOC**). Individual capacities for GRIPP and specifically in the development and dissemination of policy briefs and related documents, and in convening stakeholder policy dialogues need to be further strengthened to enable them further to engage with policy-makers and stakeholders towards development of health-related policies (**R2, R3 & R4, TOC**).

We thus anticipate that the DGD funded 2022-2026 program will enable the NIPH to continue building on their existing expertise to further develop research for health policy generation for Cambodia on a variety of (public) health topics. This means that we will target capacity strengthening of the NIPH, the laboratory, School of Public Health and the Health Systems Research Centre – both at the institutional and individual levels (NIPH staff, SPH students). Increasing individual capacity and stimulating their involvement in partner organisations (+ stakeholders) will increase the potential of these individuals to be change agents (**SG 2**) by applying their newly acquired knowledge and skills. In becoming change agents, individuals may assume responsibilities and act as committed global citizens (**SDG 4.7**).

At the same time, we will facilitate achievement of better gender balance within NIPH and the student population of SPH.

Description of Synergies

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country program.

The research proposed is in synergy with the **Global Themes that are selected by ITM in its 'synergy programme'**: equity, climate change and urban health. There is a focus on urban health and equity in the research on maternal and sexual health, equity and Universal Health Coverage are central aspects in health system research, and climate change is at the core of the surveillance and febrile illness work. Apart from that a modest budget (10K per theme per year) will be part of the 'unmarked funds' to be decided upon each year – and connected to the three themes so that the synergy with other programmes of ITM in this period can be made effective and linked through ORT and GRIPP.

Synergies and complementarities with JSF actors:

Together with the geographic JSF actors, working in the sectors of health, agriculture, entrepreneurship/vocational training, social security and research, we propose to put into practice a holistic approach. In order to ensure complementarity and to make the most of the expertise of the organizations involved and their local partners, we want to express the clear link between our different fields of work.

In practice, the JSF partners will actively and regularly exchange to maintain a dialogue on respective interventions and synergies. A geographical and thematic mapping will be developed for this purpose. With the local partners in the JSF options to share training for their staff will be defined and collaboration on the development of project proposals and funding will be continued (e.g. with TRIAS and WSM for Enabel on social security).

JSF partners working with the same beneficiaries will regularly and in agreement with the latter, exchange and, where possible, coordinate their interventions, especially in the area of capacity building. A particular effort will be made to work with the same target groups of women, to improve their life circumstances in a holistic way.

We aim to work with Eclósio and partners from ARES in a joint effort to better understand the relation between the use of pesticides and kidney failure, as such taking into account environmental concerns. With Louvain Cooperation we will be working in a complimentary way on strengthening the understanding of mental health and psychosocial aspects of health.

Other opportunities linked to the EU Team Europe Initiative No 1 and the future NDICI instrument: These are currently under review and at such synergies will be developed at a later stage when opportunities are clarified, hopefully during the formulation of the final program. It is believed that concrete opportunities will be available as Participants of the G-JSF

Cambodia and ITM as observer are part of the consultation process organized by the EU Delegation to help defining the priorities and to review the multi-annual indicative programs that will be proposed.

Description of how individual or collective recommendations and lessons are to be taken into account

The program has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue, this program gives particular attention to the valorisation of knowledge. Through its focus on "Getting Research Into Policy and Practice (GRIPP)" (in all components of the ITM program 2022-2026) ITM will strive to maximize this aspect in its program, and will also establish the preconditions to learn more about the best possible strategies to achieve this, a.o. through indicator development, and as main topic of the mid-term evaluation in 2024. Furthermore, as recommended in the approval dialogue, this program has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis."

There were four domains of focus in our 2016-2021 Cambodia program: improved management of infectious diseases; adapted malaria elimination strategies and improved control of other vector-borne diseases; elimination of mother to child transmission of HIV and syphilis; and health systems and policy research, governance and knowledge management. Lessons drawn from this period are: [1] the need to remain agile and sufficiently flexible in terms of activity and budget adaptations in order to respond to the most pressing health needs, and to remain relevant and coherent in a specific country context; [2] the availability of data can truly impact national policies; and [3] a new model of scholarship could include a monthly allowance to fully engage in NIPH research activities in the weekdays, alongside study in the weekends.

We bring these lessons forward, and note that these are also congruent with the expressed needs of NIPH:

[1] While NIPH and ITM have identified topics for research and areas for capacity strengthening, we also agree to remain agile and sufficiently flexible in terms of activity and budget adaptations. This has become even more significant for this funding cycle, given the uncertainties due to the COVID-19 pandemic.

[2] The importance of good quality data, from collection/generation to analysis and interpretation to proper storage, is a focus of our 2022-2026 program, namely: implementation of good quality research including data collection/analysis; secondary data collection and analysis; and the establishment of knowledge management and data management platforms.

[3] The equal-access MPH scholarships as described above will be offered to SPH students as from 2022.

We emphasize that our partnership with NIPH has allowed us to work on health system challenges, and already with some good results. We aim to advance this work further and to wider applications in our 2022-2026 program, taking into account the lessons learned. The program has integrated the recommendations and lessons identified through the JSF, Strategic Dialogue(s) and learning pathways. We give particular attention to the valorisation of knowledge. Through its focus on "Getting Research Into Policy and Practice" we will strive to maximize this aspect and will also establish the preconditions to learn more about the best possible strategies to achieve this, a.o., through indicator development, and as main topic of the mid-term evaluation in 2024. Furthermore, we have foreseen specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
TOC_ITM_Cambodia_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Cambodia_22-26.pdf
RA_ITM_Cambodia_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Cambodia_22-26.pdf
FACTSHEET_ITM_Cambodia_22-26_NIPH	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Cambodia_22-26_NIPH.pdf
Adapted_Visualization_TOC_Cambodia_March22	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2022-04/Adapted_visualization_TOC_Cambodia_March22.pdf
Responses_December_Cambodia	Other	https://fundhub.openaid.be/sites/default/files/2022-04/Responses_December_Cambodia_UpdateMarch_0.pdf

Outcome budget

T4 - Operational costs

HEADINGS	2022	2023	2024	2025	2026	TOTAL

TOTAL OPERATIONAL COSTS FOR THE OUTCOME	2022	2023	2024	2025	2026	TOTAL

Description

The budget required for the planned activities focuses on people and the means they need to do their work (mainly transport and communication means). The investments are limited to materials needed for the laboratory work and modest IT means. Strengthening the AMR surveillance capacities of NIPH is relatively expensive compared to other budget elements. Another important part of the budget is dedicated to strengthen the School of Public Health.

Given the insecurities related to the Covid pandemic and the risks for new outbreaks related to climate change, maximum flexibility is sought to modify the response. An annual reserve of 10% of the operational budget will be used within the context and along the lines of the proposed activities: not meant to be used for a different approach, but to focus more directly on new challenges that cannot be predicted precisely. Moreover, decisions on how to use this will be made every year based on a process between NIPH and ITM, and the process can be shared with DGD, will be transparent and fully reported.

The ITM staff is committed to work together with NIPH staff in identifying additional funding with a focus on those areas that are considered priorities for health policy change.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym NIPH

Full name National Institute of Public Health

Budget available

2022	2023	2024	2025	2026	TOTAL
293342,83	269840,78	281403,81	228899,61	134899,61	1208386,64

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Capacity building & policy support in parasitological disease surveillance & diagnosis in Vietnam

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Capacity building & policy support in parasitological disease surveillance & diagnosis in Vietnam		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-11-VN		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Viet Nam		
Sector :	12262 - Health - Malaria control	Budget share :	65%
Sector :	12250 - Health - Infectious disease control	Budget share :	22%
Sector :	12281 - Health - Health personnel development	Budget share :	13%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	3. Increased capacity of Higher Education and Science Institutions
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Thematic/geographical :	THEMATIC JSF
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5. Co-creation, transfer and application of relevant know...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- Joint strategic framework HES4SD
- High quality HES4SD partnerships and scholarship programmes
- Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Vietnam

Lat/Long :	21.02828, 105.853882
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Outcome summary

Description of the outcome

This five-year programme aims to contribute to the reduction of the burden and impact of malaria and food- and waterborne parasitic diseases in Vietnam. Ultimately the programme wants to eliminate malaria in Vietnam. We want to contribute to SDG Goal 3: 'Ensure healthy lives and promote wellbeing for all at all ages. For this programme, partners from Belgium and Vietnam will work together, through science and for societal impact. Reaching the objective will greatly benefit local communities and will contribute to reduce health inequality in ethnic minority populations in Vietnam, Leaving No One Behind (LNOB). To do so, we will enable NIMPE to become a sustainable driver of change in infectious disease research, surveillance and control and elimination in Vietnam. By addressing capacity gaps in terms of research methodology and laboratory capacity at NIMPE, diagnostic and surveillance strategies for parasitic diseases in Vietnam will be improved, through their direct role as the executor of- and technical advisor for parasitic control in Vietnam. This will result in high quality evidence that can directly contribute to policy for prevention, control and elimination of parasitic diseases. With the resulting changes in policy, we will contribute to the reduction of malaria cases, containment of antimalarial resistance and development of tailored strategies to eventually eliminate both *P. falciparum* and *P. vivax* malaria in Vietnam. In addition, the programme aims to reduce the impact of food- and waterborne parasitic diseases in Vietnam, in particular (re)emerging zoonotic infections. These parasitic diseases, including malaria are disproportionately affecting ethnic minorities. Thereby, with a focus on these diseases and the communities that are affected by them, we hope to develop strategies that are specifically tailored to these populations.

Wording of the outcome

NIMPE becomes a sustainable driver of change in parasitic disease research to inform policy and create improved surveillance and control- and elimination strategies in Vietnam.

Target groups

The main target group on an institutional level is the National Institute of Malariology, Parasitology and Entomology: strengthened capacity for research for policy. We'll also target NIMPE scientific staff, and master and PhD level students. As well as local communities, especially ethnic minorities, migrants and mobile populations in Vietnam. Plus, health centre staff at the local level (provincial, district and communal) where policies and strategies are implemented.

Sensitive and confidential information

NA

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	0
11. Children's Rights :	1

12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	No
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

A more integrated and cross-cutting approach is necessary in the areas of education, healthcare and agricultural policy: One Health training will ensure integrated, multisectoral approach. Research on health risks associated with crops and animal products will lead to improved knowledge, development of adequate, multisectoral interventions thus leading safer crops and animal products, hence improved food safety thus more quality nutrition. A community feedback loop will enhance local capacity to provide safe food. Moreover, we will investigate certain social and cultural factors hampering adequate zoonotic disease control (eg cysticercosis).

Education

In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

In our programme we focus on interinstitutional cooperation with university actors. Through the provision of scholarships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

Protection of children's rights and their health is a priority for the national malaria elimination strategies and programs in Vietnam. Within the proposed activities in the cooperation framework, NIMPE will continue to pursue universal coverage of bednets, hammock nets and other protective tools if applicable to provide children with protection against malaria. Treatment guidelines for diagnosis and treatment for malaria will continue to have a separate section to guide local health workers on how to diagnose and treat children with malaria, particularly treatment for vivax malaria with longer period of taking antimalarial medicine. In developing the tailored interventions and elimination strategies, the multidisciplinary study will explore how malaria messaging can be communicated effectively in ethnic minority populations to address the challenge around delayed health seeking and poor adherence to treatment, including adherence among child patients. Study findings will be used to inform the design of health materials and campaigns aiming to improve public compliance and adherence to malaria prevention and treatment.

Development education

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate. (strategy note) Our programme contributes to better knowledge about the diseases, and aims to inform policies to anticipate changes.

Research in the program aims to contribute to the existing knowledge of the interlink between socio-economic, ecological and human behavioural factors in disease occurrence and persistence. Our program focuses on better understanding of the contribution of these factors and how to tailored interventions and elimination strategies can contribute to Vietnam's overall efforts to mitigate the impacts of climate change in health sector.

Gender

There are clear risk associations between gender and parasitic diseases and is therefore an important factor in our qualitative and quantitative studies. Malaria risk, burden and effects are divided unequally in ethnic minority populations. In several ethnic minority settings, the whole family stays in forest for farming and subsistence activities, exposing all to malaria risk. In other communities, men who engage in forest activities that require longer stays in the forest with little or no protection for mosquito bites are at higher risk of getting malaria. While no association has been identified between taeniasis/cysticercosis and gender, for other food-borne trematode infections, the association of gender with disease risk is not well known in Vietnam, and will be one of the factors investigated in our program. On global level, women are more prone to fascioliasis in traditional communities, because they are responsible for the food preparation. The remoteness and distance to public health facilities constrains access to public health service and adds additional challenges for women and children, delaying health seeking due to limited capacity to travel on their own. In conducting multidisciplinary research and revising tailored interventions and elimination strategies, our study teams will remain sensitive to different health risks and needs between genders.

In the programme, we will aim towards a gender balance in our education and capacity building activities. This can be complicated due to the availability and interest of high quality students (for example with scientific staff) or to traditional roles and nature of the work in the case of the local level staff. In some cases this will result in a higher proportion of women trained, in other cases, more men. Within our programme, the scientific and coordinating staff has both men and women within the team at different levels of seniority and both genders play an equal role in decision making.

Digitalization - Digital for Development D4D

Data provides the basis for almost any development intervention, and is an essential element of science. The research in our programme will provide evidence using quantitative and mixed-method scientific approaches to move decision makers into action, and make informed decisions for strategies and policy. Combining multi-disciplinary datasets and applying solid statistical and bioinformatic approaches allows for more objectively describing the situation and to better address complex health challenges, especially addressing those in ethnic minority populations. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. Systematic collection, analysis and interpretation of malaria genetic surveillance data combined with epidemiological data, is the core monitoring and evaluation tool for malaria control and elimination programs and interventions, and provides the framework for effective allocation of resources. Digital technology also facilitates data collection of individual case data and data driven mapping. Modern technology can offer cost-effective ways to help and help strengthen national health systems. In addition, data from systematic disease burden analyses and surveillance activities are needed in order to keep track of the progress towards the SDGs.

In order to sustainably include digital data into policymaking, we will strengthen the capacity of NIMPE scientist on research methodologies, especially methodologies to integrate data from several disciplines to further the development of tailored parasitic control strategies. Using the latest technologies and analysis methods at NIMPE will ensure rapid turnover of data-based reports for the decision-making process. This opens the communications channel between those generating and those applying the digital data through existing reporting chains between the control programs and MoH.

Health

Parasitic diseases are still a major health issue in Vietnam, especially in ethnic minorities living in remote areas. Within this interdepartmental programme, capacity building and research-for-policy activities are proposed to support the characterization of the changing epidemiology of parasitic diseases and the population-at-risk in Vietnam. Ultimately this 5-year programme aims to contribute to the reduction of the burden and impact of malaria and food- and waterborne parasitic diseases in Vietnam, and finally to the elimination of malaria from Vietnam, and contribute to in particular to SDG Goal 3 Ensure healthy lives and promote well-being for all at all ages.

Marginalized ethnic minority communities are often made invisible in the design of public interventions. Ending malaria and reducing the impact of food and waterborne diseases will greatly benefit these communities and contribute to reducing health inequality and improving health of ethnic minorities in Vietnam.

At the moment, the health care system has combated with Covid-19 and investment on parasitic diseases decreased, risking the spread of drug resistance parasite and vectors, and diminishing the long-term decline in parasite-related deaths and infections.

By addressing the capacity gaps in terms of research methodology and laboratory capacity at NIMPE, through their direct role

as the executor of- and technical advisor for parasitic control in Vietnam at a national level, diagnostic and surveillance strategies for parasitic diseases will be improved, resulting in high quality evidence that can directly contribute to policy for prevention, control and elimination.

The program will not only strengthen human resources in science, but also train experts and health care staff from different institutes, hospitals and organizations in Vietnam and help to exchange study results and methods, broaden knowledge and cooperate in future studies in order to reduce parasitic diseases in Vietnam.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

Malaria and other poverty-related diseases have been progressively confined to specific areas and risk populations over the past years, altering the characteristics of malaria and infectious disease epidemiology in Vietnam. Many health problems are now mainly affecting especially poor ethnic minorities in remote areas, forest workers and migrants. Such a shift from majority society to minority groups and settings, requires targeting these areas for further improvement, assuring that no specific population groups is further impoverished or marginalized, Leaving No One Behind. Further success in controlling poverty-related diseases will be linked to a better understanding of these minority groups and settings and designing specific contextualized disease prevention and control strategies. The right to health and to health care is a universal human right, as defined in the Universal Declaration article 25. Children and women from ethnic minorities have poorer health and higher malnourishment that make them more susceptible to parasitic diseases and malaria; e.g. the risk of maternal fatalities among ethnic minority women was four times the risk of women from dominant ethnicity. By focusing on the diseases that affect these communities we aim to improve health equality, not only in terms of ethnicity, but also gender and age.

Decent and sustainable work

In 2019 - 2020, the Vietnam Assembly has approved the amended Labour law, in which the legal framework on employment relation, labour conditions and the safety and social welfare have been supplemented and completed. Vietnam is also ratifying two fundamental ILO conventions (1) Convention No 98 on the right to organize and collective bargaining and (2) Convention no 105 on abolition of forced labour. As NIMPE is a governmental institute, we are operating under the same Law of Labour as the Vietnamese government. Staff is well-equipped to do their routine work (better office, with full equipment such as computers, internet, etc.), better healthcare (annual free health checkup). Social security and health insurance are provided together with salary. Female staff is better protected in terms of maternity leave and there is also paternity leave for fathers. Gender equal: NIMPE is getting more aware of gender inequality issues. Staff is getting equal chance in work promotion and in appointment to important positions within the institute. There is equal chance for female scientists to be involved in the 5 year programme and join any training activities under the program.

Gender

Education and decision-making: In the past 5-year programme, a high gender imbalance in scientific training was observed. While it is certainly not a bad thing to attract mostly female students, as participants were of high quality and this potentially rectifies past imbalances, this might also reflect a global trend in increasing female ratio in (bio)medical research. Nevertheless, in this new programme, student recruitment procedures will be monitored to prevent a bias. When training people at community level, the gender balance depends on the job type, and not preselection. In the field in malaria, there is often a higher proportion of men, due to the nature of the work and traditional roles (forest work). In parasitic diseases studies, the number of local women trained is usually higher, as men are away for work in other provinces.

Vietnam has clear policies on women's rights and gender equality. In government agencies, women take decision-making positions, but are still not very well represented at the highest levels. In the long collaboration with NIMPE, we do see that scientists trained in our collaborative programs (both genders) are starting to take up more senior roles. Within our programme, the scientific and coordinating staff has both men and women in the team at different levels and both genders play an equal role in decision making.

Health: There are clear risk associations between gender and infectious diseases. Gender is an important factor in our qualitative and quantitative studies. Traditional gender roles contribute to this unequal risk (e.g. men who engage in prolonged forest activities are at higher risk of malaria; or women can have an increased risk to food borne parasitic diseases due to food preparation and handling of raw produce). Our study teams will remain sensitive to different health risks and needs between genders in multidisciplinary research and revising tailored interventions and elimination strategies.

Environment

While the program does not include interventions specifically aimed at environmental impact, the KLIMOS toolbox was used to get a better understanding of the potential impact on the environment.

The environment and changing climate will have an impact on our programme, for example on the transmission of infectious diseases. Potential consequences of climate change in Vietnam include human population movements and related subsistence strategies, exposing more people to infectious diseases. Researching and addressing these factors requires interdisciplinary

research collaborations. Transmission dynamics and spatial distribution of malaria are linked to environmental changes including (forest) land use, human settlement and insecticidal use including its use in intensified agriculture. NIMPE will continue to monitor this trend at national and local levels and use empirical evidence on the link between malaria epidemiology and environmental factors to inform policy. In supporting NIMPE in developing effective interventions and elimination strategies, the programme will focus on researching the application of novel interventions to provide the target populations with sustainable solutions taking the environment into account, i.e. improved housing and settlement systems to prevent mosquito-borne disease transmission.

NIMPE uses an external company for the weekly collection of waste, including laboratory waste which is sorted in bio-hazard containers. There is a strict non-smoking policy inside all buildings and there is a energy saving policy with a systematic deactivation of lights and AC devices (except specific laboratory spaces) outside working hours. A water saving policy was implemented with a systematic control of taps and water meters. Compared to our previous 5-year programme, international flights are reduced as we will incorporate online teaching and coordination activities using digital platforms.

Common outcome between distinct programmes

There is a clear link between geographic JSF for Vietnam and the programme described here, as our programme aims to improve the health equality of ethnic minorities, which will have a positive effect on the programmes aiming at gender equality and improving learning outcomes of children. Children and women from ethnic minorities have poorer health and higher malnourishment that make them more susceptible to parasitic diseases and malaria. A major challenge for Vietnam is the growing inequalities, particularly along geographic and ethnic divides. The focus of the geographic JSF will be to guarantee no-one is left behind in the steep economic growth of the country by focusing on the most vulnerable: that farmers can improve their supply of sustainably produced goods to local markets, that girls and boys have the same chances for economic empowerment and are safe from violence, that all children regardless of where they grow up or what ethnic group they belong to are supported at school to reach the same learning outcomes.

Areas of complementarity and synergy with the intervention of ENABEL

As Vietnam is not a bilateral country for the Belgian Development Cooperation there are unfortunately no Enabel interventions we might synergize with.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	NIMPE as a sustainable driver of change in parasitic disease research to inform policy and create improved surveillance and control/elimination strategies and improved health equality in Vietnam
Indicator title :	OC1. Uptake/influence of ITM-supported research findings and new technologies in public policies;
Indicator description :	Self-assessment on basis of available evidence using a ladder of change:(1 - knowledge has been disseminated ; 2- there have been some first exchanges with policymakers after dissemination ; 3-we are actively working with policy makers on translating our findings to policy ; 4 - new knowledge has been translated into policy ; 5 - new knowledge is being implemented at scale through changed policies) . SoV: self assessment, policy meetings, policy briefs, annual reports
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Formulation of outcome or result :	NIMPE as a sustainable driver of change in parasitic disease research to inform policy and create improved surveillance and control/elimination strategies and improved health equality in Vietnam
Indicator title :	OC2. Strengthened national policies, systems, guidelines for service delivery: New prevention / treatment / control guidelines developed, or existing ones updated
Indicator description :	Antimalarial treatment guidelines are updated twice (2022/2023 & 2025/2026); 2 updated Surveillance guideline for malaria; tailored intervention strategies (2023, 2025); case -reporting national guideline (2). SoV: national policies and guidelines
Baseline :	0

Target Year 3 – 31/12/2024 :	4
Target Year 5 – 31/12/2026 :	7

Formulation of outcome or result :	R1. Platform development
Indicator title :	R1.1 Number of new diagnostic tools and/or algorithms validated
Indicator description :	SoV: Validation report, publication, SOP
Baseline :	14
Target Year 3 – 31/12/2024 :	14
Target Year 5 – 31/12/2026 :	16

Formulation of outcome or result :	R1. Platform development
Indicator title :	R1.2 Number of realized technology transfers (technical platform installed and used)
Indicator description :	SoV: SOPs, laboratory notebooks, annual reports
Baseline :	9
Target Year 3 – 31/12/2024 :	11
Target Year 5 – 31/12/2026 :	13

Formulation of outcome or result :	R1. Platform development
Indicator title :	R1.3 Number of academic staff with strengthened qualifications (Master/PhD/Post doc/short courses) supported by ITM disaggregated by gender
Indicator description :	SoV: Training certificates; contributing authors on publications
Baseline :	0
Target Year 3 – 31/12/2024 :	2F/1M
Target Year 5 – 31/12/2026 :	3F/3M

Formulation of outcome or result :	R2. Research for policy
Indicator title :	R2.1 Number of articles published in international peer reviewed journals (through the support of the programme)
Indicator description :	SoV: Pubmed, WoS, ITM research portal
Baseline :	5
Target Year 3 – 31/12/2024 :	8
Target Year 5 – 31/12/2026 :	12

Formulation of outcome or result :	R2. Research for policy
Indicator title :	R2.2 Number of articles submitted to international peer reviewed journals (through the support of the programme)
Indicator description :	SoV: Pubmed, WoS, ITM research portal, preprint servers (e.g. Arxiv, BioRxiv, MedRxiv, journal specific servers, etc.)
Baseline :	0
Target Year 3 – 31/12/2024 :	5
Target Year 5 – 31/12/2026 :	11

Formulation of outcome or result :	R3. Getting Research Into Policy and Practice (GRIPP)
Indicator title :	R3.1 Number of participations in technical fora, policy advisory groups, and implementation programmes
Indicator description :	Antimalarial policy review meetings (4 in 2022/2023 & 4 in 2025/2026); Synergy & policy meetings for malaria (2 in 5 years); Policy meetings FBT (2 in 5 years); Annual summary meetings (every year). SoV: meeting minutes, meeting reports
Baseline :	0

Target Year 3 – 31/12/2024 :	15
Target Year 5 – 31/12/2026 :	23

Formulation of outcome or result :	R3. Getting Research Into Policy and Practice (GRIPP)
Indicator title :	R3.2 Number of policy briefs and other dissemination products aimed at other knowledge users (NMCP, IMPE's, Health centres, hospitals, communities)
Indicator description :	Continuing medical education for malaria systems (every 2 years); 1 updated map of drug resistance for malaria; IEC campaigns for parasitology. SoV: policy briefs, workshops, etc.
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	R3. Getting Research Into Policy and Practice (GRIPP)
Indicator title :	R3.1 New knowledge on contested heritage translated into at least one publication R3.3 Number of health care staff trained in new diagnostic tools/algorithms or surveillance protocols
Indicator description :	Training of health centre staff in new tools and guidelines. SoV: Training certificates; annual reports NIMPE
Baseline :	0
Target Year 3 – 31/12/2024 :	200 (40% F)
Target Year 5 – 31/12/2026 :	360 (40% F)

Formulation of outcome or result :	R4. Synergy development
Indicator title :	R4.1 Number of (online) network meetings (seminars, workshops) attended by NIMPE staff
Indicator description :	Multicountry network of countries and institutes working on malaria molecular surveillance. Meetings (online & face-to-face) will be held for joint-training & sharing of results and protocols. SoV: meeting minutes; meeting reports
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Activities, targets groups and beneficiaries

Classification of activities

Platform development for the development of parasitic control strategies

- Malaria molecular surveillance platform – transfer & training of laboratory methods; development of SOPs and guidelines for surveillance; training in bioinformatics.
- Digitalization and data integration – training in integrating data from several disciplines. (e.g. mixed qualitative, ethnography, GIS)
- Diagnostic tools for FBT diseases – validation & optimization of diagnostic tools; transfer & training of laboratory methods; training in One Health approach

Research projects

- Monitoring efficacy of antimalarial drugs and parasite population dynamics (spatial and temporal) using sentinel site surveillance strategy
- Multidisciplinary approach to identify risk factors and socio-economic characteristics and barriers to malaria control for resurging *P. vivax* malaria in ethnic minorities.
- Evaluation of the 1-3-7 approach for malaria elimination.
- Determine the burden of cysticercosis and apply One Health approach to identify factors facilitating transmission in ethnic minorities.
- One Health approach to identify factors contributing to the transmission of emerging FBT infections within the human-animal-ecosystem interface.

Getting research into policy (GRIPP)

- Provide evidence from surveillance to antimalarial treatment policy review meetings.

- Translation of molecular surveillance results and development and validation of prediction tools to facilitate interpretation & inform policy and malaria control strategies.
- Draft tailored interventions and control & elimination strategies based on evidence.
- Design and improve multi-sectorial disease prevention approaches focused on the socio-spatial configurations of housing and settlement systems and their interaction with the surrounding landscape.

Synergy

- Multi-country initiative: Malaria molecular surveillance network
- Multi-country initiative: Thematic Network on Climate change and health system resilience

Target group(s)

Institutions: National Institute of Malariology, Parasitology and Entomology

Individuals:

NIMPE scientific staff. (1 PhD (F), 3 training & courses (4F/3M)

Local communities, (ethnic minorities and migrant & mobile population; ~6000 participants, ~50%F = expected based on demographics).

Health center staff (malaria: 170 persons, 20% F; parasitology: 220 persons, 60%F)

Beneficiaries

Institutions:

National Malaria Control Program

Ministry of Health

Individuals:

Scientific communities: Young scientist will have an opportunity to develop their scientific portfolio, enhancing research methodology through academic courses and training.

Local communities beyond the targeted groups (<15% of population is ethnic minority of which >70% living in poverty: ~10 million people)

Health workers beyond the target group

Title of the reference annex :	TOC_ITM_Vietnam_22-26
Title of the reference annex :	RA_ITM_Vietnam_22-26

Description of the Relevance

Policy & ToC: Challenges to reach the SGDs remain on the implementation of laws and policies at the local level, where international organisations are well placed to contribute to the principles of **Leave No One Behind** [Geographic JSF Vietnam 2022-26]. Currently Vietnam aims to **eliminate malaria** caused by *P. falciparum* by 2025 and all species by 2030. **Ending malaria and reducing the impact of food and waterborne diseases** will greatly benefit **ethnic minority populations**. Malaria elimination is threatened by drug resistance, and the efficacy of new drugs need to be monitored (as per Malaria Treatment Guidelines, but not yet brought into practice). We will strengthen NIMPEs capacity for surveillance to provide strong evidence to update the treatment guidelines. Research projects will provide new knowledge and approaches for the benefit of target groups, and evaluate malaria elimination approaches, for sustainable health policy. The master plan for control of parasitic diseases (2021-25) from the MoH, include activities for **control of fasciola and cysticercosis** (Guidelines for monitoring activities & Guideline for management parasitic diseases including FBT and cysticercosis, 2021). The aim is to map parasitic diseases, develop treatment, diagnosis and prevention guidelines to better support training of local health staff and develop provincial master plans for control and prevention of parasitic diseases. In addition, the results from the research projects can inform the ministry of agriculture in the evaluation of the meat inspection guidelines.

Gender: We aim to bring a balanced perspective to science by including scientists of both genders in all phases (conceptualization, execution & interpretation) and aim for a gender balance in training activities. A diverse group of scientists has more diverse perspectives, which is impacted by gender and cultural background. To rectify past imbalances in gender within our programme, we often include more women in our training activities, and stimulate the inclusion of women in the decision-making processes. Where relevant, indicators for our programme are disaggregated by gender to ensure a balanced inclusion in the interventions. There are clear associations between gender and infectious disease risk, amplified by traditional roles, which are elements included in our research. Children and women in ethnic minorities have poorer health and higher malnourishment making them more susceptible to parasites and malaria. More details: Annex 'Responses Dec'.

Environment & climate: Potential consequences of climate change in Vietnam include human population movements and subsistence strategies, exposing more people to infectious diseases, especially in poorest populations. Researching and

addressing these factors requires interdisciplinary research, strengthened in our programme. Research on emerging diseases at NIMPE will be strengthened using the One-Health approach, which recognizes an intricate link between human and animal health and our shared environment, and thus aims for multisectoral collaboration to achieve reduced infectious diseases burden. The acquired skills and knowledge will in the long-term aid communities to strengthen resilience against climate induced health risks. More details: Annex 'Responses Dec'.

Educational approaches: The majority of people is trained through individual training activities (face-to-face training, lab practicals, online courses, etc.) through direct involvement in research and in synergy with education in the ITM portfolio (e.g. short courses). NIMPE trains IMPE and health staff at province levels, which can subsequently train health staff at the district level, who will in turn train the commune level. In some cases (e.g. due to changing treatment policy), NIMPE provides training at all levels, followed by monitoring to ensure correct application of skills and biennial retraining. Public awareness activities are done using common approaches in the Vietnamese context: TV/radio broadcasting, loudspeaker system, posters. We are exploring the use of educational apps. The individuals that have increased their individual capacity, have increased their potential to be change agents by applying their newly acquired knowledge and skills. In becoming change agents, individuals may assume responsibilities and act as committed global citizens. This allows them to have a positive impact on the performance of the organisations they work in as well as on their sector at large.

Continuation of collaboration: NIMPE and ITM have been collaborating since the mid-1990s, resulting in joint research on malaria epidemiology, vector control measures, and antimalarial drug efficacy, providing evidence used in decision-making, antimalarial treatment policy and control strategies. ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration. This should be seen as a sliding scale where the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed. Over time, partners will acquire specific capacities, knowledge and expertise and will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice (GRIPP). Continuation of the programme and further development of activities is required, in particular to support NIMPE and Vietnam in achieving malaria elimination. The long-established international partnerships of NIMPE are considered a valuable element contributing to the aim of elimination (WHO, 2018). While NIMPE receives support from other international partners, the collaboration with ITM is unique in the sense that it supports capacity development especially at the level of laboratory methods and diagnostics, which are transferred to the lab at NIMPE. Other collaborators often collect samples with NIMPE's support, but the analyses are done in labs outside Vietnam. We are bringing the tools to NIMPE and want to continue to support NIMPE in expanding the capacity to apply these tools to generate evidence for policy.

The programme has been relatively small compared to other country programmes, with several master students and individual training in each program, but only few of PhD students (1-2) per 5-year programme, taking time to reach a critical mass. In the current programme, we further develop the research skills and improve the positions of the young scientist through research projects that are important to strengthen policy. As government priorities change, challenges arise, and research fields develop, new skills and innovative tools are required.

Strategic JSF Targets & stakeholders: The present programme is strongly linked to the 6 goals of the JSF HES4SD. In summary, the programme interventions aim to increase the individual capacity of scientists at NIMPE in novel research methods (SG1), increasing their potential to be change agents (SG2). In addition, the capacity of NIMPE will be increased (SG3) with novel platforms for the diagnosis and surveillance of parasitic diseases, and through co-creation and application of relevant knowledge (SG5/SG6) and integrating specific strategies (GRIPP), allowing NIMPE to operate as a driver of change (SG4) aiming at elimination of malaria and reduction of parasitic disease burden in Vietnam. All activities in this programme are the result of a need or requirement identified by NIMPE, and/or in collaborations with MoH, Global Fund and WHO, for which a lack of capacity was identified.

Description of Coherence

The present five year programme is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP. In addition, the research aligns with 4 priority research themes defined in the IPP: (re-)emerging infectious and outbreaks, antimicrobial resistance, accelerating disease elimination, and designing sustainable health systems & strategies. The programme is supported by 3 ITM research units within the departments of Biomedical Science and Public Health, and aligns with multi-country initiatives (cf. synergies). While this programme has a focus on more long-term capacity development & collaboration, the highly complementary Synergy programme will allow us to flexibly grasp opportunities for synergetic interventions with other actors or funding sources, including activities linked to the collective learning of the thematic

JSF HES4SD, serving as a catalyst for the programme's impact.

External coherence:

A detailed analysis of shared interest and coherence with WHO, Global Fund, ministries and other relevant (international or national) actors in malaria and FWB parasitic diseases working in Vietnam is presented in the ToC chapter. The scientific results generated in this program align most to the same strategic goal of international organisations such as WHO and the Global Fund to fight AIDS, Tuberculosis and Malaria, aiming at reducing the gap and inequality within different populations via identifying potential barriers and risk factor. Furthermore, the programme strongly adheres to the goal of Universal Health coverage. Within the Thematic JSF HES4SD we share common strategic goals and strive for synergy and complementarity with the other actors involved. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health related Research involving Humans (2016). Ethics and ethical review are essential in any kind of research involving human participants, human biospecimens or personal data, and research needs to adhere to GDPR principles.

The focus of the geographic JSF for Vietnam is on specific groups at high risk of being left behind, with a focuses mainly on gender equality and empowerment of women and girls, in addition inclusive and equitable education and improving learning outcomes of all children, particular children in remote, disadvantaged districts. The country JSF aims to contribute to an enabling environment and improved skills of young women and farmers to be economically empowered and more resilient. There is a link with our programme that aims to improve the health equality of ethnic minorities. The challenges related to environment and climate change will be addressed transversally in the country programmes in the JSF, which will be developed in synergy with the thematic JSF's, such as the JSF HES4SD.

Description of Effectiveness

1. Demonstrate the realistic and achievable nature of the programme and expected results, in conjunction with the Theory of Change;
2. Demonstrate how the expected results can be closely attributed to the programme (as opposed to the impact);

As the target group and partner of the proposed intervention coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. The evidence provided through research will support as a strong and comprehensive foundation for policy (sphere of control). NIMPE is involved in the policy-decision procedure as technical advisor and administrator of the national malaria control program and parasitic disease control. It can draft new policies and strategies and together with the MoH, and lower level (district) control programs (IMPE's), decide on new strategies and implement them (sphere of influence). Vietnam is strongly committed to the elimination of malaria by 2030 and reducing the burden of parasitic diseases. Due to this active commitment there is a high likelihood that suggested new strategies will be taken into policy and contribute to the SDG targets (sphere of interest). Eliminating malaria from Vietnam will be challenging, but feasible. Other countries in the Greater Mekong subregion (Cambodia, China (Yunnan Province), the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam) supported by the WHO are jointly aiming to contain the spread of drug-resistant parasites and eliminate malaria from the region by 2030. The most recent success in the region has been the official declaration of China as a malaria-free country this month (July 2021) by the WHO.

ITM has a strong track-record when it comes to achieving results through its programmes. From the evaluations of past interventions, such as [the one for the third framework agreement funded by DGD](#), it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring. In the performance scores for the previous collaboration between NIMPE and ITM, the effectiveness criterium never scored below B.

Through 64 years of establishment and development, NIMPE has performed excellently its functions and responsibilities in reducing malaria morbidity and mortality, malaria outbreaks and the morbidity of parasitic diseases in Vietnam, as evidenced by several national awards. The control of malaria and parasitic diseases has made active contribution to the protection and improvement of people's health. Malaria cases in Vietnam have dropped from 17.515 in 2010 to 9.331 in 2015 [WHO world malaria report 2020] and further down to 1.422 in 2020 [Annual NMCP report NIMPE] supported by the activities and interventions from NIMPE and local level NMCPs. These successes have been achieved despite challenges such as the emergence and spread of artemisinin resistance, through adaptations in control strategies and interventions supported by evidence from research projects, in collaboration with ITM and other international partners, conducted and managed in many cases by Vietnamese scientists trained within the ITM-NIMPE collaborations over the years. An example of the impact of past research projects, is the clinical trial conducted in Quang Nam province [Thriemer et al. AAC 2014], which showed a high proportion of delayed clearance of parasites after treatment and resulted in the declaration of the province as a "Tier I" area by the NMCP and WHO as part of the Global Plan for Artemisinin Resistance Containment.

The collaboration between NIMPE and ITM has also contributed to the formulation of the 2020 guidelines for diagnosis,

treatment and prevention of taeniasis/cysticercosis in Vietnam. Research and strengthened capacity has contributed to a reduced burden of parasitic disease in Vietnam. For example in the third framework programme, a mass-drug administration study was conducted in areas with high prevalence of taeniasis. The studies that have been conducted have also increased the awareness of the population to parasitic diseases, their causative agents and preventive measures. Before each survey, we conduct IEC (information, education, communication) campaigns to explain the life cycle of *Taenia solium*, consequences of the disease (taeniasis and cysticercosis) and prevention. After each survey, positive taeniasis cases receive treatment, positive cases for active cysticercosis are invited for further medical examination.

3. Explain how the baselines have been identified and how the organization has ensured that they can be used as part of the intermediate or final evaluations or even impact assessment;

Baseline information is collected at the level of NIMPE mainly, as the partner is also the target groups of the results. Baseline information is collected mainly through document review at their level, and based on the results of the previous joint 5 year programme. In this previous programme, the focus was more on platform development and included much more technology development and transfer and capacity strengthening of individuals, in addition to research project. In the current programme the focus changed more to implementing the tools in making a difference to policy. This is also in alignment with a decision at the level of ITM to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore we included a standard indicator on this aspect. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

While the collaboration between ITM and NIMPE is a continuation of programs since 1995, and the topics in a larger sense have not changed, the specific objectives of the different programs along the years have evolved, and therefore several indicators for this new program have been set to 0. More specifically, while the focus of the previous program was to develop tools and build the capacity to use the tools on the technological platforms, the next program focusses more on expanding these skills and using the developed methods to really be implemented in surveillance and lead to uptake in policies, systems, guidelines for service delivery. While previous programs have sometimes also had an impact on policy, this has not been monitored in that way, nor has it been specified as such in indicators, therefore the baseline for these is set to 0. We have also newly added a specific indicators on Getting Research Into Policy and Practice (GRIPP) and synergies. For the continuation of the technology development and transfer, as well as the research output, we have set the baseline using results from the previous programme. For the education, we have changed the formulation of the indicators, which was in previous years specified by the level, and not by gender. In the new program we will disaggregated by gender. In our previous programmes, indeed many individuals have received training, and many of these individuals are now also the ones that continue the training in the new programme.

4. Explain how marginalized groups are to be taken into account and explain how the programme will ensure that inequalities will not widen, especially by distributing the expected results across the different groups (concept of “differentiated results” – *Leave no one behind*).

In committing to the realization of the 2030 Agenda for Sustainable Development, Member States recognized that the dignity of the individual is fundamental and that the Agenda’s Goals and targets should be met for all nations and people and for all segments of society. Furthermore, they endeavoured to reach first those who are furthest behind. Ensuring that these commitments are translated into effective action requires a precise understanding of target populations including vulnerable groups: children, indigenous peoples, migrants and minorities.

In the multidisciplinary study to identify risk factors and socio-economic characteristics and barriers to malaria control in ethnic minorities, we plan to include a mixed-methods study consisting of an exploratory qualitative strand and a quantitative strand. The qualitative study aims to gain an in-depth understanding of the social, political and power structure in the study context, who are marginalized and how to engage them in public health strategies aiming to eliminate malaria. Findings from the qualitative strand will inform the design of the quantitative strand to ensure the sampling strategy is representative and inclusive of different groups in the study populations. Throughout the study, NIMPE’s researchers will have a neutral role in dialogues with the communities and stakeholders to ensure their inputs are included in the revised intervention strategies.

5. Specifically, for all programmes covered by a geographical JSF or a thematic JSF, the organization must also > demonstrate how one or several common approaches that have been identified and formulated in the reference JSF will be put into operation.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be

responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

1. The majority of the budget (40%) will be used for operational costs for the programme. For example costs for field work activities (local staff fees, microscopy, materials, etc.), laboratory reagents, analysis software, stationary, training/workshop activities, translation services (to local languages of targeted communities) and publication costs (for publication of scientific papers). Travel to field sites and international travel (programme coordination, and research and training activities) make up 24% of the budget. Small investments (3.8% of the budget) are foreseen in the first 2 years of the programme for the platform development of the malaria molecular surveillance and parasitological diagnosis activities (ICT platform for data analysis and laboratory equipment). 1.3% of the budget is reserved for training grants to attend workshops and seminars of the multicountry initiative for malaria molecular surveillance. Salaries for the local office (11% of the budget) include administrative and laboratory technical staff who are needed throughout the programme in support of the activities. Scientific support staff from ITM (20% of the budget), based in Antwerp will spend their time working on the program by developing protocols, coordinating studies and support technological transfer. This staff will also support and coordinate the training activities and supervise the laboratory work, including organizing quality controls for laboratory work.
2. For laboratory reagents and consumables, we purchase several items in Belgium and ship these to NIMPE. This is not always the cheapest alternative, however, in the cases that we choose for this option this is because of validated protocols which use reagents that are not always available in country. However, for sustainability, we promote local sourcing of consumables and reagents where possible, although these items are sometimes more expensive than in Belgium (the European market is more competitive, so prices can be lower). Training and network activities for molecular surveillance are foreseen in the programme, which will allow the South-South exchange of experiences and increase learning-by-doing and ownership of the programme activities, supporting long term sustainability of the capacity that has been built. This will require international travel foreseen on 2 occasions rather than online meetings, to encourage interaction and support building the network between South partners. A PhD student that be trained and will work on the research projects in this programme, will apply for a sandwich PhD fellowship with ITM in September 2021, therefore we do not need to include a PhD grant in the current program. Only a limited part of the staff Fte for ITM scientific support staff is budgeted on the programme. Budget available for research is limited in this country program. Therefore for the current program, we are trying to join resources and efforts between the different proposed research projects, for example to join field work efforts in the same communities, to be more efficient with the available budgets. Or for example to add sample collections for molecular surveillance with socio-ecological/epidemiological research in order to increase efficiency and impact.
3. ITM does not work with technical assistants or a local office in the partner country. Instead, we opt to offer technical assistance and programme management from a distance to our partner institute, with regular exchange visits, hence reducing personnel costs.
4. The programme consists of a partnership between NIMPE and ITM. The majority of the activities are performed by NIMPE and ITM staff with the help of local health staff who receive training to follow protocols and to do field work, such as screening to find malaria patients, informed consent forms and sample collection, for which they can receive a fee. This programme does not work with a volunteer basis due to the strict protocols and sample preservation.

Description of the expected Impact

This programs aims to strengthen the position of NIMPE as an actor of change in the combat against infectious diseases, especially those diseases impacting minority population with unequal health access. **With this strengthened capacity, we aim to improve the research evidence that is used to review and develop strategies for the treatment, control and elimination of parasitic diseases in all people in Vietnam.** Vietnam currently aims for **malaria elimination by 2030**, and in order to achieve this goal, strategies will need to be adjusted in order to be able to tackle the final residual pockets of malaria transmission in Vietnam and resolve barriers in health access of ethnic minority communities. These communities are also the most sensitive to climatic changes due to their cultural habits, reliance on subsistence farming and their natural environment.

This program is expected to result directly in updated policies and new strategies for **control and elimination of parasitic diseases in Vietnam.** And through capacity strengthening of the institute directly responsible for carrying out the policies and control strategies, we expect not only to impact the communities directly involved in the research studies within this program, but to also benefit other high burden communities.

In addition, the research methodology and technical skills that are built during this program, can be shared with the wider

community of scientist and health research staff in Vietnam, benefitting not only the research within this program, but also to the wider community of disease researchers in Vietnam. There are other actors that support the NMCP, but mostly from a clinical perspective. This programme is unique in the sense that it supports the diagnostic and surveillance capacity from a laboratory research perspective, and supported by mixed-methodology research approaches. This combination provides strong evidence for policy and will amplify the control and elimination efforts.

Description of Sustainability

The programme target group and partners coincide, therefore technical, social and institutional sustainability have strong overlap. Together with ITM, NIMPE co-implements the project. In order to ensure appropriation by our target groups/partners, they have been strongly engaged in the writing of this proposal, and will remain the key responsible party to its execution. All interventions described in this program are the result of a need or requirement identified by NIMPE, and/or in their collaborations with MoH, and international organizations. In other words, there is a strong motivation from the responsible local actors to improve control programs for parasitic diseases and the malaria elimination program, supported by MoH and the prime minister of Vietnam.

An important element of the platforms that are strengthened at NIMPE are the training activities that support the uptake and ownership of the platform and the technical capacity. In addition, with the partner, we are teaching the teachers, and the skills and platforms are passed on to other levels on the malaria control programs and health staff. Capacity building of the partner institute will be achieved through a range of methods, such as short courses, individual internship and jointly conducted research projects. At the end of the 5 year programme, the tools and skills will be transferred to NIMPE and integrated in future programmes. Junior Vietnamese scientist that are trained are often employed by NIMPE and stimulated to become independent researchers and develop own research and policy support programs. As government priorities change (*e.g.* control to elimination), and new challenges arise (*e.g.* emerging parasitic diseases, residual malaria in remote communities), and the research fields develop, new skills and innovative methods are required and need to be strengthened. With the skills and platforms built in this program, NIMPE will be a stronger and more attractive partner for national and international funders in disease research and surveillance. In addition, the evidence base in support of national guidelines is strengthened, which will also amplify the attention for these diseases resulting in continued resolve of the government to eliminate malaria and reduce the burden of parasitic diseases, ensuring that the resources will be made available to achieve these desired changes.

The annual budget of the Vietnamese government for NMCP was 37 billion Vietnamese Dong (VND) (1.4M€) in 2019 and 29 billion VND (1.1M€) in 2020 for malaria control and elimination programs and 1.5 billion VND (55K€) in 2020 and 4.5 billion VND (170K€) in 2021 for parasitic disease control. In addition, funds are received from the Global Fund and other international organizations such as the WHO and NGOs. In the WHO review of the NMCP (2018), the WHO warns that “Financial support from external funding partners continues to flow but will likely be time limited.”, thereby stimulating the local government to ‘seize the moment and take bold steps’ to ensure required resources for malaria elimination activities are reserved.

ITMs partnership trajectory approach aims to strengthen sustainability by reinforcing partner capacities step-by-step. By making a thorough analysis of the needs and priorities of partners, we can address capacity gaps first at the lowest level in institutional capacity strengthening, and taking it up a notch with each new cooperation. By taking the needs assessment into account, we ensure buy-in from both ITM and NIMPE and ensure local ownership, hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, followed by a transition into institutional collaboration with an equal level playing field for joint research with societal impact. The final aim is to reach the phase-out, when partners are fully equipped to obtain external funding instead of applying for international cooperation funds.

Description of the Partnership Strategy

Involvement of the partner in the programme and JSF

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council, in which ITM’s partners are represented, and who discussed the thematic JSF process.

ITM and NIMPE have been collaborating since the 1990’s, and priorities for capacity building and research are determined together. All proposed activities are the result of a need or requirement identified by NIMPE, and/or in their collaborations with MoH, Global Fund and WHO and other international organizations, for which a lack of capacity was identified. NIMPE has been closely involved in developing this programme, starting with drafting the first internal call for intentions for programmes at the start of 2021, followed by the Joint Partner Meeting explaining the process and requirements. Since then, ITM and NIMPE staff have been working closely together to draft the objectives and activities, Theory of Change, budget and other sections submitted here.

Partner institute

Only one partner institute is included in this programme. The National Institute of Malariology, Parasitology and Entomology (NIMPE) has a responsibility for doing scientific research, training and (re)training for specialized staff, post-graduate training, health services for malaria, vector-borne and parasitic diseases, entomological vector control services, health education and behavior change, international cooperation on malaria, vector-borne and parasitic diseases and control measures and giving technical guidance to sub-national levels for the whole country. NIMPE is responsible for the day-to-day management of the control programs of parasitic diseases, in particular the National Malaria Control Program (NMCP). It is therefore the right partner to increase the capacity in order to perform research for policy and for generated knowledge to be taken up into policy and new strategies.

NIMPE is led by the director, 2 vice directors with 6 professors, 22 PhD and 270 staff. NIMPE is organized in Dang Van Ngu Medical College, Centre for Vector Control, Dang Van Ngu Hospital and 11 departments: Department of Epidemiology, Department of Treatment and Clinical Research, Department of Entomology, Department of Parasitology, Department of Molecular Biology, Department of Chemical Experiment, Department of Planning, Department of Financing and Accounting, Department of Scientific and Training, Department of Organization and Personnel, and finally the Department of Administration.

Capacity building strategy

A capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

An important element of the platforms that are strengthened at NIMPE are the training activities that support the uptake and ownership of the platform and the technical capacity. Capacity building of the partner institute will be achieved through a range of methods, such as short courses, individual internship and jointly conducted research projects. At the end of the 5 year programme, the tools and skills will be transferred to NIMPE and can be integrated in future programmes. With the skills and platforms built in this program, NIMPE will be a stronger and more attractive partner for national and international funders in disease research and surveillance. In addition, the evidence base in support of national guidelines is strengthened, which will also amplify the attention for these diseases resulting in continued resolve of the government, ensuring that the resources will be made available to achieve these desired changes.

Link between the partner and the target groups.

The target group and partner of the proposed programme coincide; capacity will be built at NIMPE, with NIMPE scientists. Training and (re)training specialized staff such as Health Centre staff is one of their main priorities, as well as researching and providing technical guidance to the MoH on the implementation of malaria and parasitic diseases control activities nationwide, working with the communities that are affected by these diseases.

Mutual reinforcement

Mutual reinforcement is key to the NIMPE-ITM partnership, NIMPE and ITM have been collaborating since 1995, with the aim of controlling malaria and cysticercosis and other parasitic and vector borne diseases in Vietnam. This partnership has been successful throughout the years as it is based on the mutual interests of all stakeholders. Through the scientific collaboration with ITM, local scientists at NIMPE have worked in collaboration with scientists from ITM to address the scientific gaps and contribute to strengthening NIMPE's scientific role and profile. Priorities, activities and resources have been discussed in advance and clear arrangements have been made between the partners. A multi-disciplinary approach has been chosen, involving different departments from each partner. This has broadened the scope of the collaboration, where we have jointly developed research projects and has allowed getting great benefits from research.

More details on the mutual reinforcement can be found in the Annex 'Responses December'.

Description of Synergies

Synergies with other Belgian actors in Vietnam

Geographic Joint Strategic Framework for Vietnam 2022-2026

ITM joins only as observer to the JSF Vietnam, together with Oxfam, ARES, VLIR-UOS, and CEBioS. VVOB, Plan International and RIKOLTO, form the core of the geographic Joint Strategic Framework for Vietnam in the period 2022-2026. The focus of the country JSF will be to guarantee no-one is left behind in the steep economic growth of the country by focusing on the most vulnerable: that farmers can improve their supply of sustainably produced goods to local markets, that girls and boys have the

same chances for economic empowerment and are safe from violence, that all children, regardless of where they grow up or what ethnic group they belong to, are supported at school to reach the same learning outcomes. As described in the JSF, a major challenge for Vietnam is the growing inequalities, particularly along geographic and ethnic divides. Ethnic minority groups represent 70% of people living in poverty, in some ethnic groups as many as 93% of their members live in poverty.

There is a link between the country JSF and the programme described here, as our programme aims to improve the health equality of ethnic minorities, which will have a positive effect on the programmes aiming at gender equality and improving learning outcomes of children. Children and women from ethnic minorities have poorer health and higher malnourishment that make them more susceptible to parasitic diseases and malaria. The challenges related to environment and climate change will be addressed transversally in the country programmes in the JSF, which will be developed in synergy with the thematic JSFs, such as the JSF HES4SD. There are clear interlinkages and co-benefits that will drive the exchanges between the organisations during implementation. No formal synergies have yet been formed, but will be explored in the current programme.

In general, complementarity and synergy will be explored and realized among the member organisations of the geographic and thematic HES4SD JSF and their partners. The JSF HES4SD will explicitly seek for complementarities and synergies, beyond HE&SIs, with other governmental and non-governmental actors, both nationally and internationally. Active participation of these actors will be sought in specific projects and programmes to reinforce common objectives (complementarity) or to stimulate collaboration between academics/scientists and actors in the broader society (synergy).

The HES4SD JSF initiators envisage to jointly organise at least three strategic dialogues Vietnam in consultation with the local partner HE&SIs, embassy and DGD. On this occasion an event open to Belgian and local development actors can be organized, focusing on the exchange of project results, networking among alumni and scholarship holders, identification of potential synergies and complementarities. The HES4SD JSF initiators will further develop mechanisms to systematically share information on ongoing projects and the launch and results of calls for scholarships and project proposals. Representatives and partners of the JSF HES4SD, including ITM, will participate in the strategic dialogues of the geographic JSF as observer.

Synergies within JSF HES4SD in Vietnam

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme.

Within the thematic JSF, ARES and VLIR-UOS serve as umbrella organizations with a wide variety of member institutions covering all academic and scientific fields. The actors in this thematic JSF will cooperate and reinforce each other in the fields of joint research, teaching and management topics. Synergy might be created by the collaboration of several HE&SIs in specific project and programmes, as it happens in many current programmes. Ongoing synergy projects including ITM and NIMPE are: a VLIR-UOS South Initiative (EmFaVie), ITM Alliance (EmFaVieTrained), FWO-NAFOSTED project (FasciCoM), ARES project (FOODTINC), which focusses on investigations on the epidemiology of foodborne trematodes (*Fasciola* in particular). New rounds of competitive calls will open after the start of this programme and will be explored within the five-year programme. Actors working on ecological systems, rural health and improving health of ethnic minority children include NIMPE, Plan International and VLIR-UOS. As these actors might work on different locations and topics, synergy can be built between NIMPE, ITM and these actors in the area of translation of scientific evidence into programs or policies.

Synergies with international organisations

Building on previous research in the Greater Mekong Subregion, the Unit of Socio-Ecological Health Research will continue further the collaboration between scientists from various disciplines, policy makers, program managers and manufacturers in the Asia Pacific Malaria Elimination Network. In addition, the Malariology Unit of ITM is collaborating with dr. Sarah Auburn from the Menzies School of Health and Hidayat Trimarsanto from the Eijkman Institute (soon to start a PhD at Menzies) in the development of *P. vivax* molecular surveillance tools for the geographical prediction of origin of isolates, which is an important element in the last stages of malaria elimination. Whereas Menzies has developed a barcode for prediction at country level throughout the globe, ITM has developed an assay that can genotype samples for this barcode, and in addition has added a Vietnam specific within-country barcode. The assay (and a sister assay targeting *P. falciparum*) will be transferred to NIMPE within the first years of the proposed programme.

More details on synergies: Annex 'Responses December'

Synergies within ITM

The programme is supported by 3 ITM research units within the departments of Biomedical Science and Public Health, and aligns with multicountry initiatives, namely the Thematic Network on Health and Climate Change, and the South-south network

for malaria molecular surveillance. In addition, the units involved are also part of other ITM country programs, with which there are contextual interlinkages. In the case of food borne trematode diseases, there is a link with the programs in: DRC (partner INRB, working on cysticercosis), South-Africa (partner DVTM working on regional research and training hub on zoonotic diseases), Ethiopia (Jimma University Ethiopia working on training & research neglected zoonotic diseases). In addition, there is a DGD supported sandwich PhD project supporting Man TT Nguyen on researching Taenia spp. in pigs in Vietnam. For malaria molecular surveillance, there are very similar activities (training, transfer, standardization and implementation of molecular surveillance tools) in the country programmes of Peru, Burkina Faso, and Rwanda. Malaria molecular surveillance activities and a PhD project in Mozambique are supported by the Flemish government. In addition, the potential for collaborations in this topic will be explored with partner institutes in DRC and Nepal. Training of social scientists in interdisciplinary methods will be integrated in the training on qualitative mixed methods coordinated by the unit of socio-ecological health research. Collaboration with international and local researchers and actors will be explored on further application of multi-sectorial approach to disease prevention and malaria elimination strategies in Vietnam.

Description of how individual or collective recommendations and lessons are to be taken into account

The programme has integrated the recommendations and lessons identified through the JSF, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue, this programme gives particular attention to the valorisation of knowledge. Through its focus on “Getting Research Into Policy and Practice (GRIPP)” ITM will strive to maximize this aspect in its programmes, and will also establish the preconditions to learn more about the best possible strategies to achieve this, a.o. through indicator development, and as main topic of the mid-term evaluation in 2024. Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis, risk management approach and stakeholder analysis.

Country specific:

- Budget available for research is limited in this country program. Therefore, we plan to join resources and efforts between the different research projects, for example to join field work efforts in the same communities, to be more efficient with available budgets. Or for example to add sample collections for molecular surveillance with socio-ecological research in order to increase efficiency and impact. Additional external funding will be sought to supplement activities described in this program to increase the impact. As an example, we have obtained additional funding for parasitological activities through VLIR, ARES and FWO, and in the past we supported training activities at NIMPE through ARES and ITMs global alliance (supported by DGD).
- We have learned that organising purchasing from Belgium, and one or two shipments a year covering the needs of the different components will highly reduce administrative burden and cost of both partners, therefore we have foreseen local budget at ITM in the current program.
- Frequent contact is key for the success of the project and to timely adjust activities where necessary. During the time of travel restrictions we have relied on online communication channels, and have gained more experience with online training as well. In the current program, we therefore expect to be able to conduct more coordination meetings and theoretical training sessions through online platforms, reducing the need for international travel and associated environmental impact of travel. Flexibility in planning of activities, priorities and internal budget allocations and good working relations and communication can overcome restrictions and delays due to global events.
- In the previous 5-year programme, we experienced a lower allocation of government budget for the NMCP, therefore the NMCP had to adjust their plans, resulting also in changes in the plans for our programme. As malaria continues to decline, there is a risk that government commitment and budgets will also reduce, threatening the elimination goals. Therefore we have foreseen to have continued communication with MoH and other important stakeholders of the importance of continued control/elimination activities and associated risks of neglecting this issue, in order to keep the commitment high.
- In the past 5-year programme, a high gender imbalance in participation in trainings was observed (mostly women). While it is certainly not a bad thing to attract mostly female students, and participants are of high quality and this potentially does rectify past imbalances, and might reflect a worldwide trend in an increasing female ratio in (bio)medical research, in this new programme we will monitor student recruitment procedures and potential bias.
- The health impact of Covid-19 has been relatively small compared to other countries across the globe, however, it is expected that economic impact will be high. The impact on health seeking behaviours and treatment adherence especially amongst the poor and ethnic minority groups who make up most of malaria cases is yet unknown and should be explored in light of our programme activities.

More details: Annex 'Responses December.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
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Budget available

2022	2023	2024	2025	2026	TOTAL

Evidence-based vector-borne disease management and elimination of visceral leishmaniasis in Nepal

Contacts

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Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Partner institutions enabled to contribute to improved evidence-based vector-borne disease management and to sustainable elimination of visceral leishmaniasis as a public health problem in Nepal		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-12-NP		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Nepal		
Sector :	12182 - Health - Medical research	Budget share :	90%
Sector :	12110 - Health - Health policy and administrative management	Budget share :	10%

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

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Description :	3. Increased capacity of Higher Education and Science Institutions
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Thematic/geographical :	THEMATIC JSF
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5. Co-creation, transfer and application of relevant know...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

▪

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

▪

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

▪

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

▪

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- Joint strategic framework HES4SD
- High quality HES4SD partnerships and scholarship programmes
- Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Nepal

Lat/Long :	28, 84
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Outcome summary

Description of the outcome

Nepal is endemic for several vector-borne diseases, such as malaria, dengue, and visceral leishmaniasis. Vector-borne diseases (VBD) are diseases caused by a pathogen that is transmitted to humans through the bite of an infected blood-feeding insect (so-called 'vectors'), such as mosquitoes or sand flies. In recent years, several of these diseases have spread from the lowlands to the mountainous (Himalayan) regions in Nepal, most likely due to climatic changes which facilitate the survival of the vectors at higher altitudes. The current public health system, however, is not equipped for this, with surveillance systems not covering newly endemic areas, and resources for disease control measures mostly lacking. This is specifically also a challenge for visceral leishmaniasis, which is on the verge of being eliminated in Nepal but is now progressively advancing into new areas. We will strengthen capacity in Nepal to collect baseline information on the geographical spread of vectors and pathogens in different ecological settings. This will allow the development of risk maps and predictions for vector-borne diseases in Nepal, both under current and future climate scenarios. In addition, we will address some of the most important knowledge gaps currently hampering successful and sustainable elimination of visceral leishmaniasis in the country. We will facilitate translation of these newly gathered insights into updated and context-specific policies, by piloting new surveillance strategies, formulating mitigation measures, and strengthening collaboration between the academic and the policy level. In addition, we will enhance capacity of policy makers to analyse routinely collected data, in order to maximize the impact of the policy changes expected through this programme.

Wording of the outcome

Partner institutions enabled to contribute to improved evidence-based vector-borne disease management and to sustainable elimination of visceral leishmaniasis as a public health problem in Nepal

Target groups

The main target groups of our program will be the collaborating institutions, the National Health Research Council (NHRC) and B.P. Koirala Institute of Health Sciences (BPKIHS), and the researchers working there. In addition, we will target the policy makers at national level as well as provincial, district, and local level.

Categorization: Sustainable Development Goals

SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Integrate climate change measures into national policies, strategies and planning
SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 1. End poverty in all its forms everywhere	SDT :	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	2

8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	0
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	No
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	No

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Education

In the annex of the strategy note it reads: "Belgian university cooperation, which is much appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly."

In our programme we focus on interinstitutional cooperation with university actors. Through the provision of fellowships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

Our programme is in line with the Strategy Paper on Children's Rights on several levels. We will contribute to protecting children's rights by improving access to qualitative health care, and contribute to providing qualitative health services for children by assuring that health services have the required means at their disposal to provide qualitative health care, such as medical equipment and medication. Especially in VL non-programme districts in Nepal, most of the VL cases reported are children. However, as long as local transmission has not been formally confirmed, these districts don't receive the resources required to ensure availability of VL diagnostics, treatments, nor the equipment and training needed for vector control interventions. Previously, our VL research has already led to several study districts in the east of Nepal to be declared endemic by the National Program. We now intend to continue our work in western districts of Nepal, to support the decision of the National Programme to provide the appropriate resources for qualitative VL case management and disease control activities. In addition, we will develop a mobile application in order to both involve communities in the reporting of vector-borne diseases, and to inform them about preventative measures against vector-borne diseases, thereby facilitating the access of families towards health education and preventative measures, as put forward as an important objective in this Strategy Paper.

Development education

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own. In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

As the strategy note states in objective 4.1.3, “Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate.” Our programme will directly contribute to better knowledge about the geographical pattern of different vector-borne diseases in Nepal, both under the current and under future climatic scenarios, and will support the formulation of eco-region specific policies to mitigate the effects of climate change. In addition, we will strictly adhere to hygienic measures such as proper management of medical waste in order to minimize potential harmful effects of this programme towards the environment.

Gender

Although gender mainstreaming is not specifically mentioned as one of the main outcomes of this program, it is implied in all activities. Gender will be taken into account in all research activities, not only by analyzing and presenting the results in a gender-specific manner, but moreover also by assessing gender as an explicit determinant for the risk of vector-borne diseases and the potential impact of climate change, the latter being an explicit area of focus mentioned in this Strategy Paper under Objective 3. With regard to education, which is a second area of focus mentioned in this Strategy Paper, trainings and fellowships will pay attention to gender-equality at all steps, including the selection of participants, the format and duration of trainings, and the chances for acknowledgement (e.g. scientific publications). We foresee training on VBD management to Female Community Health Volunteers (FCHVs), which per definition are all female. Further, we will promote gender-sensitivity in all formulated policy changes.

Digitalization - Digital for Development D4D

As the DGD Strategy Paper D4D states, “Data provide the basis for almost any development and humanitarian intervention. They allow for objectively describing the situation or the problem that one will address.[...] Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus. They allow for proper monitoring during implementation, adjusting policies and interventions when needed, and for evaluating their results and impact upon completion. [...]Data is also needed to keep track of a country’s progress towards the SDGs.” In line with this vision, our programme will facilitate the use of data for policy guidance on three different levels. First, we will provide trainings on routine data analysis to policy makers, in order to maximize the information extracted from existing VBD surveillance systems. Systematic analysis of these data is required to identify specific areas or communities requiring special attention, and to formulate contextualized disease control strategies. As such, we fully align with the ‘Digital for inclusive societies’ - defined as the second strategic priority in this Strategy Paper. Secondly, we will promote more complete surveillance data, by suggesting appropriate geographical coverage of all endemic regions, as well as inclusion of specific – infectious – subgroups currently not or not sufficiently captured in the surveillance system. Lastly, we will create new data on the current and expected future effects of climate change on the extent of vector-borne diseases in Nepal. This information is crucial for guiding policy makers in the formulation of mitigation measures, but not covered by the routine surveillance system. In addition, we will promote digital tools to involve communities in case reporting, as well as inform them on preventative measures.

Health

Our programme will contribute to the single result targeted in this Strategy Paper, namely the ‘development of a healthcare system that offers high quality, accessible and global healthcare in an efficient and sustainable way in response to the needs of all segments of the population, and which thus contributes to poverty reduction and the improvement of general well-being.’ This result will be approached through two different strategies, a) strengthening of the health sector, and b) strengthening of the healthcare system. With regard to the former, the international partnership obtained through this programme will strengthen the system by building in-country capacity to inform the National Programme on the dynamics of climate change and its impact on vector-borne diseases.

With regard to the latter, the updated knowledge on the extent of vector-borne diseases in different areas in Nepal obtained through the research activities will guide the reformulation of endemic regions, and evidence-based distribution of available resources, including diagnostics, medicines, and tools for disease-control interventions. As such, this programme will improve accessible quality health care and available of essential medicines. In addition, we will develop and pilot innovative integrated entomological and epidemiological surveillance approaches, in order to promote integrated control of neglected tropical diseases, defined as one of the key strategies in this Strategy Paper on Health and Healthcare. Integration of surveillance and disease control activities will strongly support sustainability of the activities in the long run.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

As one of the world’s poorest countries hit by years of political instability and natural disasters, the humanitarian situation in Nepal remains challenging. The vision of our programme is therefore strongly guided by the ‘MEET’ principles promoted by the Belgian development cooperation, aiming to improve human rights for all by strengthening of the health care system, empowerment through participation of communities, and capacity building of academic partners and policy makers. The scientific and institutional capacity building of our partner institutes which is foreseen in this programme over the next five

years, will contribute to a health system which is better adapted to the geographical reality of VBD and more resilient towards the expected effects of climate change. This will strengthen the capacity of duty-bearers to fulfil the right to health. In addition, we will develop and pilot mobile applications empowering rights-holders to actively participate in VBD management and claim their rights to health. As several of the VBD belong to the NTD group of diseases, mainly affecting the poorest populations in society, this programme will serve especially those who are most vulnerable. As such, this programme strongly links to the LNOB principle.

Decent and sustainable work

Even though Decent Work is not ITM’s core business, we do adhere to a number of principles which are part of the definition of decent work as given by the Decent Work JSF, such as productive and freely chosen employment, which provides an income sufficient to cover family needs, includes social protection, and includes health and safety provisions in the workplace. We will ensure fair payment and adherence to the existing social protection mechanisms in both partner institutes. We will see to it that all workers will be treated equally, without distinction based on sex, age, origin, political or religious beliefs.

Gender

Although reducing gender inequality is not an explicit prerequisite for the success of this program, a gender mainstreaming (GM) vision will be part of each activity planned, in order to promote GM where possible and avoid negative impact on gender equality. Our aim is to collect and interpret data disaggregated by age and gender, and promote gender-sensitive policy changes. Moreover, our qualitative research will specifically take into account the intersection between gender and other determinants of health such as risk behavior, health care seeking behavior, and acceptability of disease control measures. A similar link will be made with gender-specific vulnerabilities towards potential effects of climate change. During training and educational activities, specific attention will be paid to gender-equality, with regard to the selection of participants, format and duration of trainings, and chances for acknowledgement (e.g. scientific publications).

Environment

The impact of the environment on this country programme is directly reflected in the central focus of the country objective on the effects of climate change on the spread of vector-borne diseases. Besides climate-related parameters, also other environmental factors will be assessed as potential determinants for presence of vectors spreading disease in different ecoregions, such as waste management, deforestation, drought, water quality and urbanization.

By promoting the translation of this acquired knowledge into policy changes, we expect our programme in return to have a positive impact on the environment. Not only do we expect to contribute to a health care system which is more resilient towards climate change, we will also raise awareness among policy makers and communities towards the potential effects of climate change on health, and the need for mitigation measures.

In order to reduce potential harmful effects towards the environment, we will

- replace travel between Belgium and Nepal by online meetings as much as possible, in order to reduce our carbon footprint
- promote renewable energy when investing in new infrastructure
- pay specific attention to correct waste disposal, both in laboratory settings and during field work activities
- invest in digital data collection tools instead of paper-based data collection, reducing waste

Areas of complementarity and synergy with the intervention of ENABEL

As Nepal is not a bilateral country for the Belgian Development Cooperation there are unfortunately no Enabel interventions we might synergize with.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC Partner institutions enabled to contribute to improved evidence-based vector-borne disease management and to sustainable elimination of visceral leishmaniasis as a public health problem in Nepal
Indicator title :	OC.1 Uptake/influence of ITM-supported research in public policies

Indicator description :	Measured through self-assessment drawing from evidence using following scale: 1-knowledge has been disseminated; 2-there have been some first exchanges with policymakers after dissemination, 3-we are actively working with policy makers on translating our findings to policy; 4-new knowledge has been translated into VBD policy; 5-new knowledge is being implemented through scaling up of the program ; SoV: Meeting reports, prints of policy brief
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	OC Partner institutions enabled to contribute to improved evidence-based vector-borne disease management and to sustainable elimination of visceral leishmaniasis as a public health problem in Nepal
Indicator title :	OC.2 Number of policy makers reached through dissemination meetings
Indicator description :	By 'reached through stakeholders consultation workshops' we mean attending at least one of the consultation workshops focusing on the content and the progress of the programme ; SoV: Attendance sheets and meeting reports
Baseline :	0
Target Year 3 - 31/12/2024 :	50
Target Year 5 - 31/12/2026 :	150

Formulation of outcome or result :	OC Partner institutions enabled to contribute to improved evidence-based vector-borne disease management and to sustainable elimination of visceral leishmaniasis as a public health problem in Nepal
Indicator title :	OC.3 Number of research and policy-related documents (publications, policy briefs, technical reports, etc) developed, with at least one policy maker or programme manager as a co-author
Indicator description :	Number of documents (articles or policy briefs) with at least one policy maker or programme manager as a co-author; this indicator is intended as a proxy for collaboration between the academic and policy level ; SoV: prints of the documents
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	4

Formulation of outcome or result :	R1. A platform for molecular surveillance is established for VBD in Nepal
Indicator title :	R1.1 # of persons trained on molecular analysis (disaggregated by gender)
Indicator description :	By training we mean formal or informal in-country knowledge transfer ; SoV: Attendance sheet/certificate of training
Baseline :	0
Target Year 3 - 31/12/2024 :	9 (4 females, 5 males)
Target Year 5 - 31/12/2026 :	9 (4 females, 5 males)

Formulation of outcome or result :	R1. A platform for molecular surveillance is established for VBD in Nepal
Indicator title :	R1.2 # of samples analyzed through molecular testing
Indicator description :	This indicator is intended as a proxy for operability of the platform; SoV: technical reports, publications,...
Baseline :	0
Target Year 3 - 31/12/2024 :	1000
Target Year 5 - 31/12/2026 :	2000

Formulation of outcome or result :	R2. Research is carried out on epidemiological, psycho-social, socio-economic, ecological, entomological aspects of VBD to document geographical coverage & spatio-temporal patterns of VBD, and disease forecasting models are developed
Indicator title :	R2.1 # technical reports
Indicator description :	By technical report we mean completed documents without/prior to peer-reviewed publication; SoV: technical report
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R2. Research is carried out on epidemiological, psycho-social, socio-economic, ecological, entomological aspects of VBD to document geographical coverage & spatio-temporal patterns of VBD, and disease forecasting models are developed
Indicator title :	R2.2 # articles accepted or published in peer-reviewed national or international journals
Indicator description :	This indicator measures the direct results of research (number) and the quality of the result (peer reviewed); SoV: copy of publication
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R2. Research is carried out on epidemiological, psycho-social, socio-economic, ecological, entomological aspects of VBD to document geographical coverage & spatio-temporal patterns of VBD, and disease forecasting models are developed
Indicator title :	R2.3 # policy briefs
Indicator description :	By policy briefs we mean documents presenting research and policy recommendations targeting a non-specialized audience, either accepted or published in an open-access journal; SoV: policy briefs
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	6

Formulation of outcome or result :	R3. Training is provided to public health officers on surveillance and control of leishmaniasis in selected districts
Indicator title :	R3.1 # of persons trained for leishmaniasis surveillance and disease control (disaggregated by gender)
Indicator description :	persons participating in one of the training sessions organized by partner institute BPKIHS; SoV: Attendance sheet
Baseline :	0
Target Year 3 - 31/12/2024 :	50 (male: 35, female: 15)
Target Year 5 - 31/12/2026 :	80 (male: 55, female:25)

Formulation of outcome or result :	R4. New methodologies are developed and piloted for improved surveillance for VL in the context of elimination
Indicator title :	R4.1 # of ex-VL patients followed up for PKDL within routine health system
Indicator description :	Number of ex-VL patients visited at their household to be assessed for the development of skin lesions; SoV: copy of KA treatment registers
Baseline :	0
Target Year 3 - 31/12/2024 :	100

Target Year 5 - 31/12/2026 :	200
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Formulation of outcome or result :	R4. New methodologies are developed and piloted for improved surveillance for VL in the context of elimination
Indicator title :	R4.2 # articles accepted or published in peer-reviewed national or international journals
Indicator description :	This indicator measures the direct results of research (number) and the quality of the result (peer reviewed); SoV: copy of publication
Baseline :	0
Target Year 3 - 31/12/2024 :	0
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	R5. Community level awareness of VBD is enhanced
Indicator title :	R5.1 # IEC/BCC material
Indicator description :	Number of awareness raising products developed and communicated; SoV: # printout
Baseline :	0
Target Year 3 - 31/12/2024 :	2
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	R5. Community level awareness of VBD is enhanced
Indicator title :	R5.2 # of people using mobile app
Indicator description :	Number of people with the mobile application installed on their phone (disaggregate number of people reporting cases and reading the available information); SoV: # Server data
Baseline :	0
Target Year 3 - 31/12/2024 :	10000 (6000 female, 4000 male)
Target Year 5 - 31/12/2026 :	20000 (12000 female, 8000 male)

Formulation of outcome or result :	R5. Community level awareness of VBD is enhanced
Indicator title :	R5.3 # Number of FCHVs oriented on prevention and control of VBDs
Indicator description :	Number of FCHVs present in one of the trainings provided; SoV: # Name list of trained participants
Baseline :	0
Target Year 3 - 31/12/2024 :	50 (all women)
Target Year 5 - 31/12/2026 :	100 (all women)

Formulation of outcome or result :	R6. Research capacity in Nepal on VBD and climate change is improved
Indicator title :	R6.1 # of persons trained - other than personnel of the partnering institutions (disaggregated by gender)
Indicator description :	Indicator intended as a proxy for knowledge sharing; SoV: Attendance sheet/training certificate
Baseline :	0
Target Year 3 - 31/12/2024 :	150 (75 male, 75 female)
Target Year 5 - 31/12/2026 :	300 (150 male, 150 female)

Formulation of outcome or result :	R6. Research capacity in Nepal on VBD and climate change is improved
Indicator title :	R6.2 # of persons attending international trainings, fellowships, conferences, meetings, etc (disaggregated by gender)
Indicator description :	Staff of one of the partner institutions attending international trainings, fellowships, conferences, meetings, etc; SoV: training certificate, attendance certificate

Baseline :	0
Target Year 3 - 31/12/2024 :	5 (3 male, 2 female)
Target Year 5 - 31/12/2026 :	13 (8 male, 5 female)

Formulation of outcome or result :	R7. Capacity built for decision making based on analysis of operational research or routinely available MoH surveillance data
Indicator title :	R7.1 # policy briefs
Indicator description :	By policy briefs we mean end-products developed by the participants of the course, published or unpublished; SoV: printed policy brief
Baseline :	0
Target Year 3 - 31/12/2024 :	10
Target Year 5 - 31/12/2026 :	20

Formulation of outcome or result :	R7. Capacity built for decision making based on analysis of operational research or routinely available MoH surveillance data
Indicator title :	R7.2 # persons trained at program level (disaggregated by gender)
Indicator description :	Number of individuals participating in the training; SoV: Attendance sheet
Baseline :	0
Target Year 3 - 31/12/2024 :	10 (9 male, 1 female)
Target Year 5 - 31/12/2026 :	20 (15 male, 5 female)

Formulation of outcome or result :	R8. Collaboration between academic institutions and the VBD National Program is strengthened
Indicator title :	R8.1 # of annual review meetings organized
Indicator description :	review meetings are meetings intending to update stakeholders on the progress of the programme; SoV: meeting report
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Formulation of outcome or result :	R8. Collaboration between academic institutions and the VBD National Program is strengthened
Indicator title :	R8.2 # steering-committee meetings
Indicator description :	Meetings organized for high-level participants (intersectoral committee) with decision-making authority to discuss results and progress of the programme; SoV: meeting minutes/report
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	5

Activities, targets groups and beneficiaries

Classification of activities

- Platform development
 - o Strengthening research capacity at the partner institutions
 - o Development of a platform for molecular surveillance
 - o Strengthening of existing VBD surveillance systems
 - o Platform for collaboration between academic institutes and policy makers
- Education projects
 - o Development of curriculum focusing on VBD for the Government initiation course for clinicians within the health care system
 - o Trainings to young scientists within academic institutes
 - o Trainings to staff within the existing health care system, with a focus on Training of Trainers (TOT)
- Research projects

- o Creating climate-sensitive geographical risk maps for VBD in Nepal
 - o Research to support the VL elimination initiative in Nepal
 - Getting Research into Policy and Practice (GRIPP)
 - o Creating platforms for facilitate dissemination of research results to the National Programme and propose evidence-based disease control measures
 - o Strengthening of National Programme to analyze routinely collected data and carry out operational research
 - Synergy
 - o Synergistic collaboration between both partner institutes (south-south capacity strengthening)
 - o Synergistic activities within National Program
 - o Synergy with the Regional VL Elimination Initiative
- For a more in-depth description of activities, we refer to the Theory of Change

Target group(s)

The main target groups will be the collaborating institutions NHRC (Infectious Disease Centre) and BPKIHS (Tropical Infectious Disease Centre) and the researchers working there on VBD (60% women in BPKIHS, 60% women in NHRC). In addition, we will target the policy makers at National level (EDCD) as well as provincial, district, and municipality level (approx. 5% women).

Beneficiaries

The ultimate beneficiaries are the inhabitants of Nepal at risk for VBD; in practice, this is almost all the population. As many VBDs belong to the NTD group, we expect the poorest and most marginalized populations to benefit most. For VL, specifically children will receive a particular focus, as they comprise the majority of cases in newly endemic areas. We will specifically promote gender equality when translating science into policy.

Title of the reference annex :	TOC_ITM_Nepal_22-26
Title of the reference annex :	RA_ITM_Nepal_22-26

Description of the Relevance

With this programme we ultimately aim to mitigate effects of climate change on the burden of VBD in Nepal. We will collect the baseline data needed to provide insight in the current extent of the problem in Nepal, and create different climate-change scenarios elucidating potential future evolutions that can guide policy makers. By strengthening surveillance systems for VBDs, we will contribute to early warning and timely response measures in order to protect those most vulnerable (LNOB principle).

Our programme is in line with priorities defined in several **international** policies and national guidelines. With a focus on mitigating effects of climate change on VBD burden, it contributes to several SDGs as described before (primarily SDG 13, SDG 3, and SDG 1). WHO recently published a policy brief on climate change in which it formulated four main strategies for countries to mitigate the effects on VBD due to climate change : a) Use climate-related information and climate-driven mathematical models to plan a better response; b) Promote ‘whole of government’ approaches; c) promote local research on impact of climate change on VBD and improve surveillance; and d) Strengthen health systems (23). With our commitment to strengthening capacity of the local partners to carry out research on VBD and climate change, creating ecoregion-specific risk assessments for different climate scenarios, and a strong investment in improved surveillance, we will contribute to these mitigation measures identified by WHO. In addition, while the overall programme objective of reducing the burden of VBD directly links up with one of the main cross-cutting targets identified in the WHO Road Map for Neglected Tropical Diseases for the period 2021-2030, namely the reduction of number of deaths from vector-borne NTDs, it contributes to several other targets formulated in the document, such as certification of elimination of VL as a public health problem, increased reporting of CL, integrated approaches for skin NTDs, and access to basic health care in all endemic areas. By focusing on integration of vector surveillance and management for different VBD, our project is fully in line with the **National** Guideline on Integrated Vector Management released in 2020, which also mentions environmental changes as one of the main causes of VBD spread in Nepal. VL-specific activities within this project focus on preparing the surveillance system for the post-elimination phase by elucidating the current geographical extent of VL, inclusion of neglected infectious (geographical and clinical) subgroups and integration of surveillance systems with other diseases, which aligns with priorities defined at national level (National Guideline on Kala-azar Elimination Programme updated in 2019) as well as international level (priorities defined during the VL elimination assessment visit of WHO to Nepal in 2019).

In Nepal, climate change poses a direct threat to one of the main sources of income in the Himalayan region, namely tourism and tracking. Besides the melting snow, unpreparedness towards endemic diseases poses a second threat to travelers, which needs to be addressed to ensure this source of income. We will promote **Global citizenship** by creating awareness on the effects of climate change within Nepal, and strengthen capacity of the partner in the global south to take action and influence mitigation measures to reduce its impact. In addition, mapping of endemicity of different VBDs will help Nepal to improve its VBD case reporting, informing both national and international societies, bringing it more in line with international health regulations.

Although reducing gender inequality is not an explicit prerequisite for the success of this program, a gender mainstreaming (GM) vision will be part of each activity planned, in order to promote GM where possible and avoid negative impact on gender equality. Our aim is to collect and interpret data disaggregated by age and gender, and promote gender-sensitive policy changes. Moreover, our qualitative research will specifically take into account the intersection between gender and other determinants of health such as risk behavior, health care seeking behavior, and acceptability of disease control measures. A similar link will be made with gender-specific vulnerabilities towards potential effects of climate change. During training and educational activities, specific attention will be paid to gender-equality, with regard to the selection of participants, format and duration of trainings, and chances for acknowledgement (e.g. scientific publications).

ITM has been collaborating for almost ten years with NHRC and for more than 15 years with BPKIHS. The collaboration with NHRC has evolved to an equal partnership over the years. While the collaboration with BPKIHS initially focused strongly on capacity building, also this relationship has changed towards a partnership, now that three BPKIHS colleagues have obtained their PhD through ITM (one epidemiologist and two molecular biologists), and one medical entomologist is finalizing hers. Although both partner institutes have had collaborations with ITM through competitive funding in the last years, the current multiyear programme would allow a more specific focus on capacity strengthening again, supporting the sustainability of the progress made so far. In addition, by strengthening the individual capacity of the researchers working at both partner institutes, we will contribute to the Strategic Targets identified in the Joint Strategic Framework by promoting the partner institutes to become drivers of capacity strengthening themselves, co-creating knowledge and supporting the translation of knowledge into society (cf. ToC for full overview of links with Strategic Targets of JSF HES4SD). The pathway through which we assume this will happen was described in the Theory of Change. ITM approaches partnerships along the lines of a partnership trajectory. Partnerships gradually move from an initial phase where emphasis lies on institutional capacity strengthening towards a consecutive phase with emphasis on institutional collaboration. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed. In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer etc.) and on continued capacity building. Over time, partners will acquire specific capacities, knowledge and expertise. Over time this capacity will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as hub for a network. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice.

Description of Coherence

Internal coherence:

The present five-year programme is aligned to the goals for International Collaboration and Development (ICD) of ITM's Institutional Policy Plan (IPP; 2020-2024). ITM's overall aim in ICD is to strengthen the rational basis and the country ownership of health care systems, programmes and policies in LMICs and to improve the health status of the populations, thereby contributing to the reduction of poverty and inequity. ITM's development actions contribute to the improvement of health for all, based on the provision of evidence and translating evidence into policy. Our partnership trajectory approach (cf. relevance) is derived from the IPP. Furthermore, as a research institute ITM adheres to the international standards when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health related Research involving Humans (2016). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect of this last aspect, any research undertaken also needs to adhere to GDPR principles. In terms of internal coherence, it is also worth noting that this programme will be highly complementary to ITM's Synergy programme. Whereas the present programme includes a focus on more long-term capacity development/collaboration, the Synergy programme will allow the present programme to flexibly grasp opportunities for synergetic interventions with other actors (Belgian or other) or funding sources, including activities linked to the collective learning of the thematic JSF HES4SD. The synergy programme will be a further catalyst for the programme's impact.

Within ITM this proposal brings together the unit of 'Entomology' of the department of biomedical sciences and the unit of 'Mycobacterial Diseases and NTDs' of the department of public health. In Nepal the unit of entomology of ITM has mainly been focusing on mosquito borne diseases, in particular on the entomological aspects. The unit of mycobacterial diseases and NTDs has for many years been involved in management of visceral leishmaniasis (VL), transmitted by sand flies. The project will also bring together two leading research institutes in Nepal, the National Health Research Council (NHRC) and the B.P. Koirala Institute of Health Sciences (BPKIHS). BPKIHS is situated in Dharan, in the south east of Nepal, the region that used to be the main endemic area of VL. In the meantime VL has spread to many other parts of Nepal, hence the increased importance of having a partner institute in the capital city of Kathmandu, situated in the center of the country. The two institutes also provide complementarity in expertise on mosquito borne diseases such as dengue and malaria and vector-borne diseases transmitted by sand flies, in particular cutaneous and visceral leishmaniasis.

External coherence:

Within the Thematic JSF HES4SD we strive for synergy and complementarity with other actors in the field. Although none of the other thematic JSF partners have foreseen activities in Nepal, the thematic JSF is on Decent Work has foreseen activities in Nepal; potential synergies will be explored at the start of the programme. The proposed surveillance activities for VL are well aligned with the initiative to eliminate VL as a public health problem from the wider region, launched in 2005 by the governments of Bangladesh, India and Nepal. The original deadline was set at 2015 but has twice been extended, first to 2017, later to 2020. In Nepal VL elimination appears within reach but is now under threat again as a result of cases diagnosed from areas previously considered non-endemic. Obviously there is a need for expansion of VL surveillance activities beyond the areas traditionally covered, which is what this proposal foresees in.

Description of Effectiveness

In this programme, we foresee to reach eight separately formulated results:

- A platform for molecular surveillance is established for VBD in Nepal
- Research is carried out on epidemiological, psycho-social, socio-economic, ecological, entomological aspects of VBD to document geographical coverage & spatio-temporal patterns of VBD, and disease forecasting models are developed
- Training is provided to public health officers on surveillance and control of leishmaniasis in selected districts
- New methodologies are developed and piloted for improved surveillance for VL in the context of elimination
- Community level awareness of VBD is enhanced
- Research capacity in Nepal on VBD and climate change is improved
- Capacity is built for decision making based on analysis of operational research or routinely available MoH surveillance data
- Collaboration between academic institutions and the VBD National Programme is strengthened

The results expected within this programme have been formulated to reflect **realistic** targets. The pathway through which we assume they will contribute to the long-term objective - reducing the burden of vector-borne diseases in Nepal in the context of climate change - was described previously in the Theory of Change. Targets formulated are in line with the respective expertise of both partner institutes as well as with the collaborating units within ITM. They build upon research implemented in the recent past by the partner institutes, and take into account lessons learned from these previous experiences. Both partner institutes also have a longstanding positive professional relationship with the VBD National Program, which we expect to facilitate the activities foreseen within the current project. Partner institute **NHRC** has built extensive entomological experience over the years on a wide range of VBD, as well as on the relation between climate change and expansion of vectors and vector-borne diseases in Nepal (7, 8, 15). They previously demonstrated the use of altitudinal transects to predict geographical repartition of different vectors and VBD and guide scaling-up of vector-borne disease control programs in mountainous areas (15). Partner institution **BPKIHS** on the other hand is the center of reference for VL in Nepal, and has established an advisory role to the National Programme which has become increasingly important over the last years with the elimination deadline approaching. They co-authored the update on the VL Elimination Programme in Nepal in 2019 (24), and are actively consulted by the National Programme on a regular basis, illustrating their expertise on the topic. The combination of epidemiological, entomological and molecular expertise present at BPKIHS provides a strong advantage for the integrated approach required in the VL pre-elimination phase. Activities proposed by BPKIHS are in line with previous work by the team. A transmission assessment in Eastern Nepal in 2015 led to the declaration of endemicity in six new districts, and resulted in human and financial resources to provide diagnostics, treatment, surveillance and disease control measures for VL in these districts (16).

As the target groups and partners of the proposed interventions coincide, results are decided upon in dialogue. This close collaboration to set the project targets increases the feasibility of achieving our goals. In addition, ITM has a strong track-record when it comes to achieving results through its programmes. From the evaluations of past interventions, such as the one for the third framework agreement funded by DGD, it becomes clear that together with our partners, we are capable to deliver, and can adapt our strategies in time, based on efficient activity monitoring.

While this programme targets all people at risk for VBD and climate change, in practice people living in newly VBD endemic areas - which are often mountainous and less developed regions - are expected to proportionally benefit more. NTDs including VL are known to specifically affect the **poorest communities**, with high spatial clustering often resulting in high chance of multiple household members affected by the same disease, leading to disease-induced aggravation of poverty within affected households. The initial symptoms of fever and splenomegaly are very non-specific and require sharp clinical awareness to lead to the correct diagnosis of VL, together with the appropriate diagnostic tools required. As long as district is not officially declared VL-endemic, no budget is attributed to provide diagnostics, treatment, and disease control tools. It is therefore of the utmost importance to assess the endemic status of all geographical regions in Nepal, and to attribute the necessary resources for diagnostics, treatment and disease control, in order to prevent avoidable deaths. In addition, in western districts, the majority of VL patients are children. Elucidating the endemic status of these districts, will positively affect this vulnerable subgroup in particular. As such, this programme strongly links with the Leaving No One Behind (LNOB) principle.

Baseline information is collected at the level of NHRC and BPKIHS mainly, as the partners are also the target groups of the

results. Baseline information is collected mainly through document review at their level. At the level of ITM it was decided to focus the mid-term evaluation on the aspect of Getting Research into Policy and Practice. Therefore we included a standard indicator on this aspect.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development. (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

In this project we will strive for efficiency. While ITM staff will spend an important part of their time on capacity building, supervision and monitoring and evaluation of the current multiyear program, these activities will only partly be financed through the current programme budget (20% of the total budget). In addition, ITM does not work with technical assistants in the partner country. Instead, we opt to offer technical assistance and programme management from a distance, with regular exchange visits, hence reducing personnel costs. Local staff will receive a small topping up of their salary to compensate for the additional burden in responsibilities as a result of this program, but this expenditure was kept at the absolute minimum. Coordination and supervision in the local context will be carried out by a relatively small group of scientists, with the expertise to provide high quality output. We are convinced that a small team can provide more efficient methodological and technical guidance to the programme.

Despite our efforts to limit topping up of the salary of the involved researchers of the partner institutes, the total salary costs might seem quite high. The reason for this, however, is that we will need to hire additional technical staff to carry out the field activities. These field activities will take place during several consecutive months and even years, which is the reason why we opted to hire and train dedicated technical staff for the duration of this programme, rather than pay new personnel on a daily basis for their work – in which case these expenses would have been categorized as operating costs rather than salary costs. We are convinced that this will increase not only the efficiency of the data collection, but also the quality of the data.

Purchases of materials will be made locally where possible. Nonetheless, for some items local purchase will not be possible. For example, the Direct Agglutination Test, which allows for the identification of asymptomatic *leishmania* infected individuals, is only available in Europe, and will therefore be purchased in Belgium and shipped towards Nepal. Investments will be made in local infrastructure in the partner institutes in order to generate capacity to perform innovative research, which in turn will allow for competitive funding in the future and result in a net gain which is only measurable on the long run. We will promote south-south collaborations where possible, not only to improve efficiency but also sustainability of this programme. In addition, training activities will focus on training of trainers, in order to further increase efficiency.

More details on the personnel cost and operating costs can be found in the new annex 'Responses December'.

Comments on description of efficiency

Submitted by DGEO-MarcF on Tue, 10/26/2021 - 18:00

ITM - Nepal - HQ staff salary

Is it justified that HQ staff salary represents half of the budget or 498.361,04€?

This is something encountered also in other countries like Cambodia or Vietnam, where the HQ staff salary are very high...

Submitted by ITG-IMT on Tue, 11/02/2021 - 11:36 in reply to itm - nepal - hq staff salary by dgeo-marcf

ITM - Nepal - HQ staff salary

In all ITM country programmes the ITM staff cost has been predefined to a maximum of about 20%. In the overall budget table, the total personnel cost of ITM staff is mentioned under 4.3: 190 861,04 €. (19%).

As to the row "A. Salary HQ", ITM has (after consultation with FIABEL) used this as the sum of the salaries of both ITM staff and staff at the level of the local partner's/partners' HQ. The row "C. salary local staff" is dedicated for local staff, working for the partner, but not at the HQ of the partner (e.g. drivers, temporary "interim" staff, etc.; not applicable for Nepal). This budget structure has been applied to all budgets and outcomes of this ITM programme "Connecting the Dots - Higher Education and Science for a Healthier World 2022-2026". The total personnel cost at the level of the local partner's/partners' HQ is 307 500 € (190 861,04 € ITM).

Submitted by DGEO-MarcF on Tue, 10/26/2021 - 18:20

ITM - Nepal - Partners budget

It is said in the programme that the partners will receive 400.000€ each, while in the budget spreadsheet the total for partners is 705.639€.

Also, how could this be possible if they are supposed to receive that amount while the HQ staff salary is 481.639€, knowing the total budget is only 1.000.000€?

Submitted by ITG-IMT on Tue, 11/02/2021 - 11:39 in reply to itm - nepal - partners budget by dgeo-marcf

ITM - Nepal - Partners budget

In all ITM country programmes the ITM staff cost has been predefined to a maximum of about 20%. For Nepal, the total personnel cost of ITM staff is mentioned under 4.3: 190 861,04 € (19% of the total budget). The only other costs that are directly benefiting ITM for program management are the travel costs (47 500€), as well as 3000 € operating costs related to covering fees for bank transfers and transport of consumables to the partner institutions.

All other costs that will be paid for by ITM actually benefit the project implementation from the partner's side. Although in general we strive to maximize purchasing locally, for a limited number of items we foresee potentially problematic delays if organized through the existing administrations of the local partner institutions. This would be particularly the case for the equipment and consumables related to molecular analyses, which are not available within Nepal, and for which the currently existing procedures are very tedious. As activities planned relatively early in the project partly depend on the availability of this equipment in the lab, we want to try and avoid foreseeable delays at the very start of the project as much as possible, and would therefore propose to organize their purchase through ITM, which will be more efficient from an administrative point of view. In the course of the project we will then further discuss with both partner institutions if/how we can facilitate international purchases through their respective administrations in the future.

Since the expenditure is made by ITM, it is, from an accounting point of view, an ITM expenditure. However the expenditure is done entirely for the local partner, it is not a purchase for ITM. The "HQ-budget" mentioned under "4.1 investment" and "4.2 operational costs (werking)" includes such costs. All of the budgeted investments (15 000 €) go to Nepal partner(s), as does 38 000 € of the operational costs (werking).

In summary, the actual breakdown of the budget is:

- ITM: 190 861,04 €. + 47 500 € travel costs + 3000 € operating costs
- BPKIHS: 376 069,48 €
- NHRC: 382 569,48 €

As a result, the total budget dedicated to the partners is 758.638,96 €.

Submitted by ITG-IMT on Tue, 11/02/2021 - 11:39 in reply to itm - nepal - partners budget by dgeo-marcf

ITM - Nepal - Partners budget

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Description of the expected Impact

With this programme, we expect to contribute to reducing the burden of vector-borne diseases in Nepal in the context of climate change, by supporting improved evidence-based VBD management in general, and sustainable elimination of VL as a public health problem in particular. The capacity strengthening of both partner institutions, which will be at the core of our programme in the coming five years, will contribute to the creation of centers of excellence in science, education, and translation of science into policies. By creating evidence on the effect of climate change on the spread and risk of VBDs in Nepal, we will be able formulate mitigation measures for current and future climatic scenarios, informing policy makers on how best to adapt National VBD Programme policies. We will contribute to improved surveillance of VBD in order to allow timely capturing of changes in dynamic transmission patterns and act accordingly.

This programme will allow the development of services to society, contributing to the right to health for all, with a particular focus on those who are most vulnerable, as several VBD belong to the NTD group which disproportionately affect the most marginalized populations. As such, this programme strongly links to the LNOB principle. We will create multidisciplinary knowledge which will allow the new generation to tackle the complex effects of climate change on health (SDG 13). In the long term we hope to contribute to improved health for all (SDG 3), and reduce disease-induced poverty (SDG 1). Sharing knowledge on the potential impact of climate change will in addition raise awareness, not only among policy makers, but also among communities, and might on the long term influence environment-related behavior and policies outside the scope of health alone.

Description of Sustainability

ITMs partnerships trajectory approach aims to strengthen sustainability by reinforcing partner capacities step by step. By making a thorough analysis of the needs and priorities of partners we can address capacity gaps first at the lowest level in institutional capacity strengthening programmes, and taking it up a notch with each new cooperation. By taking into account the needs assessment, we ensure buy-in from both ITM and partner institutions NHRC and BPKIHS, and ensure local ownership hence anchoring sustainability. Within the partnership trajectory we start with a phase of institutional strengthening, after which we transition into institutional collaboration where we see an equal level playing field for joint research with a societal impact. The final aim to reach the phase out, when partners are fully equipped to obtain external (research or education) funding instead of applying to international cooperation funds. Further, the current multiyear programme will facilitate sustainability of the efforts made through collaborations between ITM and NHRC/BPKIHS throughout the last decade. The continuation of this long-term partnership will lead to sustainable capacities and systems over time.

As mentioned under other sections, the programme target group and partners coincide. Therefore technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups completely control the intervention. Together with ITM, they co-implement the project. In order to ensure appropriation of the outcome by our target groups/partners, they have been strongly engaged in the writing of this proposal, and will remain the key responsible party to its execution.

The activities foreseen in this programme are directly in line with the existing expertise at both partner institutes. Additional trainings for academic staff which are foreseen within this programme, aim to increase technical skills that go beyond the needs required for direct execution of this programme, but instead aim to strengthen the position of the partner institutions in the national and international academic field. Trainings will, however, focus on technology which is available and can be sustained within the country. Both partner institutions also have a longstanding relationship of trust with the National Programme for their respective expertise (VBD and VL for NHRC and BPKIHS respectively), which will facilitate communication as a first step to translation of research findings into policy. In all training activities towards the National Program, we foresee a component of training of trainers, in order to create capacity of the programme to provide future trainings themselves and thereby increase sustainability of the shared knowledge within the trainings.

With regard to financial sustainability, the research planned in this programme will increase the scientific expertise of the partner institutions within the domain of VBD and climate change, and enhance their chances to obtain competitive research funding in the future. The additional trainings foreseen for the researchers will have a 'multiplier' effect, as both their additional knowledge on their domain of expertise as well as their technical skills acquired through the trainings will be shared with students at the respective institutes. The specific focus of this programme to increase collaboration between researchers and policy makers, will have a further multiplier effect in the sense that increased scientific expertise from the partner institutes will

be reflected in improved quality of the technical support provided to the policy makers in the process of translation of research into policy.

Description of the Partnership Strategy

The two partner institutions NHRC and BPKIHS have participated actively in every step since the current multiyear programme was announced. At the level of the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD process through the general council in which ITM's partners are represented and which discussed the thematic JSF process. In the brainstorm sessions organized in the run-up to, first, the call of interest, and later the proposal writing, the partner institutions took the lead in outlining the local context, identifying priority challenges and needs, and generating ideas for activities. Based on these sessions, the ITM formulated a first draft on the Theory of Change, but input was provided by both partner institutions before finalizing. During the further writing of the proposal, additional meetings were coordinated by the local partners where needed, with or without presence of ITM, to finetune activities and maximize synergy between both local partners. Also in the implementation phase, both partner institutes will take the lead in both the field work and the analytical part. In addition, we foresee south-south collaborations between both institutes, with skills from one institute being transferred to the other through trainings in both directions.

At ITM we aim to work in equal partnerships with other institutes. While capacity strengthening is part of our core business, the starting point for these activities lies in in-depth and open discussions on the needs identified and requests made by partner institutes. During the formulation of this FA5 program, we always took into account the platforms and expertise already available at the partner institutions – created with or without support from previous ITM-related projects – and tried to build further upon this. Besides providing administrative and financial support, ITM will mainly provide additional scientific expertise to support platform development and research capacity building, aiming to strengthen partner institutes as centers of excellence and facilitate additional – competitive – funding to make the programme more sustainable in the long run. In addition, a capacity assessment will be conducted at the start of the programme to identify key capacity gaps. This assessment will be repeated at mid-term and in the final year of the project to assess progress and identify potential areas where more efforts are needed. This capacity assessment will be a self-evaluation tool, in which the partner institutes have the lead in indicating progression.

The selection of two partner institutes was a logical consequence of the topic selected for this programme. NHRC has specific expertise on a broad number of vector-borne diseases, and has – as one of the few institutes in Nepal – extensively studied the effect of climate change on the spread of VBD in Nepal. Their expertise is closely linked to the existing expertise at the unit of Entomology, with whom they have been collaborating on several different related projects in the recent past. NHRC is also closely linked to the Ministry of Health, which makes them the ideal partner institute to coordinate with policy makers and facilitate translation of science into policy. BPKIHS on the other hand is the reference center for VL, and a crucial partner for any VL-related interventions in Nepal. They have established a good relationship with EDCD over the last years, and are a frequently consulted partner for the Ministry of Health for technical support on VL-related policies. They have the multidisciplinary capacity (epidemiological, entomological and molecular) required to develop and pilot improved tools for VL surveillance in the pre-elimination phase, and have shown to be a reliable collaborating partner for multiple projects together with the unit of Mycobacteria and NTDs at ITM since the first collaborations started in 2000.

Description of Synergies

The ultimate objective of this programme is to contribute to improved evidence-based VBD management, which inherently requires a synergistic collaboration with the National Programme in order to improve policies. The partner institutes will benefit from a close collaboration with the National Programme in their research through increased chances of translation of science into policy, while in return the partner institutes will be able to carry out research required for improvement of policies for which the National Programme does not have the capacity itself.

Synergies can also be found on the level of the two partner institutes involved in this program. Both will contribute to the integrated activities with their specific field of expertise; while NHRC has extensive experience on mosquito-borne diseases in relation with climate change, BPKIHS's particular expertise on VL allows integration of this disease while taking into account the specific needs of diseases within an elimination context. Mutual learning opportunities will be encouraged and exploited to the maximum; for example, BPKIHS molecular lab will train NHRC lab in leishmania species identification and contribute to south-south capacity strengthening. In addition, BPKIHS personnel will participate in the trainings provided by NHRC on VBD and climate change. Also, both institutes will jointly promote integrated surveillance and management of VBD, as well as mitigation measures towards the effect of climate change on public health in Nepal. The networks of the two institutes will work in a synergistic way, both on the academic level and on the science-society interface, with each of the two institutes strengthened by their respective connections with specific stakeholders, both in the communities and at the policy level. In addition, this programme will be synergistic to the Regional VL Elimination Initiative, aiming to support sustainable elimination of VL in Nepal. While a considerable reduction in the number of VL cases has been observed over the last years, several challenges still threaten the sustainability of the results achieved so far. With this program, we aim to support the elimination initiative by

addressing some of the most stringent research questions, and by piloting innovative strategies to improve surveillance in the post-elimination phase. Further, although none of the other thematic JSF partners have foreseen activities in Nepal, the thematic JSF is on Decent Work has foreseen activities in Nepal; potential synergies will be explored at the start of the programme.

Another possible collaboration could be envisioned with the Damian Foundation. Exploring opportunities for integrated disease surveillance for VL (and PKDL) is one of the foreseen activities (Activity A4 in the ToC). With leprosy as the most important differential diagnosis for PKDL, integrating surveillance for both skin NTDs would be a very logical approach. We hope to further elaborate on this potential collaboration in the months to come.

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single country programme. In addition, this programme follows the guiding principles of interconnectedness and multi-stakeholder partnership, approaching the complex relationship between health and climate from a multidisciplinary angle and bringing together partners from academic, policy, and community level, in the understanding that each will bring its own added value to the table, strengthening the others in the process.

Description of how individual or collective recommendations and lessons are to be taken into account

ITM has taken important steps towards professionalizing M&E over the last years, which translated among others into an appropriate guidance in the development of the ToC and identification of indicators, driven by (and based on lessons learned from) the certification process.

The programme has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. First, as recommended in the report of the approval dialogue and in past evaluations, this programme gives particular attention to the valorisation of knowledge. Through its focus on “Getting Research Into Policy and Practice (GRIPP)” (in all components of the ITM programme 2022-2026) ITM will strive to maximize this aspect in its programme, and will also establish the preconditions to learn more about the best possible strategies to achieve this, a.o. through indicator development, and as main topic of the mid-term evaluation in 2024. Furthermore, as recommended in the approval dialogue, this programme has also foreseen a specific context analysis (complementary to the generic one in the JSF), risk management approach and stakeholder analysis.

In addition, lessons learned from the previous multiyear (2014-2016) programme in Nepal have been integrated in the current multiyear programme approach. We will continue to invest in institutes with which we have a longstanding collaboration already, as long-term commitments were found important for both institutional and educational capacity strengthening. We will stimulate south-south cooperation, with both partner institutes engaging in mutual trainings to increase synergy as well as ownership. In addition, more attention has been paid to explicitly formulate activities to involve policy makers not only in scientific dissemination activities, but involve them from the very start of research proposals, in order to explicitly delineate the pathway of translating research into policy.

Mandatory annexes classified by outcome

Title of the annex	Type of document	File
TOC_ITM_Nepal_22-26	Theory of Change associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/TOC_ITM_Nepal_22-26_1.pdf
RA_ITM_Nepal_22-26	Analysis of risks associated with the outcome	https://fundhub.openaid.be/sites/default/files/2021-07/RA_ITM_Nepal_22-26_0.pdf
REFERENCES_ITM_Nepal_22-26	Other	https://fundhub.openaid.be/sites/default/files/2021-07/REFERENCES_ITM_Nepal_22-26.pdf
FACTSHEET_ITM_Nepal_22-26_NHRC	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Nepal_22-26_NHRC.pdf
FACTSHEET_ITM_Nepal_22-26_BPKIHS	Fact sheet per partner	https://fundhub.openaid.be/sites/default/files/2021-07/FACTSHEET_ITM_Nepal_22-26_BPKIHS.pdf
Responses_December_Nepal	Other	https://fundhub.openaid.be/sites/default/files/2022-04/Responses_December_Nepal_UpdateMarch.pdf

Connecting the Dots - Higher Education and Science for a Healthier World

2022	2023	2024	2025	2026	TOTAL

Global programme: ITM Education and scholarships programme

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Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	ITM Education and scholarships programme		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-14-XX		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Belgium		
Region :	Developing countries, unspecified		
Sector :	12181 - Health - Medical education/training	Budget share :	100%

Strategic target involved

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

België

Lat/Long :	50.850346, 4.351721
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Outcome summary

Description of the outcome

The "Education programme", part of the "Global Programme" for academic development cooperation of ITM, provides access to quality higher education in International / Global health and Global One Health, support for career development of alumni and staff at partner institutions and support for educational development for the latter. The Education Programme thus comprises a scholarship programme (for formal training and individual fellowships) and the Alliance project. The Alliance project focusses on lifelong learning including career support and on educational collaboration; its more individual and more institutional component respectively.

In our Theory of Change (ToC), in tune with the ToC in the Joint Strategic Framework HES4SD, we hypothesize that access to international, interactive and interdisciplinary short courses, master programmes and doctoral training is both a demand and a need in our partner countries and beyond.

We also hypothesize that the impact of training and ensuing knowledge production, will depend on increased agency for change of professionals and institutions (as drivers of change). The importance of lifelong learning and regional and international networking is not to be underestimated as pathways towards change and ultimately the contribution to better health (SDG3 through SDG4).

The Education Programme is complementary to the 12 country programmes and concerned education initiatives at partner institutions. The education programme allows targeted training of additional human resources and support for internationalisation and innovation in education, be it through instructional design, development of technology enhanced learning or e.g. professionalisation of teaching staff.

Equal access to the scholarship programme and alumni activities goes beyond country programmes. A truly Global Campus at ITM is paramount for the quality of interactive education, peer-learning, networking and fostering Global Citizenship.

Wording of the outcome

Professional competencies and agency of students and alumni, and staff of partner institutions is strengthened through access

to quality postgraduate education, networking and lifelong learning opportunities.

Target groups

Target groups:

Scholarship programme

Professionals and scientists from LMICs (OESO DAC list). Yearly min. 70 Short Courses, 48 MSc., 3 individual PhD bursaries. At least 33% from each sex.

Alliance : Staff from partner institutions (ITM incl.) and ITM alumni. Yearly min. 50-100 staff and 1800 alumni online are concerned, min. 30 alumni for travel grants. Gender equality proactively sought. Partners are from country programmes and other LMIC partners (e.g. Flemish Internat. Coop. or Erasmus+)

Categorization: Sustainable Development Goals

SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	1
4. Trade development :	0
5. Biodiversity :	0
6. Climat Change - Mitigation :	0
7. Climat Change - Adaptation :	0
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	1
11. Children's Rights :	1
12. Disability :	1
13. Nutrition :	1

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	Yes
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Education

The Programme contributes to health worldwide (SDG 3) and to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (SDG 4) with a focus on tertiary education.

The strategy papers focuses on primary, secondary and vocational training.

Development education

In this Education Programme, students, alumni and staff from partner institutions (including ITM) generate (scientific) evidence and/or policy briefs with relation to health and its impact on society. These messages are not only translated towards the governments in the countries of intervention, but are also disseminated to the Belgian public through the ITM communication service. An example is the Prize for Global Research of the Province of Antwerp (formerly called Prize for Development Cooperation) which is yearly awarded to 4 ITM master graduates. Through this award, the Province of Antwerp wants to stimulate research in the field of (public) health or medicine relating to the Global South. Development relevance, quality and originality of the master theses are central in the selection criteria.

Our scientific findings (together with the ones from staff from partner institutions and alumni) are being integrated in our curricula, causing a multiplier effect through our teaching. Informal and formal (alumni) networks contribute to shaping discourse on health worldwide on national, regional and international levels.

Complementarily to the country programmes and other partnerships, the collaboration and exchange in higher education among global partners, aims to further strengthen capacity building and to provide opportunities to institutions to act as divers of change. Alliance interventions will foster national and international inter-institutional collaboration amongst FA5 country programme partners and beyond. Co-creation, transfer and application of relevant knowledge is enabled through synergies, collaboration and exchange between HEIs.

These collaborations and their impact provide input for development education initiatives on academic collaboration such as the “Besmet” (2021) documentaries on Flemish television (Canvas). Educational material for schools on these topics have as well been developed in the past years.

Environment and climate change

The Education Programme, is sensitive to environmental issues (e.g. travel policies), increasingly uses digital means wherever educationally relevant and possible. Virtual education will increasingly complement the face-to-face teaching and learning modalities. Different educational activities (e.g. alumni webinars, transferable skills programme for PhD students, some basic science course components) have already proven more efficient and effective if digitalized.

Gender

The Education Programme is not aligned with the strategy paper on Gender. There is a link to the sector and gender mainstreaming but not to the main focus area of education and decision making. This is explained by the specific focus of this programme on Higher Education (postgraduate education) and not on primary and secondary education and participation in political decision-making.

However, this Education Programme approaches gender inequalities in various ways:

- selection and admission to taught short- and master programme courses (and scholarship programme): indeed, a gender balance seems to have been achieved for short courses, however not yet for master programmes. Both flexibility and digitalization (blending courses) can come in support of specific groups of men and women and more broadly gender mainstreaming in master programmes. Indeed, a gender balanced scholarship programme can be expected to contribute to gender equity in policy- and decision-making bodies in countries of origin of target groups.
- admission to the PhD programme: for the PhD programme the proportion of admitted women is significantly higher than the proportion of applying women. This is an effect of self-selection based on academic merit. It might however promote in the long run a better gender balance even at application.
- career opportunities under the Alliance: within the Alliance activities especially when alumni travel grants (to attend and present work at a conference) are awarded, gender equality is proactively taken into account.
- a rights based approach in our education (e.g. sexual and reproductive rights) is mainstreaming gender.
- gender mainstreaming in our communication strategies for education (through pictures, quotes, testimonials) is as well proactively taken into account.

Digitalization - Digital for Development D4D

In ITM's Education Programme, target groups are being trained to conduct research, to produce and disseminate data to improve health policies and quality of care. Continuing Professional Development (CPD) and lifelong learning opportunities are organised in a virtual or hybrid way. The online alumni platform is an important digital tool for the management and dissemination of knowledge produced and shared through Alliance activities.

The digitalization agenda, and possibly pandemic threats (e.g. Covid-19), are expected to continue to influence the organisation of education and scholarship programmes in the coming years. The development of eLearning and virtual mobility and sharing of educational resources are expected to become more relevant, effective and efficient.

Digitalization and eLearning can thus influence the effectiveness of the Alliance approach. This is being supported by the FA3 Final Evaluation which recommended the promotion of e-learning within partner institutions and within ITM. The Alliance will move to a balanced mix of physical and virtual exchange increasing the efficiency of different activities. All stakeholders do however share the conviction that physical meeting and exchange will stay important for sustainable impact.

LNOB or the risk of increasing the digital divide are important concerns for digitalization in education (blended and online learning). In this field, at ITM, a pilot project has been implemented (Spring 2021) to test remote payment of air-time so as to reduce problems of internet access. The first results seem very promising as for a 3-week short course at distance (with ample synchronic activities) as little as 25 euro (via online air-time transfer) can mitigate internet access problems. A much bigger challenge is the availability of "protected study time" at home. This issue will have to be researched further, to find effective and efficient solutions.

Health

ITM's Education Programme contributes to improve health worldwide.

Graduates are strengthened in their scientific, methodological and competences in the field of Tropical Medicine and International Public Health. They are enabled to act as agents of change by using and transferring knowledge and acquired competences. The Syspons evaluation shows that ITM graduates shared knowledge and helped their organisation or institution in reaching its goals more effectively and efficiently. PhD graduates developed new research projects and rate highest on all aspects of knowledge transfer.

Employers of ITM graduates value the graduates' practical skills gained through the hands-on orientation of the courses. Also soft skills (e.g. leadership, decision-making), increased team management & presentation skills together with improved skills in drafting and formulating proposals & reports were valued by employers.

For employers in research (e.g. universities) and policy (such as international organisations or NGOs), application of research methods in the field of Tropical Medicine and International Public Health as well as the transfer of research results into policy briefs were very relevant. Employers in the policy sector specifically mentioned that staff need to be able to process complex scientific analysis into appropriate policy briefs and provide practical recommendations to inform local and national policy makers. Syspons evaluation results highlight that ITM graduates gained these skills, as ITM's courses involve many practical sessions on research, analysis and discussion.

Through the Alliance initiatives with an institutional focus, the strengthened institutional capacity will foster partner institutions to operate as drivers of change with a meaningful impact on public discourse and health. This is being realized via both the co-creation, transfer and application of knowledge relevant to specific contexts, and via strengthening of the science-society interface.

Subsidy bonus allocation: priority themes and strategic priorities

Human rights-based approach

The Education Programme is framed within a Human Rights Based Approach (HRBA).

The training programmes put human rights (and explicitly the Universal Declaration article 25) at the center of its teaching and more specifically its introductory courses of all programmes. (e.g. patient-centered care, social determinants of health, sexual and reproductive rights, social protection and universal health coverage). A rights-based approach to health is fundamental in the ITM approach to teaching and learning. Special emphasis is put on neglected diseases and Public Health as well as the One Health concept and the disease at the human-animal-environmental interface, all linked to the right to health of the less affluent.

Diversity of students and lecturers as well as the participatory and peer-learning pedagogy support the rights-based approach. In health care we consider our alumni mainly as duty-bearers when shaping health guidelines and policies in their organisations and countries.

Intercultural competencies, development of world citizenship, as well as ethics and research integrity are part of all programmes and courses (from short courses to PhD programmes)

The value-based approach to health was acknowledged and really appreciated by alumni and their employers in the Syspons evaluation of education and scholarship programmes under the ITM-DGD framework agreement 2017-2021.

Decent and sustainable work

Decent Work (DW) is only indirectly touched by the Education Programme as equal and equitable access to training and support of career development does influence the opportunities and quality of work of alumni. We can however only hypothesize that this will develop sensitivity for Decent Work among beneficiaries. We anticipate however that post-doctoral grants may have a direct sensitizing effect on decent work in research (including academic autonomy). Doctoral re-entry grants (only budgeted for in country programmes) are expected to have a similar effect.

ITM has thematic expertise on HR policies in the health sector and on Social Protection. The latter expertise is being translated into a short course on Social Protection in Health for Universal Health Coverage.

Gender

At ITM, since the end of 2018 a gender and inclusiveness working group has been tasked to improve gender mainstreaming in research, education and development cooperation as well as in ITM's organizational context.

Among the academic institutional actors (ITM, VLIR-UOS and ARES) a working group gave suggestions to mainstream gender in the scholarship programmes in the framework of the learning trajectory (2019-2020) and through a joint publication on Gender with all actors of the non-governmental cooperation (ANGC).

Gender inequalities are approached in the education programme in different ways:

- A gender balance has been achieved for short courses, however not yet for MsC programmes. The latter is determined by gender inequality in access to higher education (1st master degree required for admission) and to management functions (management experience is an admission requirement). These inequalities differ from country to country and take time to overcome. Both flexibility and digitalization (blending courses) can be come in support of specific groups of men and women and more broadly gender mainstreaming in master programmes. Indeed, a gender balanced scholarship programme can be expected to contribute to gender equity in policy- and decision-making bodies in countries of origin of bursaries.
- For the PhD programme the proportion of admitted women is significantly higher than the proportion of applying women. Women have a 55% success rate as compared to 39% for male applicants. This is an effect of self-selection based on academic merit. It might however promote in the long run a better gender balance, even at application.
- Within the Alliance activities especially when travel grants are awarded gender equality is proactively sought.
- The ITM thematic expertise in SRH has been translated into a short course. Role models are important. Female teaching staff and female students influence attitudes of male students and possibly their future roles in society

Environment

Health is affected by climate change. And human behavior affects the environment and the climate. In the interaction between humans, animals and the environment disease transmission is a specific problem. This is the One Health domain of science. ITM's master programme in "One Health: diseases at the human - animal interface" specifically addresses the issue of disease transmission. The broader aspect of climate change and health is included in the different curricula.

Under the Global Programme at ITM, of which the Education Programme is a part, also two networks were created to address respectively the "urban health and climate" and the "eco-health" topics.

In a broader sense the ITM aims at continuously raising awareness for environmental issues among students and staff through the activities and policies proposed by its Committee for Sustainable Entrepreneurship. Travel policies, investments in virtual mobility and means for collaboration, environmental sensitivity in organizational life at ITM, are examples.

In reference to the KLIMOS toolkit, the environmental impact of the scholarship programme has not been measured or quantified. However the travelling implied is and obvious issue.

Indeed, an important question at this moment is finding the right balance (and this is a complex issue) between online and face-to-face education whereby online teaching and learning would definitely be beneficial for the environment (less travel) but also has an impact on quality and accessibility of courses and most likely also on the gender dimension. It should be noted that eLearning can be advantageous or disadvantageous to women depending on local social factors. This is a reflection which was accelerated due to the Covid-19 pandemic but is awaiting the formulation of a clear policy. For specific Alliance activities such as the exchange among alumni and partners, the virtual route is definitely there to stay, next to the physical exchange

modality.

Common outcome within a common programme

N/A

Common outcome between distinct programmes

We do not have a common outcome, but common objectives for the scholarship programme among ITM, VLIR-UOS and ARES exist.

The 3 higher education (HE) actors include an education (scholarship) programme with slight differences in terms of scope (ITM includes an Alliance project).

The Programme Objective at ITM

Professional competencies and agency of students and alumni, and staff of partner institutions is strengthened through access to quality postgraduate education, networking and lifelong learning opportunities.

The programme objective at VLIR-UOS

Through educational networks (ICP Connect), training programmes (ITP) and scholarships HEIs aim to systematically integrate global perspectives hereby creating a supportive, inclusive and networked learning environment in which individual scholarship students, professionals and academics acquire transversal competencies and state-of-the-art knowledge on sustainable development enabling them to become experts and critical global citizens motivated to act as change agents in their network.

The programme objective at ARES

“Les boursier.es intègrent des compétences et capacités pour aborder les problèmes selon des stratégies adaptées à leurs contextes afin qu’ils et elles puissent contribuer à un développement durable. L’accès à nos établissements d’enseignement supérieur pour les personnes des pays partenaires encourage l’internationalisation des cursus et améliore la qualité des formations. Ceci offre un important potentiel en termes d’échanges scientifiques et culturels et à la création de réseaux.”

Although differently worded the same concern about transversal and relevant competencies and agency for change transpires. This is in line with the JSF HES4SD.

One difference to be noted is that ITM is a programme implementing institution, with 12 defined country programmes, as compared to the umbrella function of VLIR-UOS and ARES, and hence adds emphasis on staff and institutional strengthening at LMIC partner institutions.

Areas of complementarity and synergy with the intervention of ENABEL

The complementarity and synergy with Enabel’s programmes in the field of education will most likely concern digitalization in education. As a response to the Covid-19 crisis and its impact on education, Enabel launched its EdTech initiative: “Use of education technology to improve quality and continuity of teaching and learning”. This is part of Enabel’s Wehubit programme, under the “ACP-EU Digital Connectivity and Digital Solutions to Strengthen the Resilience of Education, Health and Micro, Small and Medium Enterprises’ (MSMEs) Systems to COVID-19 in ACP Countries”. Although only actors from a limited number of countries can be beneficiaries (and only 5 countries overlap with the ITM programme countries) synergies relevant for higher education and science institutions in these countries can and will be explored.

Beyond the ITM programme countries, this would imply new partnerships for education under the Alliance.

LNOB or the risk of increasing the digital divide are explicit concerns for EdTech and digitalization in education in general. At ITM a pilot project (Spring 2021) has been conducted to test remote payment of air-time so as to reduce problems of internet access. The first results seem very promising as for a 3-week short course as little as 25 euro (via online air-time transfer) can solve the internet access problem. (see also below – DGD Digitalisation D4D Strategy Paper).

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	Professional competencies and agency of students and alumni, and staff of partner institutions is strengthened through access to quality postgraduate education, networking and lifelong learning opportunities.
Indicator title :	OC1 - OVI 1: Self-reported development of professional competencies and agency of students and alumni

Indicator description :	SoV: Course evaluations and periodic (2 to 3 yearly) alumni surveys, ITM institutional administrative (including education) reports Baseline = 0 , value of baseline is > 70% "agree or fully agree" with the outcomes of training (Ref. Syspons questionnaire) on a Likert (5 or 6 point) scale; value 1= maintained ; value 2 = improved
Baseline :	0
Target Year 3 - 31/12/2024 :	1
Target Year 5 - 31/12/2026 :	2

Formulation of outcome or result :	Professional competencies and agency of students and alumni, and staff of partner institutions is strengthened through access to quality postgraduate education, networking and lifelong learning opportunities.
Indicator title :	OC2 - OVI 2: Number of CPD and peer learning initiatives organised for alumni and staff from partner institutions and their appreciation rate by participants
Indicator description :	SoV: Activity reports & participants surveys baseline = 0; cumulative number of CPD and peer learning activities organised for alumni and staff from partner institutions under FA5. For the evaluation, > 70% of the participants "satisfied or very satisfied" with the results of the activity on a Likert (5 or 6 point) scale; value 1= maintained ; value 2 = improved
Baseline :	0
Target Year 3 - 31/12/2024 :	35 ; 1
Target Year 5 - 31/12/2026 :	70 ; 2

Formulation of outcome or result :	Professional competencies and agency of students and alumni, and staff of partner institutions is strengthened through access to quality postgraduate education, networking and lifelong learning opportunities.
Indicator title :	OC3 - OVI 3: Number of education initiatives at partner institutions supported by the Alliance
Indicator description :	Sov: Activity reports and country programmes reports Number of education initiatives supported in the country programmes & beyond per year; baseline value = 10 (=average last 3 years under FA4)
Baseline :	10
Target Year 3 - 31/12/2024 :	16
Target Year 5 - 31/12/2026 :	18

Formulation of outcome or result :	Professional competencies and agency of students and alumni, and staff of partner institutions is strengthened through access to quality postgraduate education, networking and lifelong learning opportunities.
Indicator title :	OC4 - OVI 4: Number of international alumni and staff from partner institutions yearly involved in teaching at Alliance partner institutions (ITM included)
Indicator description :	SoV: Teaching agreement & narrative report number of mobility grants for alumni and staff from partner institutions involved in teaching at Alliance partner institutions (ITM included) under FA5; baseline=0; cumulative over the years; disaggregated by gender (40% min. for M and F)
Baseline :	0
Target Year 3 - 31/12/2024 :	40 (16 : 24)
Target Year 5 - 31/12/2026 :	70 (30 : 40)

Formulation of outcome or result :	R1 - Graduates gained thematic, methodological and ethical competencies and soft skills, including intercultural skills, through interactive and diverse teaching and learning experiences.
Indicator title :	R1 OVI 1: Numbers of scholarships awarded / course type , disaggregated by gender
Indicator description :	SoV: Statistics student lifecycle management system; selection and admission data This is the cumulative number of scholarships awarded for Short Courses, MSc., PhD and individual fellowships. Baseline = 0, gender distribution min. 33% for M and F.
Baseline :	0
Target Year 3 - 31/12/2024 :	PhD: 15 MSc: 150 SC: 240 Fellowships (pre-and post doc): 25 (min. 33% M and F)
Target Year 5 - 31/12/2026 :	PhD: 25 MSc: 260 SC: 400 Fellowships (pre- and postdoc): 35 (min. 33% M and F)

Formulation of outcome or result :	R1 - Graduates gained thematic, methodological and ethical competencies and soft skills, including intercultural skills, through interactive and diverse teaching and learning experiences.
Indicator title :	R1 OVI 2: Graduation rates among MSc. bursaries
Indicator description :	SoV: Statistics student lifecycle management system; graduation data; Rate: students graduated as compared to students expected to graduate according to the scholarship contract Baseline based on academic year 2019-2020
Baseline :	85%
Target Year 3 - 31/12/2024 :	87%
Target Year 5 - 31/12/2026 :	90%

Formulation of outcome or result :	R1 - Graduates gained thematic, methodological and ethical competencies and soft skills, including intercultural skills, through interactive and diverse teaching and learning experiences.
Indicator title :	R1 OVI 3: Geographical diversity of students in MSc. and Short Courses
Indicator description :	SoV: Statistics student lifecycle management system; origine data A level of diversity (in origins) for students: not more than a specific 75 % should be from the same continent and from a significant number of different countries: baseline <75 from same continent, >25 countries of origin (baseline as per education KPI institutional policy plan)
Baseline :	<75% from same continent 25 different countries
Target Year 3 - 31/12/2024 :	<75% from same continent 30 different countries
Target Year 5 - 31/12/2026 :	<70% from same continent 30 different countries

Formulation of outcome or result :	R2 - The agency for change of alumni and staff from partner institutions is supported through networking, exchange and lifelong learning opportunities
Indicator title :	R2 OVI 1: number of alumni travel grants awarded, disaggregated by gender
Indicator description :	SoV: travel reports; selected abstract and presented PPT; conference programme Cumulative number of travel grants awarded under FA5, disaggregated per gender (40%min. for M and F). Baseline = 0
Baseline :	0
Target Year 3 - 31/12/2024 :	95 (38 min. M and F)
Target Year 5 - 31/12/2026 :	170 (68 min. M and F)

Formulation of outcome or result :	R2 - The agency for change of alumni and staff from partner institutions is supported through networking, exchange and lifelong learning opportunities
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Indicator title :	R2 OVI 2: number of alumni meetings and participants
Indicator description :	SoV: alumni meeting reports; participants lists; published news items on online platform Cumulative number of alumni meetings organised and participants attended under FA5; baseline value = 0 (Y1= 3 meetings/year, with 60 participants ; Y3 & Y5= 4 meetings/year, with 65 participants)
Baseline :	0
Target Year 3 - 31/12/2024 :	10 meetings, 620 participants
Target Year 5 - 31/12/2026 :	18 meetings,1140 participants

Formulation of outcome or result :	R2 - The agency for change of alumni and staff from partner institutions is supported through networking, exchange and lifelong learning opportunities
Indicator title :	R2 OVI 3: number of alumni with whom ITM is in contact (new students/graduates registered on the online alumni platform)
Indicator description :	SoV: alumni database; number of new accounts on alumni platform Cumulative number of new students/graduates registered on the online alumni platform (average of 150 per year). The baseline value in July 2021 is 1780;
Baseline :	1780
Target Year 3 - 31/12/2024 :	2080
Target Year 5 - 31/12/2026 :	2380

Formulation of outcome or result :	R2 - The agency for change of alumni and staff from partner institutions is supported through networking, exchange and lifelong learning opportunities
Indicator title :	R2 OVI 4: number of lifelong learning and job opportunities shared within the alumni network
Indicator description :	SoV: statistics online alumni platform (news items, vacancies, calls for abstracts, events such as conferences, MOOCs & webinars) Cumulative number of jobs, events, news & email campaigns published on the online alumni platform (Y1=609; Y3=670; Y5=770) ; baseline value = number of posts since launch in Jan 2020 until July 2021; baseline value = 858
Baseline :	858
Target Year 3 - 31/12/2024 :	2764
Target Year 5 - 31/12/2026 :	4186

Formulation of outcome or result :	R2 - The agency for change of alumni and staff from partner institutions is supported through networking, exchange and lifelong learning opportunities
Indicator title :	R2 OVI 5: number of ITM alumni webinar attendees under this outcome
Indicator description :	SoV: webinar reports Cumulative number of ITM Alumni webinar participants under FA5 (Y1= 60 @10 webinars; Y3= 70 @12 webinars; Y5= 80 @14 webinars); baseline value = 0
Baseline :	0
Target Year 3 - 31/12/2024 :	2040
Target Year 5 - 31/12/2026 :	4000

Formulation of outcome or result :	R2 - The agency for change of alumni and staff from partner institutions is supported through networking, exchange and lifelong learning opportunities
Indicator title :	R2 OVI 6: Number of alumni and staff from partner institutions involved in operational educational exchange (e.g. teaching or as jury member F2F or virtual) at Alliance partners institutions (ITM included)

Indicator description :	SoV: Teacher agreements; narrative teacher reports Cumulative number of mobility grants for alumni and staff from partner institutions (ITM included) involved in operational educational exchange across and beyond country programmes & at ITM (S-S-N); baseline value = 0 ; disaggregated per gender (40% min. for M and F)
Baseline :	0
Target Year 3 - 31/12/2024 :	40 (16 min. for M and F)
Target Year 5 - 31/12/2026 :	75 (30 min. for M and F)

Formulation of outcome or result :	R3 - The quality in postgraduate education at partner institutions is strengthened through internationalisation and professionalisation initiatives
Indicator title :	R3 OVI 1: Number of staff mobility grants for course development and techno-pedagogical support at Alliance partner institutions (ITM included)
Indicator description :	SoV: Educational support agreements; narrative staff mobility reports Cumulative number of staff mobility grants for course development and techno-pedagogical support at Alliance partner institutions in and beyond country programmes ; baseline value = 0 ; Estimated at 3 grants per year
Baseline :	0
Target Year 3 - 31/12/2024 :	9
Target Year 5 - 31/12/2026 :	15

Formulation of outcome or result :	R3 - The quality in postgraduate education at partner institutions is strengthened through internationalisation and professionalisation initiatives
Indicator title :	R3 OVI 2: number of joint (TEL) educational initiatives beyond country programmes' partners
Indicator description :	SoV: narrative project reports Cumulative number of educational projects with partners implemented outside/beyond the country programme outcomes under FA5; baseline value = 0 (Y1= 3 per year; Y3= 4; Y5= 5)
Baseline :	0
Target Year 3 - 31/12/2024 :	10
Target Year 5 - 31/12/2026 :	19

Formulation of outcome or result :	R3 - The quality in postgraduate education at partner institutions is strengthened through internationalisation and professionalisation initiatives
Indicator title :	R3 OVI 3: number of CPD, peer learning and professionalisation activities with partners
Indicator description :	SoV: narrative activity reports Cumulative number of CPD, peer learning and professionalisation activities with Alliance partners (e.g. Training of Training workshop; thematic educational webinars) under FA5 ; baseline value = 0 (Y3= min 1/year; Y5=min 2/year)
Baseline :	0
Target Year 3 - 31/12/2024 :	3
Target Year 5 - 31/12/2026 :	6

Activities, targets groups and beneficiaries

Classification of activities

1. Scholarship and training programme at & through ITM

Postgraduate training activities, whether mainly research-informed (expert short courses), research-oriented (Master

programmes) or research-based (PhD training), provide education at a level, effective for academic capacity development. Pre-doctoral and postdoctoral fellowships support the effectiveness of doctoral training as they allow adequate selection and/or preparation for PhD training (predoc) or ‘valorisation’ of the PhD research and developing a research training programme afterwards (postdoc).

The training programme requires excellent administrative and student support. Academic and scholarship selection processes are key. Academic support includes coaching, mentoring, study management (tutoring), (critical) feedback and building relationships.

2. Alliance

Individual level: alumni and staff partner institutions

Alumni travel grants: providing opportunities to speak out to the national and international policymakers or scientific community (e.g. at conferences; through the EV4GH-training)

- Organisation of alumni meetings: supporting alumni networking and peer learning
- Management of the online alumni platform
- Organisation of lifelong learning and CPD activities (e.g. webinars)
- Allocation of mobility grants for teaching & coaching (exchange N-S-S) : strengthening alumni and staff of partners in their capacity to act as agents of change and contributing to the internationalisation of postgraduate education (broadening of horizon).

Institutional level: partners

Strengthening internationalisation and professionalisation of postgraduate education at partner institutions through:

- Allocation of mobility grants for course development & techno-pedagogical support (exchange N-S-S)
- Support of joint educational initiatives
- Organisation of professionalisation activities (e.g. Training of Trainers workshops, peer exchange meetings, webinars)

Target group(s)

Scholarship programme: Professionals & scientists from LMICs (DAC list). Min. 70 SC bursaries, min. 48 MSc. bursaries, min. 3 individual PhD bursaries (institutional PhD bursaries not incl.) min. 4 predoc/ 2 postdoc bursaries per year. No less than 33% from each gender.

Alliance: staff from partner institutions and ITM alumni. 50-100 staff from partner institutions, 1800 alumni online. Institutional partners from 12 country programmes and other LMIC partners, LMIC partners via e.g. Erasmus+

Beneficiaries

Direct beneficiaries:

- Scholarship programme: early and mid-career health professionals from LMICs.
- Alliance activities (academic and support staff): alumni and partner institutions

Indirect beneficiaries:

- Employers of alumni (e.g. Ministries of Health, national Disease Control programmes, NGOs, universities, international organisations)
- Students and researchers at partner institutions
- Patients and clients of the health systems in LMIC’s

Title of the reference annex :	TOC_ITM_GPEdu_22-26
Title of the reference annex :	RA_ITM_GPEdu_22-26

Description of the Relevance

A scholarship and training programme geared toward training scientists and experts able to research and solve complex practice and policy problems responds to the scientific capacity building demands and needs of institutions (e.g. universities, science institutes, ministries of health, NGO’s) in LMIC. The proposed Alliance activities including alumni career support and structural support of education programmes at partner institutions aim to be the catalysts for increased effectiveness and impact of the scholarship and training programmes. The concerned field of science; public health and related disciplines, adds to the relevance. The EUA and National Rectors’ Conference statement^[i] emphasizes the urgent need for scientific capacity strengthening.

The programme is central to the **6 strategic objectives of the JSF HES4SD**, aiming at individual capacity and agency, institutional capacity and agency, knowledge production and dissemination, and strengthening of the science-society interface.

Scientific capacity strengthening is a slow process. Training of a junior scientist (PhD) takes on average 4 or more years. Achieving critical mass and establishing independent research groups is an even longer process. Training at MSc. and Short Course level has a faster impact but usually at a more operational level (workplace and organisation), as was documented by the Syspons evaluation (2021).

The Syspons evaluation concluded on the **relevance of the scholarship/training programme at individual level** that:

- the thematic focus and practical orientation of ITM's programmes ranked the highest in terms of alignment of educational activities and scholarship programme with the student's needs.
- the courses' practical or hands-on orientation was an equally strong factor leading to overall student satisfaction
- there was an overall satisfaction with the possibility of distance learning in the programmes with an important eLearning component. This was particularly the case for students with young families for whom long periods of absence of a family member for studies was difficult.
- the main motivation of ITM students was the acquisition of methodical technical expertise as well as skills enabling them to contribute to public health in general. Applicants identified the broadening of the horizon (developing world citizenship) to also be a crucial aspect for their motivation to study at ITM. Networking and career opportunities came in second place.
- ITM's DGD-funded scholarship programme met the needs of the target group in terms of financial support during their studies.

In terms of **relevance on an institutional level** the evaluation concluded that:

- ITM met the need for practical skills, transferable knowledge and soft skills at partner institutions.
- for employers in research (such as universities or health institutes) and policy (such as international organisations or NGOs), application of research methods in the field as well as the transfer of research results into policy briefs were particularly relevant.
- institutional partners were able to some extent to use the individual capacity building, training their staff, strategically.
- influencing institutional relevance is the partner institutions' need for more visibility, reputation and ability to recruit highly qualified staff for research projects. ITM partners described that this need can be addressed by sending staff abroad, such as to ITM.

The Alliance activities have existed in the previous ITM-DGD framework agreement (2017-2021) but are yet to develop to their full potential. Digitalization is considered very promising to enhance both relevance, effectiveness and efficiency. The Covid crises has boosted the global acceptance and perception and added value of digitalization in education.

The **relevance of Alliance activities** is also evidenced through:

- the high value given to networking by the survey participants and interviewees (Syspons evaluation), who (interviewees) see a clear advantage in the institutional set-up at ITM for networking through working groups, availability of lecturers and supervisors and (survey participants) value the informal and formal alumni networks. The latter more for information exchange.
- the fact that educational support and professionalisation activities are high on the agenda of institutional partners mainly related to eLearning development and research methods and skills as expressed during recent Joint Partner Meetings (JPM). Both topics have become even more pressing due to the Covid pandemic.

The Scholarship and Alliance Programme clearly fosters equal opportunities for different target groups. Scholarship selection processes and Alliance activities actively strive for a gender balance. The programme is sensitive to environmental issues in content (course curricula) and practice (e.g. travel policies) and increasingly uses digital means wherever educationally relevant and possible to mitigate the impact on the environment (international travel). Virtual education will increasingly complement the face-to-face teaching and learning modalities. Different educational activities (e.g. alumni webinars, transferable skills programme for PhD students, some basic science course components) have already proven more efficient and effective if digitalized. As documented in the "lessons learned" last academic years, the efforts mentioned here are relevant, but yet to be further strengthened.

[1] EUA and National Rectors' Conferences, 2021, Statement EU-Africa, accessed on 19/06/2021
https://www.crc.muni.cz/media/3324313/statement-eu-africa_final_31052021.pdf

Description of Coherence

The Education Programme (scholarships and Alliance) of ITM is unique in the sense that it covers the specific scientific fields of International/Global public health, One Health and tropical and re-emerging diseases. The programme offers an interdisciplinary perspective in scientific capacity building, across biomedical, clinical well as public health sciences (e.g. epidemiology, management, political sciences, sociology, economics, anthropology, bio-ethics). The niche and the interdisciplinary approach are to a very large extent complementary to the scholarship programmes of the other institutional actors such as VLIR-UOS and ARES. Compared to the NGO sector, the focus on advanced academic training constitutes the main added value. The outcomes (see Theory of Change) are academic, and concern professional competencies and agency as well as institutional educational capacity, with the ultimate aim to contribute to health.

The scholarship programme will prioritize applicants from the 29 partner countries of the institutional actors under the thematic JSF HES4SD, but will nevertheless also be accessible for a smaller number of professionals from any country on the OECD-DAC list. In this sense the ITM offers a rather unique study environment where global students meet in view of peer-learning and exchange and broadening the horizons or fostering global citizenship.

In terms of internal coherence, educational projects (e.g. development of a specialised short course, a MSc or a doctoral programme, eLearning development) at partner institutions are structurally embedded in ITM country programmes or other 'global' institutional partnerships. The Education Programme supports these projects through scholarships at ITM and Alliance activities. Partner institutions can use scholarships and training at ITM strategically to develop their staff and can benefit from the Alliance activities to strengthen internationalisation and networking as well as educational quality through (mainly but not exclusively) teaching and techno-pedagogical input. As this input comes from the Alliance it comes from the broader network of partners (ITM included) and alumni. Internal coherence also exists with the Policy Support Programme (Emerging voices for global Health (EV4GH) training, supported with travel grants through the Alliance) and the Thematic Networks (exchange supported via Alliance travel grants).

Internal coherence with ITM policy plan 2020-2024.

One of the institutional strategic objectives (Policy Plan 2020-2024) stipulates that ITM aims to be a **global open campus** and to offer its international staff, students and alumni the most interesting and meaningful teaching and learning experiences possible. Educational operational objectives include 1) to increase study flexibility (for optimal relevance) for students, 2) to further invest in blended short courses, 3) to increase the diversity of teaching and educational staff, 4) to develop institutional training activities for lecturers and 5) a language policy to optimize access for non-native English students.

A second strategic objective is to strengthen the position of ITM's **education at national and international level**. Operational objectives include 1) strengthened national and international collaboration, 2) a consolidated ITM global alumni network and 3) improved educational impact assessments.

ITM's Open Global Campus is supported by the award of the 2021-2027 Erasmus Charter for Higher Education (ECHE) based on its Erasmus Policy Statement, internationalisation and modernization strategies. See https://www.itg.be/Files/docs/onderwijs/EPS-2021-2027_full-version.pdf

External coherence with the programmes of VLIR-UOS and ARES are based, to some extent on a geographical complementarity. External coherence with the NGO sector (e.g. AZV-MEMISA-DvdW) is based on ITM's academic focus as opposed to a more operational-level focus in the NGO sector.

Description of Effectiveness

The effectiveness of the scholarship programme and Alliance activities has been monitored and documented in previous years (ITM-DGD FA4 2017-2021 – see below) and the scholarship programme impact has been investigated through the mid-term "Social, Developmental and Professional Impact Evaluation of ITM's Educational Activities and Scholarship Programme" (Syspons evaluation, June 2021).

Scholarship programme

Monitoring of results (ITM-DGD MYP 2017-2021) is in the ToC's sphere of control.

The academic selection process, followed by a DGD scholarship selection process, remains the main instrument to maintain or further increase the effectiveness of the scholarship programme (see 2019 Belgium Programme - lessons learned).

To summarize the scholarship programme data for 2021, which inform our baseline data:

- The courses at ITM on average attract 5 times the number of applicants as compared to the max. number of students that can be admitted
- The number of non-native English speakers among applicants, to the English taught courses with language support, is increasing and representative for the non-English speaking (African) partner countries
- Overall a third of admitted students in courses supported by the DGD scholarship programme are women and among DGD bursaries the gender balance is 40% F - 60% M.
- A majority of DGD bursaries (65%) are from African countries.
- On average at least 50 master scholarships, 80 Short Course scholarships and a variable number of individual fellowships are yearly awarded.
- On average 3 individual PhD scholarships (beyond the PhD scholarships in country programmes) are yearly awarded.
- Graduation rates are above 85%.

Alliance

The Alliance started to be operational in 2018 after a preparatory phase in 2017 and its effectiveness is increasing. As the main role of the Alliance is to support exchange, networking, continuous professional development and partner institutions' educational development, based on the network's resources (partners and alumni), the Covid-19 related limitations for international travel (in 2020) did not facilitate the Alliance's growth in effectiveness.

Nevertheless, in terms of Alliance results in 2020 (results for 2021 not yet available), the data show:

- 21 partners involved (ITM excluded)
- 14 collaborative and exchange projects with partner institutions, including:
 - staff mobility South-South: 1, South-North: 4 and North-South: 3;
 - 4 Technology enhanced Learning initiatives implemented
- 13 webinars organized: 10 focusing on COVID-19 in LMIC, 1 focusing on the world and 2 on Belgium. These webinars were attended by more than 1800 participants from around the world, and recordings have been viewed almost 2500 times.
- more than 1600 alumni on the online alumni platform ITM Alumni Connect
- travel grants for alumni (34 in 2019) and 3 international alumni meetings (not in 2020, due to Covid-19)

In terms of the sphere of influence, the Syspons impact evaluation documented the first two outcomes of the ToC (see ToC above). The third outcome, related to quality of postgraduate education at partner institutions, has no previous effectiveness assessment.

Digitalization could become a catalyst for quality and effectiveness in education (as also happened to some extent at ITM introducing the "flipped classroom" method) as online teaching and learning requires a reflection on approaches to curriculum implementation. Digitalization and eLearning will also influence the effectiveness of the Alliance approach. This is being supported by the FA3 Final Evaluation which recommended the promotion of e-learning among all partners; south partners and ITM.

The thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

Description of Efficiency

Efficiency of education and scholarship programme

Higher Education has a cost which depends mainly on the size of student groups and the modalities and organisation of courses (e.g. face-to-face, blended, online). The cost is as well related to the quality of education. Teaching in smaller student groups, on campus, with extensive individual coaching (thesis project) or supervision is costly but also very effective for individual capacity strengthening. A good example is the PhD programme which carries the highest cost per student (as covering 48 scholarship months) but also yields the biggest impact (as was documented in the Syspons evaluation). Also at master level, beyond the diversity in backgrounds and countries of origin, the size of a cohort is most important for peer-learning. MSc. programmes at ITM admit on average 20 students as this group-size has proven optimal for significant exchange and peer-learning. For specialised short courses (e.g. 5 credits) the group size can be bigger as gaining knowledge (thematic, methodological or ethical) is relatively more important than networking and as individual coaching is less intense. For eLearning courses as well, the optimal group size is still to be further explored in view of also maintaining optimal quality.

The quality of educational programmes at ITM has been confirmed during recent NVAO accreditation rounds (2008 and 2016) and is confirmed by alumni in the Syspons evaluation. The question remains whether a same quality can be achieved at a lower cost. To capitalize on the learnings from the changes introduced due to the Covid-19 crisis a reflection has started on the right balance between face-to-face, blended and online teaching and learning, on pedagogy and the role of digital means, and on the group size in short courses. These factors can potentially increase efficiency but require careful consideration. This is being explored and explicitly mentioned in ITM's policy plan 2020-2024.

For a scholarship programme, blended or online courses are indeed less costly (no flights, no subsistence costs) but the quality and the aim to develop soft skills, broadening the horizon and global citizenship, might be affected. Even for gender

considerations and inclusivity a shift to online courses doesn't necessarily always have a positive effect as this depends on local social characteristics (e.g. access to resources included protected study time).

Alliance activities and efficiency

The Covid-19 crisis had a significant impact on the Alliance activities of 2020-2021 and significant learning took place on the use of digital means to foster exchange among alumni and partners. Virtual participation to activities and exchange (e.g. lecturing, attending conferences, participation in and presentation of webinars) replaced physical mobility. The Alliance will move to a balanced mix of physical and virtual exchange increasing the efficiency of different activities. All stakeholders do however share the conviction that physical meeting and exchange will stay important for sustainable impact.

The online platform ITM Alumni Connect is as well a means to increase the efficiency of alumni networking.

The platform will increasingly be used to strengthen the relations between ITM and partner institutions.

Overall, **digitalization** (online alumni platform, virtual exchange, blended and eLearning courses) and the possibility to reach more beneficiaries, is expected to have the most important impact on efficiency of ITM's education programme.

More specification on the partners to whom budget is allocated can be found in annex 'Responses December'.

Comments on description of efficiency

Submitted by ITG-IMT on Wed, 03/30/2022 - 16:41

Response December

Underspensing during FA4 (2017-2021) is due to a set of circumstances which include 1) the structure of the 5-year budget which was characterised by a late start, budgetary cuts imposed by DGD in the first years and structural increases in the last years. This type of inconsistency in funding does not match well with the academic reality, in which the scholarship programme is limited by the number of students courses can accomodate. 2) Concurrently in the last two years, the Covid-19 pandemic has led to the cancelation of a number of short courses and to scholarships which excluded travel and subsistence costs due to Covid-19 restrictions on mobility (also in the PhD programme).The adaptations made in the Covid-19 context (e.g. online teaching and internet support at distance) implied less spending. 3) Last but not least, a number of policy aspects of the FA4 scholarship programme were not confirmed or slow to develop. A local scholarship programme (LSP) was foreseen (on DGD demand) as transitional measure for the partners from country programmes which were stopped in 2016 (e.g. country partners Uganda, India, Bolivia, Morocco, Ecuador and network partner Nepal). But only one partner in Latin-America (Bolivia) and two in Asia (India and Nepal) were interested in implementing the LSP as proposed. New mobility programmes (as for pre-doctoral students) were slow to be put in place and eventually (as for teacher mobility, mobility for joint course development under the Alliance and alumni mobility) seriously hampered by the Covid-19 context. A confluence of events which caused relative underspending and hence the fact that a significant part of the budget was made available to complement the CREDO fellowship programme in the DRC. For the forthcoming 5-year programme (2022-2026) we plan a progressive increase in the capacity of specific courses and thus number of students and bursaries which can be admitted. Taking into account the reorientation of funds to the CREDO fellowship programme, the execution rate of the programme budget resulted above 95% (as per latest figures). A revision of the score for efficiency would acknowledge this reality.

Description of the expected Impact

With an ultimate aim to contribute to health, in the ToC, impact is specified at three levels (as supported by the Syspons evaluation).

Informal and formal (alumni) networks will contribute to lifelong learning and exchange and shape the discourse on health worldwide on national, regional and international levels (JSF HES4SD: SG2 and 4)

The evaluation results show that **networks created** during training at ITM contribute to **continued exchanges after graduation**. The ITM Alumni Connect network is appreciated for information-sharing and staying up-to-date while for discussions strong informal networks are preferentially used.

Alumni, staff of partner institutions and ITM, embody scientific, ethical and professional values, attitudes and practice. They act as agents of change by using and transferring knowledge and acquired competences (JSF HES4SD SG1, 2 and 5)

ITM graduates shared their knowledge (96%) and helped their organisation or institution in reaching its goals more effectively and efficiently (89% and 91%). PhD graduates developed new projects and rate highest on all aspects of knowledge transfer.

The strengthened institutional capacity will allow partner institutions to operate as drivers of change aiming at a meaningful impact on public discourse and health. This can be realized via both the co-creation, transfer and application of knowledge relevant to their context, and/or via the science-society interface (JSF HES4SD SG3, 4, 5 and 6).

Through international training partner institutes gain greater **international visibility**. Graduates returning to their institutions develop new international partnerships. PhD graduates network and secure additional financing. The impact of staff professionalisation and techno-pedagogical support, is still to be assessed.

The Syspons evaluation results shed light on the plausibility of an impact on health mainly through research and new practices leading to new health policies.

Description of Sustainability

The Education Programme includes a scholarship programme and Alliance (educational networking / capacity strengthening) activities.

Scholarships

The target group of the scholarship programme are “multiplier” stakeholders. Alumni are expected, and indeed do, as has been evidenced in the mid-term evaluation of the FA 2017-2021 (Syspons evaluation), act as agents of change and as teachers in their professional environment.

The strategies promoting sustainability in the Education Programme include:

- The quality of the academic selection process and the focus on experienced (mid-career) professionals who, except for a very small minority, reintegrate into their home institution and certainly home country. There is thus as good as no indication of brain drain, beyond the expected brain circulation in function of an international career (e.g. with an international organisation).
- The link and priority given to project countries and partner institutions and the training needs of their staff / professionals. Training thus fits the policy plans of partner institutions.
- The likelihood of career progression of alumni as confirmed by the Syspons evaluation.
- The alumni strategy promoting networking, exchange and continuous professional development.
- The promotion of co-funding of scholarships (scholarship co-payment by other donors / countries / private) increases the number of stakeholders and is expected to favor financial, social and institutional sustainability.

Alliance

As mentioned above the Alliance strategy comes to a large extent in support of the scholarship programme in view of guaranteeing effects in the medium and long term.

- Professionalisation of staff for educational development at partner institutions has a training of trainers perspective.
- The increased emphasis in LMIC’s on quality higher education and development as knowledge societies favors institutional and environmental sustainability.
- Development of a culture of internationalisation / regional collaboration at partner institutions, supported by the Alliance, increases visibility and possibility to attract resources. This was confirmed in the Syspons evaluation (mid-term evaluation of FA 2017-2021)
- Financial sustainability of institutional strengthening mainly depends on local structural funding for HE&S institutions. Joint international funding such as the EU Erasmus+ Key Action 2 on Capacity Strengthening as well can play a role. The Alliance facilitates the development of joint projects.

The right level of digitalisation is expected to boost sustainability. Development of virtual educational collaborations (eLearning / webinars) is likely to become part of common practice.

Defining an exit strategy for this outcome is indeed not on the agenda. Training needs and demands - especially on research skills - to comprehend and work in increasingly complex public health contexts, will most likely not diminish in the future. Sharing knowledge and mutually reinforcing research capacities is not to be seen as a project with a defined end-date but rather the future way of being together. And although most countries are becoming knowledge societies, not all countries progress that fast, and thus might still count on scholarships for capacity development in the years to come.

Higher middle income countries develop their own scholarship schemes for international exposure of young professionals. And it is indeed a challenge for ITM to connect to these initiatives and develop co-funding of scholarships with these schemes, especially for partner institutions in partner countries. But even if scholarships are with priority geared at partner institutions and countries, a significant number of bursaries comes from other contexts. As mentioned, ITM already signed Memoranda of

Understanding in that sense (e.g. with Thailand).

More on the technical sustainability can be found in the annex 'Responses December'.

Description of the Partnership Strategy

The partnership strategy for the Education Programme is related to the complementarity between the Education Programme and the networks with partner institutions as well as alumni, and aims at joint education in multiple ways. The target groups are shared between ITM and its institutional partners in country programmes and beyond. These are health professionals and scientists. The different institutional partners (universities, science institutes, ministries of health) allow multi-stakeholder partnerships.

Formal joint education programmes such as the MSc in Tropical Animal Health (MScTAH), from 2022 onwards called MSc. in “Global One Health: diseases at the human-animal interface” (MScGOH), a partnership with the University of Pretoria (UP) has been in place (MoU) since 2016. With the UP it is the objective to evolve from a collaborative degree (MScTAH) to a real joint degree (MScGOH) during the next academic year.

Joint development and implementation of specialised short courses has proven difficult and for 2022-2026 we intend to shift the strategy much more towards mutual support and internationalisation of courses (e.g. exchange of educational or TEL expertise, lecturers).

Academic partnerships with countries including an agreement on **co-financing of scholarships**, is as well a partnership strategy that ITM would like to further develop. At the moment this kind of partnership exists with Thailand (MoU) and its health authorities, and enquiries about such partnerships have come from other countries such as Brazil.

Important are the partnerships with universities in the framework of **PhD programmes**, with joint supervision and the award of the PhD degree. Mostly these are with universities in Flanders or in HICs but occasionally also with institutional partners in LMICs, both within and beyond country programmes.

The fourth partnership strategy, which will be proactively explored during the coming years, is the **delocalization and joint implementation** of topical courses to/with interested partners (e.g. Qualitative and Mixed Methods in International Health Research to our former FA3-partner in Ecuador, Antibiotic Resistance (AIM) course to partners in West-Africa or Peru or Data for Action course to our partners in Guinea).

As for education as such, it is currently very relevant to explore the role of **digitalization** for the development of (new forms of) partnerships.

Except for the co-financing of scholarships these strategies have a mutual capacity building effect.

In addition to identifying partnerships within our country programmes, ITM scientists also take part in international networks through which we identify potential future partners, just as in Education networks such as TropEd.

In what follows we explain how working together with partners on joint courses leads not only to an improved partnership relation, but also to mutual reinforcement. This is a core aspect of our education and Alliance programme and thus as taken for granted and consequently not sufficiently explained. This might justify a re-assessment.

The main mechanism through which joint education (whether formal programmes as the MSc. in Global One Health with the University of Pretoria or joint PhD supervision and award) is being offered, is through the agreements on joint quality assurance and management processes which always raise fundamental questions on the why and the how things are currently done as they are done at both partner institutions. This triggers a learning trajectory and development / strengthening of institutional policies at both institutes. E.g. to run a joint course there must be a joint formulation and understanding of learning outcomes, an agreement on aligning content, agreement on teaching and learning methods and administration of the course (e.g. retribution policies for external lecturers). The capacity building effect is significant. At the same time this learning trajectory makes the implementation of joint educational projects complex and sometimes rather slow, but as said, the potential for mutual capacity strengthening all the more important.

The Alliance specifically aims to facilitate these joint learning trajectories (through joint educational initiatives) complemented by a focus on institutional internationalisation (mobility) and professionalisation initiatives (e.g. pedagogy seminars). Initiated under the 2017-2021 programme, the delocalization and joint implementation of topical ITM courses to/with interested partners will be further strengthened under this FYP (FA5). As example, the first edition of the Peruvian version of the Antimicrobial Resistance Course (AIM) was jointly organised by the Peruvian partner IMTAVH and ITM in August 2021. Based on a concrete demand and need of the partner institution, this ITM course curriculum was adapted to the local reality, with an involvement of

teaching and educational staff of both institutions. Both institutions brought in their expertise and teaching & learning materials and reinforced each other mutually in this joint course development and implementation process. Another example is the e-module of a Scientific Writing Course, jointly developed by 3 Asian partner institutions (India-Nepal-Indonesia) and ITM. For the methodological, pedagogical and digital development of the module, all partners had their share of responsibilities in function of their expertise and experience. Master and doctoral students of all partner institutions involved will be able to follow this course online.

Description of Synergies

Synergy is the active collaboration between at least two organisations which generates added value compared to the individual effort of each organisation.

To reach the objectives of the education programme operational synergy with **non-accredited organisations** is included at two levels: with individual professionals and experts (alumni and staff from partner institutions) and with the partner institutions as such.

At individual level

Through the exchange of lecturers and educational or techno-pedagogical experts, collaborators mutually strengthen their education and achieve internationalisation and international visibility as added value.

At institutional level

The organisation of joint programmes or degrees or joint courses (UP / IPH) increases the scope of programmes beyond the expertise of each partner. This is the case for the joint master programme with the University of Pretoria. The complementary expertise, different field contexts and international dimension constitute the added value for both partners.

The flexibility in ITM's educational programme benefits from the synergetic tropEd (www.troped.org) network, through which students have access to accredited course components in the fields of International and Global Health in more than 25 renowned universities worldwide. The tropEd network shares the same objectives in education, networking and capacity strengthening.

For the Alliance activities, synergy or internal coherence with the FA5 country programmes and partners is characterised by a clear division of tasks. Under the country programmes institutional partners plan and budget educational activities (e.g. course or eLearning development or introduction of new approaches to teaching and learning) and the Alliance supports the international dimension (e.g. professionalisation initiatives, international lecturer mobility, exchange jury members). Operationally this support can be provided for a limited number of years after which the institutional course budget should take over. The international dimension can be S-S (regional or beyond) and N-S/S-N.

Synergy has also been achieved in the past with the HITIHE project financed under the EU Erasmus + KA2 Capacity Strengthening. Synergy through Erasmus+ projects will be further explored.

Synergy with **accredited organisations** is especially relevant for the scholarship and course programmes.

The scholarship programmes of ITM, VLIR-UOS and ARES did benefit in the past from the exchange of practices and harmonisation of approaches. As anticipated in the JSF HES4SD, the latter "will become a permanent platform for exchange, coordination and concertation among the three organisations". A website (joint virtual platform) will be created to that effect.

Examples are:

- Joint update of the harmonized scholarship guidelines;
- Gender mainstreaming
- Scholarships and eLearning
- Joint monitoring of the short track visa application procedure for DGD bursaries, and report to DGD
- As has been very relevant lately: harmonised Covid-19 measures / advice for bursaries.

Synergy between institutional **capacity strengthening initiatives** (e.g. professionalisation workshops) of the Alliance and training initiatives by the accredited health NGO's (AZV- Memisa - Dokters van de Wereld) can be explored. There will certainly be opportunities to tap into each other's networks and human resources if relevant. Initial talks showed that health NGO's are more training at the operational level in health systems and not at HE level.

Synergy with Doctors Without Borders (MSF) and the Belgian Red Cross (RKV and CRB-Cf) materializes through **collaboration**

in training whereby these organisations bring in their specific expertise in postgraduate certificates and master programmes at ITM. The Red Cross and MSF e.g. respectively focus on international humanitarian rights (IHR) and water and sanitation / primary health care training sessions.

Many international NGO's active in the health sector seize the opportunity of the "NGO-days" in our postgraduate certificate courses to establish the link with ITM students and alumni.

The synergies described and related to the tropEd network (www.tropEd.org) and with institutional partners under the Alliance are in our sphere of control and thus rather concrete. For example, ITM is co-chairing the tropEd network and mobile students build their study plan on the specific expertise of member universities in the network. It leads to mutually strengthening the relevance of master programmes. Also in the framework of Erasmus+ (e.g. the HITIHE project with Cambodian and Indonesian partners) the synergy is real. For the HITIHE project (which stands for Health Information and Technology for Improved Health Education in SEA), financed under the EU Erasmus+ KA2 Capacity Strengthening, ITM is the coordinating institution (<https://hitihe.org/>). This project aims at strengthening capacities with partner institutions in Indonesia and Cambodia to co-develop, use and share online educational materials. More specifically, it aims to build the capacity of two specific HEI support services, the techno-pedagogical staff and the health librarians. These 2 groups will act as catalysts to stimulate the adoption of innovative techno-pedagogical techniques by academic staff in their teaching. They will also help building up a network of skilled health care experts via the development of open access platforms and supporting teaching and academic staff in sharing resources through these platforms.

Synergies with JSF partners (Institutional Actors) and ANGC's are not yet very concrete as it is too early to know the concrete projects under the MYP's of respective actors. Synergies in education under country programmes of these actors will only be able to become concrete when the planned platform for information sharing will be fully operational. The potential synergies with VLIR-UOS and ARES concerning the development of scholarship policies and management aspects (e.g. related to local support of bursaries in the context of increased distance- and eLearning modalities) are clear as evidenced through the ongoing concertation and development of proposals to DGD in last months of 2021.

In terms of concrete MOU's, next to the (18) institutional partner agreements under the current programme, at this moment ITM signed agreements with a strong educational component with its Indian partner (IPH Bangalore), with Nagasaki University (HIC), with the Thai health authorities and with the University of Pretoria. It is our objective to keep the number of MOU's relevant and manageable.

Description of how individual or collective recommendations and lessons are to be taken into account

The ToC of the Education Programme is the fruit of a joint reflection, fed by:

- Lessons Learnt under FA 2017-2021,
- the strategic dialogues (FA 2017 - 2021 Belgium Programme) and mainly the Learning Pathway on gender
- The recommendations formulated in the FA4 mid-term evaluation (by Syspons); Social, Developmental and Professional Impact Evaluation of ITM's Educational Activities and Scholarship Programme
- the recommendations expressed by FA4 partner institutions at the Joint Partner Meeting (JPM) 2019 on innovative learning and teaching,
- the FA3-evaluation and recommendations (by HERA),
- the Joint Strategic Framework (JSF HES4SD) w
- the ITM Institutional Policy Plan (IPP) 2020-2024
- the adaptations made related to the Covid-19 pandemic.

Lessons learned 2017-2020, summarized in our yearly reports and taken into account in the formulation of present programme:

- Need for a reflection on the quality of the academic and scholarship admission and selection criteria and selection processes to guarantee equity and effectiveness. Special attention went to the importance of interviews, especially for online education. (also confirmed in the FA4 mid-term evaluation)
- Establishment of gender working-group at ITM and in coordination with other IA's to continuously reflect on and improve strategies towards gender equality. (also through the learning pathway and Strategic Dialogues with DGD)
- Importance of policy development for flexibility in programmes and scholarships, including the promotion of, and a workable approach to, partial (co-funded) scholarships (also in ITM IPP)
- Effective EN language support (attractiveness to non-native EN speakers) and the need to further strengthen this approach (also in ITM IPP)
- The need to invest in the role of eLearning, hybrid modalities and adapted pedagogies. (stressed in the JPM 2019, the FA3 evaluation, catalyzed by the Covid-19 pandemic)
- The need for clear policy and strategies for pre- and postdoctoral training/fellowships (also in ITM IPP and discussed during the development of the JSF HES4SD and scholarship policy). The need for strengthening research training opportunities (also highlighted in the JPM 2019)

former country programme partners under previous ITM-DGD framework agreements; partners in thematic networks (such as Climate Change & Health network); country programme partners funded by VAIS (the Flemish development cooperation) & partners in Erasmus+ Capacity Strengthening projects.

Personnel costs take the expected indexation of salaries (and new ITM labour agreements from 2023 onwards) into account, as well as indexation of subsistence and e.g. tuition fees as included in a scholarship.

The scholarship budget guarantees a minimum number of (full or partial) scholarships per type of course. A full scholarship includes travel, subsistence, insurance, tuition (or supervision and research fees for PhD bursaries) and miscellaneous fees (e.g. didactic material, installation, shipping or doctoral thesis printing).

Average cost of a PhD scholarship = 120.000 euro (30.000 euro/year - 4 years)

Avg. cost Master scholarship = 35.000 euro (12 months)

Avg. cost of a Short course scholarship = 5000 euro (3 weeks)

Cost of an individual (pre-doctoral) fellowship = 18.000 euro (6 months)

Cost of a post-doctoral fellowship = 30.000 euro (3x3 months)

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym Alliance partners

Full name Alliance partners

Budget available

2022	2023	2024	2025	2026	TOTAL
70000	70000	70000	70000	70000	350000

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL
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Global programme: ITM-DGD International Health Research Policy Support Partnership

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	ITM-DGD International Health Research Policy Support Partnership		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-15-XX		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Belgium		
Region :	Developing countries, unspecified		
Sector :	12110 - Health - Health policy and administrative management	Budget share :	100%

Strategic target involved

6. Science-society interface strengthened

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

■

Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

4. Enabling Higher Education and Science Institutions to ...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Global

Outcome summary

Description of the outcome

A research to policy and practice partnership between ITM and DGD has increasingly taken into account DGD information needs. A pre-identified set of ITM Tropical Medicine and Public Health fields of expertise can be used to better link demand and supply of evidence-influence and strengthen the position of DGD and more broadly of the Belgian governmental actors, especially the ministry of health, and the ministry of foreign affairs and related Belgian embassies.

On the supply side of scientific evidence, ITM's expertise (ITM Strategy 2020-2024) includes four research priorities: i. (re-) emerging diseases and outbreaks; ii. antimicrobial resistance (AMR); iii. Disease elimination of 'Communicable Diseases (HIV, TB, Malaria) incl. maternal and Sexual Reproductive Health, Neglected Diseases; and iv. Sustainable Health Systems and Strategies, incl. Universal Health Coverage and Global Health Governance. On the demand side, DGD relies on scientific updates and research evidence to support the DGD health strategy of 'the right to health care'. This strategy set priorities on communicable, neglected diseases; non-communicable diseases and sexual reproductive health, as well as WHO building blocks of a health system: (i) service delivery, (ii) health workforce, (iii) health information systems, (iv) access to essential medicines, (v) financing, and (vi) leadership/governance. DGD is also in need of scientific guidance and support within multilateral health partnerships (WHO, UNAIDS, Global Fund to fight AIDS, TB and malaria, UNFPA, COVAX/ACT-A). ITM provides evidence-informed briefings and recommendations to DGD to support the uptake of research (especially from low-income country context perspectives) into policies and practices, as well as support DGD and related ministries to be visible and active at international fora to improve health outcomes of populations in LMICs and strengthen equity within international policies and programs.

Wording of the outcome

Better informed Belgian policies and strategies through research evidence with optimal engagement and leadership of health researchers from low and middle income countries - LMIC's.

Target groups

- DGD / thematic department D2 experts on health(3), gender(2), education(1), nutrition(2), social protection (1), and human rights(1). DGD 'EU'(3) and multilateral relations'(3) staff ; +cabinet of minister of development cooperation(3);
 - ITM partner research institutions (19) and ITM alumni (1800), international networks of IHP (5300+ subscribers) and Emerging Voices (250+ alumni with a new cohort /2 years); and 'Be-cause health' (25 member organizations and 302 individual members).

Sensitive and confidential information

NA

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences

SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
SDG :	Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	SDT :	Develop effective, accountable and transparent institutions at all levels

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	0
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climate Change - Mitigation :	0
7. Climate Change - Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	1
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	1

1. D4D - Better use of big data :	No
2. D4D - Digital for inclusive society :	No
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes
8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

A sustainable food system, defined as a system that delivers food security and nutrition for all without compromising the economies, societies and the environment, is at the heart of SDGs. To realize this ambition, the current food systems need to be transformed to a sustainable system where production is improved, vulnerable groups are addressed, and the environment is considered.

Poor diet is the leading cause of preventable chronic conditions globally. Individual policies strategies can only improve partially diet and population health. Tackling the entire food system to address malnutrition and subsequent non-communicable diseases - NCDs - has been proposed by all international health agencies. International guidelines on nutrition include three (basic) constituent elements for the transformation of the food system that can be seen as policy entry points: 1. Food supply and supply chain, including processing and packaging. The latter can enhance nutritional value of food items by reducing the content of salt, sugar, and trans fats. 2. Food environment of proximity and affordability of nutritious food, and overall address the access to nutritious food (incl. vulnerable populations); 3. Consumer behavior based on awareness raising and education to improve knowledge, attitudes and habits of nutrition and diet. Overall, international (development cooperation) strategies should include nutrition sensitive trade policies and reduce food waste, as well as social (health) protection programs.

Education

In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an is highly appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

In our programme we focus on interinstitutional cooperation with university actors. Through the provision of scholarships, and capacity strengthening of university personnel we aim to contribute to building stronger institutions, and hence contribute to a country's development as described above.

Children's rights

ITM (and DGD) apply a rights-based approach to health in line with the WHO concept of Universal Health Coverage – UHC. To improve access to qualitative health care for everyone requires special attention to vulnerable groups, including children. ITM's focus on the improvement of sexual and reproductive health (SRH) addresses disease prevention and health promotion. People in all parts of the world should be able to make informed choices about their SRH, respecting sexual and reproductive rights in enabling environments, with equal access, built on scientific evidence. Adolescents (<18years old) often don't get access to sexual and reproductive health prevention and services due to social norms and their socio-economic status. This includes access to contraceptives that also prevent sexually transmitted diseases, including the ongoing pandemic of HIV/AIDS.

Comprehensive sexual education, via schooling and in communities, are a vital part of strategies aiming to improve access to SRH services and rights.

Evidence continues to be needed on innovative medical products in SRH to ensure access to modern contraceptives. Evidence on the prevention of mother-to-child transmission of HIV remains needed to inform policy and implementation strategies.

Children and adolescents are entitled to be properly informed when engaged in (mass) vaccination campaigns and should contribute to decision-making that is related to their health.

Development education

In our programme we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the well being of populations in our partner countries is closely aligned to our own.

In addition, we integrate our findings in our courses, causing a multiplier effect through our students and teaching staff.

Environment and climate change

Ecological change leads to an increased number of and frequency of natural disasters such as flooding. This puts health systems that are already weak under severe stress. It also creates the conditions for an increasing number of disease outbreaks such as cholera that require a health intervention. Repeated and sustained heat waves leads to premature death, in particular of vulnerable populations. Policy Supportive Research in affected countries and in vulnerable communities such as urban slums is conducted to inform Belgian development policies.

Climate change alters the pattern and prevention of vector-transmittable diseases, which governments should be able to anticipate. Our programme contributes to better knowledge about the diseases, and aims to inform policies to anticipate needed mitigation measures.

ITM's Belgian ('Be-cause health') and global networks are actively sharing evidence on the links between climate change and health. ITM's recent international seminars focused on the rapid growth of urbanization and health. Health system strengthening strategies are still often oriented towards a rural (district) health system, neglecting health needs of urban populations. A multidisciplinary research group on the theme of ecology and health named "ECO-Health" is active within ITM and linked to the policy program. Links between health and 'planetary health' (as key theme and paradigm – see also the concept of 'planetary boundaries'), are increasingly covered by ITM related experts and networks (including IHP/EV...).

Gender

People in all parts of the world should be able to make informed choices about their sexual and reproductive health (SRH), respecting sexual and reproductive rights in enabling environments, with equal access, built on scientific evidence. ITM policy input in this program on the improvement of SRH addresses disease prevention and health promotion – including of LGBTQI+. The program provides recent research evidence on maternal health, family planning, on sexually transmitted diseases and infections, and overall on the need to maintain access to high quality medical products. Diagnostics and medical products – including for the termination of unwanted or life-threatening pregnancies – should be quality-assured and accessible. A multidisciplinary approach, combining evidence on the pathogen (the infection or disease), the health system as well as the patient, provides particular attention to the ‘continuum of care’ used by girls and (young) women in their Sexual and Reproductive Health. This continuum or trajectory includes both formal and informal provision of health prevention, promotion and care, by both public and private health providers.

Digitalization - Digital for Development D4D

‘To measure is to treasure’. In our program, data are the foundation of the research provided by ITM, ‘translated’ into policy recommendations. Data are highly convincing and sensitive. The absence of data is as informative. The current lack of or at least very low levels of COVID-19 tests in the African region makes it difficult to assess the actual spread of C-19 variants on the continent. Health systems strengthening policies include policies for better evidence-based policy making in partner countries, that rely on accurate data. Insights derived from data can move decision makers and people into action. Moreover, data, if turned into timely, accurate and useful information, are crucial to provide a development policy or intervention with a relevant and targeted strategic focus..

Belgian digital companies build on data collection and management to support Belgian development cooperation and partners. They are active in the field of electronic patient files, hospital management, and results-based financing and health insurance schemes. These all need accurate, timely data and analysis. National and local ownership and skills required for the collection and analysis are vital to ensure sustainability. Data are used in policy briefs to keep track of progress by UN and International agencies, multilateral partners of Belgium, monitored in this program for DGD.

Health

The ITM policy program and related Belgian platform Be-cause health provided evidence and support for the current DGD consensus note on the Right to health, the de facto health strategy of DGD. The program for the coming years foresees again support to DGD in drafting a revised health strategy, that is evidence based and reflects well perspectives of Southern researchers and partner organisations.

The DGD policy - co-developed with Belgian actors via the Be-cause health platform - holds a rights-based approach to health in line with the WHO concept of Universal Health Coverage – UHC.

This program provides policy support to DGD on all health related themes. The global/international health scene evolves very quickly, with new themes, policies and partners constantly emerging or in the pipeline (see IHP). The rapid evolutions, and complexity require multi-disciplinary, high-level and flexible expertise which is impossible to maintain within DGD, also given resource constraints. A regular ‘dialogue’ between ITM and DGD to prioritize policy research support in line with DGD needs has proven effective over the years. The flexibility to respond, rapidly, to new changes in the global public health and health security context is an essential ‘capacity gap’ that ITM can cover.

Particular attention is given to the shared vision, namely a rights-based approach that aims to provide access to quality health care to all. A strengthened and resilient health system that addresses specific as well as emerging diseases in an integrated manner is at the centre of this approach. This is reflected in the policy advice on strengthening the health sector as well as the building blocks (human resources, financing, medical products, supply chain, information technologies, governance) of a healthcare system.

Subsidy bonus allocation: priority themes and strategic priorities**Human rights-based approach**

ITM has been instrumental in the Belgian Government promotion of the ‘Right to Health’, as reflected in the DGD & health development sector “consensus” strategy for health cooperation. ITM developed an ‘Antwerp’ ‘school of thought’ that applies a health systems analysis but first and foremost a person-centered and human rights-based perspective. Visiting master program students choose for ITM based on that specific “Antwerp” approach. ITM is a medical services provider in Belgium and has been a taboo-breaking champion of HIV-infected people in Belgium for decades. ITM was co-editor of an EU call to action on the Right to Health under the Belgian EU Presidency in 2001, and later promoted the WHO concept of Universal Health Coverage – UHC to be at the center of the Agenda2030. ITM was part of the Belgian delegation to renew WHO Member States of the ‘Alma Ata’ declaration for a comprehensive and human rights based approach to health. ITM policy influence aims to strengthen Southern governmental agencies in their capacities of ‘duty-bearer’ to fulfill those rights. The ITM (Getting Research into Policy and Practice) GRIPP workstreams focuses on increasing access and equity. An ITM “medicines group” supports DGD in the development of priority policies regarding access to quality of medicines; SF medicines; access to opioids for medical needs, C-TAP, etc. An SRHR team provides evidence on ‘continuums of care’ by populations, as well as evidence on barriers to access for

populations at risk for infectious diseases such as TB, malaria or HIV. Our focus lies on quality of life and not only on quantitative indicators on reducing morbidity/mortality. Recent research looks at access to health for people living in urban slums, and the governance of health systems. Via related Southern research networks, ITM influences Global health governance and decision-making to become more inclusive and equal.

Decent and sustainable work

ITM policy work on the WHO concept of 'Universal Health Coverage - UHC' addresses human resources for health as one of its pillars. Qualified health workers available in number at the various levels of the health system requires decent working conditions and sustained financial and institutional resources. An independent review report of WHO's 'Working for Health' (W4H) program was commissioned by WHO in November 2020, and conducted by ITM. It informs Member States during the 'World Health Assembly' -WHA in May 2021 regarding the future and continuation of this global program. A crucial matter as seen in the Covid-19 pandemic given the essential role of health workers also in epidemic response and preparedness, as well as the global support needed for access of personal protective equipment - PPE. Decent work relies also upon a well-funded and integrated social protection scheme that protects workers in case of illness. Most 'social health protection' schemes - including micro-insurance and 'mutuelles' - rely upon support by or integration with a broader social protection scheme base. This is included within the trainings of ITM students (Pharma Course) providing capacity building and offers an opportunity to include this reflection transversally in all of ITM work. The manner in which social protection is organized (pooled contributions across age and income - preferably compulsory) determines the level of equity of access to health services in countries and communities - that will benefit foremost the vulnerable populations. ITM capacity-building of young researchers, via the networks, indirectly provides confidence and skills to a group of young professionals working in low-income countries who often work on the basis of short-term, precarious contracts.

Gender

Most networks supported by this outcome by ITM have a gender (male/female) balance in their governance bodies (Steering Committee and thematic working group coordinators). However, gender equity is more than just gender balance. One of the recommendations of the external (hera) 2020 evaluation of Be-cause health (BCH) was to diversify the network: "to promote diversity, inclusion and learning of the platform by promoting inclusion of young professionals and experts from the global south". As management response, the platform steering group of BCH decided to broaden the scope of the recommendation and include (young and female) professionals and experts from partner organizations. The platform aims pro-actively to involve these groups in the policy and governance of BCH. A gender policy is being developed for BCH. In addition, practical tools (co-created by members together with the BCH - SRHR working group) should allow BCH members to screen their actions on gender equity. A questionnaire ("gender test") is being developed and will be implemented in all activities of the BCH network. Similarly, the young researchers network of 'Emerging Voices' has a gender balance (male/female) in each cohort, as well as a balance at the level of network leadership. In addition, synergies are sought within "Women in Global Health" country chapters. A majority of active members of the international network International Health Policies - IHP correspondents and members of the editorial team of the newsletter - are female. This results in more diverse agenda setting and choice of topics, including stigmatized or less highlighted health topics (eg menstrual health). The Sexual Reproductive Health and Rights - SRHR strategy of DGD has been developed (co-created) within the SRHR working group of BCH. This working group engages the DGD health team for dialogues and inputs. ITM has a long track record of policy research on SRHR, most recently on the continuum of SRH care in Benin.

Environment

This programme includes a considerable number of activities that involve international travel, in representation of DGD as well as attending global health and research events. ITM recent travel policy aims to minimize flying and using compensations, with a vision towards carbon-neutral travel. For example, for ITM representation in neighboring countries or in Geneva (towards WHO), travel by train will be prioritized, in addition to online participation where possible.

These decisions aim for neutralizing the negative effects of frequent travel related to the knowledge management and dissemination activities. The Belgian platform BCH 2021 annual seminar will be a pilot for hybrid BCH conferences in the future. These have the advantage of avoiding air travelling (and thus carbon emissions), and of being able to include more participants of the Global South and strengthen their voice and increase their contributions to the conferences held. A similar trend of eco-friendly participation in 'hybrid events' is embraced by international networks. ITM also contributes via training and awareness raising. A multidisciplinary research group on the theme of ecology and health named "ECO-Health" has been set up. Links between health and 'planetary health' (as key theme and paradigm) are increasingly covered in IHP newsletters and blogs. The 2021 BCH conference concerns the interlinkages between climate change and disease trends and underlying causes. It will focus on public health impacts in LMICs, and explore mitigation and adaptation measures. Belgian actors and Southern partners will address the impact of climate change on their health activities and programs. Exchanges and learning include a shift to a circular and socially just economic system, that respects the planetary boundaries. A working group on Climate emergency and Health can take forward key outcomes from the conference, incl. activities that tackle climate emergency and transformation by health actors.

Common outcome within a common programme

NA

Common outcome between distinct programmes

There are no intentional common outcome objectives or results sought with other programs. The Belgian platform Be-cause health – hosted by ITM and supported via this outcome aims to bring Belgian development actors in health -and their non-Belgian partners- together. All the BCH member organizations apply a jointly developed ‘consensus’ strategy for the right to health, and share an overall objective of increasing access to health and well-being for all – ‘leaving no-one behind’. Similarly, the informal network around access to health products provides a platform for mutual learning and strengthening and for bringing forward a common policy strategy.

Areas of complementarity and synergy with the intervention of ENABEL

The drafting of the strategy for implementing the programme includes a preliminary analysis covering the activities of ENABEL in a targeted context, and it is demonstrated that the programme is potentially complementary with ENABEL’s activities in this context. The potential is described but the specific links between activities have not been elaborated upon and the cooperation with ENABEL is not organised.

ENABEL is an active member of the BCH network. They are represented in the Steering Committee, General Assembly. Experts of Enabel are active in the working groups on ‘digitalization’, ‘access to quality assured medicines’, ‘SRHR’, ‘determinants of international health’ and ‘mental health’.

Enabel engages ITM (public health) researchers for ‘action-research’ of new or ongoing Enabel country programs, with the aim of improving the Enabel programs with action-oriented research findings. In Guinée Conakry, for example, ITM is a scientific partner of Enabel in the development of e-courses for health personal in Guinée, incl. an introduction to Sexual Reproductive Health. Enabel health experts also engage ITM scientific staff to advise Belgian Development Cooperation strategies (2021) on ‘local manufacturing of medical products in Africa’. ENABEL has been involved in promoting the right to quality-assured medicines since at least 2007-2008, and this continues to be an activity with lots of synergies up to now (see for instance the CCPCJ side event co-organized by ITM and ENABEL in 2021: Fighting poor quality health products in times of Covid-19 and beyond: the need for a multi-stakeholder approach (itg.be))

The role of Enabel in co-developing with DGD potential EU-funded Belgian health strategies is a new activity, complementary to ITM’s policy influence and support to DGD role.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	OC Better informed Belgian policies and strategies through research evidence with optimal engagement and leadership of health researchers from LMIC’s
Indicator title :	OC1. Number of evidence-influenced contributions made within the ITM-DGD policy support partnership
Indicator description :	# Policy (research) requested in support to Belgian (DGD) policy priority themes & DGD multilateral partners programs; SoV: Policy advice Institutional (policy support) dialogue of ITM & DGD/D2 - minutes
Baseline :	2 annual Policy Research evidence and average of 10 annual targeted evidence-influenced policy messages related to DGD policy priority themes & DGD multilateral partners programs
Target Year 3 – 31/12/2024 :	2 annual Policy Research evidence and average of 10 to 15 annual targeted evidence-influenced policy messages related to DGD policy priority themes & DGD multilateral partners programs
Target Year 5 – 31/12/2026 :	2 annual Policy Research evidence and average of 10 to 15 annual targeted evidence-influenced policy messages related to DGD policy priority themes & DGD multilateral partners programs

Formulation of outcome or result :	OC Better informed Belgian policies and strategies through research evidence with optimal engagement and leadership of health researchers from LMIC’s
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Indicator title :	OC2. Growing levels of active participation by DGD and related Belgian actors at international fora
Indicator description :	Composite indicator that will measure this indicator through a survey in year 3 and 5 and will look at: (1) The ITM support level of influence is strong and growing stronger and (2) there is an effective and growing availability of evidence influenced BE outputs used in international organisations. The index score will be based on the average of 4-point scales looking at both aspects (1- Strongly Disagree ; 2 - Rather disagree ; 3 - Rather agree ; 4 Strongly agree) ; SoV: Survey
Baseline :	NA
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	OC Better informed Belgian policies and strategies through research evidence with optimal engagement and leadership of health researchers from LMIC's
Indicator title :	OC3. Maximizing growing levels of engagement and leadership of health researchers of LMICs
Indicator description :	Qualitative assessment of the engagement and leadership of health researchers of LMICs, influencing (pharmaceutical) public health debates and a constructive disruption of global health discourse towards equity and democratization (Baseline to be developed by EV in september 2020) ; SoV: Survey and assessment reports on of the effect of individuals(supported by ITM) of LMICs in leadership roles,
Baseline :	baseline: qualitative assessment (eg: 2020-21 external EV evaluation) of engagement & leadership of LMIC health researchers (including Evs)
Target Year 3 – 31/12/2024 :	tbd - yearly qualitative assessment (based on available data)
Target Year 5 – 31/12/2026 :	tbd

Formulation of outcome or result :	R1. Actors linked to the Belgian development cooperation share knowledge and coordinate policy support amongst peers through the Be-cause health platform
Indicator title :	R1.1 % of BCH members agree that the BCH platform operates against the expected results
Indicator description :	Number of BCH members (individual and member organisations) indicating in survey(s) their level of satisfaction with the functioning of the network – as coordinated by ITM staff and network governance ; SoV: Baseline: 2020 Be-Cause Health evaluation report; Target values: member survey
Baseline :	53% members agreeing BCH platform operates against the expected results
Target Year 3 – 31/12/2024 :	60% members agreeing BCH platform operates against the expected results
Target Year 5 – 31/12/2026 :	65% members agreeing BCH platform operates against the expected results

Formulation of outcome or result :	R1. Actors linked to the Belgian development cooperation share knowledge and coordinate policy support amongst peers through the Be-cause health platform
Indicator title :	R1.2 number of contributions from Global South participants to BCH annual seminars (speaker role, presentation, peer exchange input and feedback)
Indicator description :	Measure the level of participation of global south participants, with support of the ITM program; SoV: annual seminar program, annual seminar report
Baseline :	30% contributions from Global South participants to past BCH annual seminars
Target Year 3 – 31/12/2024 :	50% contributions from Global South participants to past BCH annual seminars
Target Year 5 – 31/12/2026 :	80% contributions from Global South participants to past BCH annual seminars

Formulation of outcome or result :	R1. Actors linked to the Belgian development cooperation share knowledge and coordinate policy support amongst peers through the Be-cause health platform
Indicator title :	R1.3 Gender balance assured in governance and leadership

Indicator description :	Measure the degree of implementation by members and network governance of a gender policy ; SoV: Steering Committee composition; Working group coordinators; gender policy
Baseline :	SC: 8 women (chair) - 4 men WG coordinators: 4 women - 5 men
Target Year 3 – 31/12/2024 :	gender policy in place
Target Year 5 – 31/12/2026 :	gender policy implemented

Formulation of outcome or result :	R1. Actors linked to the Belgian development cooperation share knowledge and coordinate policy support amongst peers through the Be-cause health platform
Indicator title :	R1.4 % of member survey respondents indicate active participation in thematic working group
Indicator description :	Measures the degree of participation by Members to thematic working groups of the network; SoV: Baseline: 2020 Be-Cause Health evaluation report; Target values: member survey
Baseline :	59% active participation
Target Year 3 – 31/12/2024 :	60% active participation in the BCH working groups
Target Year 5 – 31/12/2026 :	65% active participation in the BCH working groups

Formulation of outcome or result :	R2. Relevant scientific knowledge is managed and disseminated at national and international level through scientific events and knowledge networks
Indicator title :	R2.1 Average number of persons reached through weekly International Health Policies Newsletters
Indicator description :	Checks the reach and perceived effectiveness of the IHP newsletter (for key target audiences in North and South, and of global health governance & HPSR communities). ; SoV: Mailchimp statistics (subscribers & newsletter opened) - survey will also be organized in 2022 & mid-term
Baseline :	5400 subscribers (2021) of 48 newsletters/year
Target Year 3 – 31/12/2024 :	5,670 subscribers receive 48 newsletters/ year
Target Year 5 – 31/12/2026 :	5,940 subscribers receive 48 newsletters/ year

Formulation of outcome or result :	R2. Relevant scientific knowledge is managed and disseminated at national and international level through scientific events and knowledge networks
Indicator title :	R2.2 Percentage of articles (blogs, editorials) written by health experts from LMICs (with at least half of these by women)
Indicator description :	Checks diversity and gender balance of IHP article authors (both editorial in newsletter and on Featured articles & blogs on the IHP website) ; SoV: count on IHP website (& newsletter)
Baseline :	between 70 to 80 %
Target Year 3 – 31/12/2024 :	80%
Target Year 5 – 31/12/2026 :	80%

Formulation of outcome or result :	R2. Relevant scientific knowledge is managed and disseminated at national and international level through scientific events and knowledge networks
Indicator title :	R2.3 Average proportion of LMICs health experts contributing to ITM annual colloquium (speaker role, ppt)
Indicator description :	Measures growing active participation by health experts from the Global South in ITM's annual colloquium. This colloquium is organised alternating in Antwerp or the Global South. ; SoV: annual ITM colloquium program, ppt delivered
Baseline :	Antwerp hosted Colloquium 2020 - average participation rate of 46%
Target Year 3 – 31/12/2024 :	55%
Target Year 5 – 31/12/2026 :	70%

Formulation of outcome or result :	R3. Southern networks of 'emerging' health researchers enabled to engage in scientific evidence collaboration
Indicator title :	R3.1 Number of Southern researchers ('emerging voices') enabled to become agents of change, disaggregated by sex
Indicator description :	tracks the number of new Evs in every new (bi-annual) cohort (resp. 2022, 2024, 2026); so, 3 cohorts in total. The new Evs get the full (blended) EV training package. ; SoV: two yearly EV training event report;
Baseline :	# of Evs in latest (2020) cohort (30)
Target Year 3 - 31/12/2024 :	60 new Evs (30 per bi-annual cohort) - with gender balance
Target Year 5 - 31/12/2026 :	90 new Evs (30 per biannual cohort) - with gender balance

Formulation of outcome or result :	R3. Southern networks of 'emerging' health researchers enabled to engage in scientific evidence collaboration
Indicator title :	R3.2 Number of activities (webinars, Twitter chats,...) for broader EV Community (TWG-Googlegroup)
Indicator description :	Tracks the number of key activities/year for the broader EV community (i.e. EV alumni but also other young HPSRers part of the TWG). These activities are part of the EV core role/niche as TWG to smoothen the introduction of young LMIC researchers in the broader HSG community. ; SoV: new EV secretariat will track a number of M&E indicators systematically.
Baseline :	2 events on average ; # of members of broader EV community : 500 + in 2021;
Target Year 3 - 31/12/2024 :	6 large events (2 per year) for a broader EV community and related EV Googlegroup
Target Year 5 - 31/12/2026 :	10 large events (2 per year)for a broader EV community and related EV Googlegroup

Formulation of outcome or result :	R3. Southern networks of 'emerging' health researchers enabled to engage in scientific evidence collaboration
Indicator title :	R3.3 Number of (EV)people (current cohort and alumni) with an active contribution to bi-annual Health Systems Research Symposium (with gender balance)
Indicator description :	tracks active participation of Evs & EV alumni in the bi-annual HSR conference/symposium (2022-2024-2026), and gender balance. The HSR symposium is the flagship conference of the HSR community, and so active participation there is vital for Evs & EV alumni; SoV: HSR symposiumprogram, ppt
Baseline :	24 active EV participants with M-10, F-14 (2018 figures Liverpool symposium - (pre-Covid))
Target Year 3 - 31/12/2024 :	At least 25 EV active participants (with gender balance)
Target Year 5 - 31/12/2026 :	At least 60 EV active participants (with gender balance)

Formulation of outcome or result :	R4. Scientific evidence on (identified) policy and practice needs is generated, translated and made available to DGD
Indicator title :	R4.1 Number of policy supportive research for DGD through ITM scientific staff and related international partners
Indicator description :	Policy support research is provided to DGD in accordance with (identified) Belgian policy needs; SoV: ITM to DGD reporting on Policy Research conducted annually
Baseline :	average of 2 PSR annually (2017-2020 data)
Target Year 3 - 31/12/2024 :	6 researchers
Target Year 5 - 31/12/2026 :	10 researchers

Formulation of outcome or result :	R4. Scientific evidence on (identified) policy and practice needs is generated, translated and made available to DGD
Indicator title :	R4.2 Number of expert briefings for DGD through ITM scientific staff and related international partners

Indicator description :	Transfer of knowledge (co-creation) in support of Belgian input / participation at national, EU and global (WHO,UNGA, ...) meetings and events. Policy briefings are based upon technical advice, policy advice, representation, and knowledge management; SoV: Policy advice (@ DGD- mail) Institutional (policy support) dialogue of ITM & DGD/D2 - Expertise requests by D2 & related actors
Baseline :	0
Target Year 3 - 31/12/2024 :	36
Target Year 5 - 31/12/2026 :	60 expert briefings

Formulation of outcome or result :	R4. Scientific evidence on (identified) policy and practice needs is generated, translated and made available to DGD
Indicator title :	R4.3 Number of liaison tasks on international health requested by DGD and related actors
Indicator description :	Liaison role within DGD and between DGD and other Belgian gov. actors - especially ministry of health and ministry of foreign affairs - engaged in international health; SoV: Policy advice (@ DGD- mail); Expertise requests by D2 & related actors
Baseline :	0
Target Year 3 - 31/12/2024 :	45
Target Year 5 - 31/12/2026 :	75

Formulation of outcome or result :	R4. Scientific evidence on (identified) policy and practice needs is generated, translated and made available to DGD
Indicator title :	R4.4 Core research to policy partnership qualities (mutuality, interactivity, engaged boundary partners, policy adaptability) are strengthened
Indicator description :	Quality assessment of the ITM-DGD interface of evidence demand and supply, of the quality of support provided to and collaboratively with DGD; SoV: Reports of annual 'Institutional (policy support) dialogue' of ITM & DGD/D2
Baseline :	Tracer documents to be defined with DGD (institutional dialogue on policy support)
Target Year 3 - 31/12/2024 :	Qualitative and quantitative analysis
Target Year 5 - 31/12/2026 :	Positive evolution compared to Y3

Formulation of outcome or result :	R5. DGD co-leads with Belgian Ministry of Health and other relevant Belgian stakeholders on universal access to quality assured medical products (SDG 3.8)
Indicator title :	R5.1 Number of open access, peer reviewed papers on access to quality assured medical products
Indicator description :	research (open-access) papers as well as (scientific) opinion papers related to the objective; SoV: (open-access) journals
Baseline :	0
Target Year 3 - 31/12/2024 :	10
Target Year 5 - 31/12/2026 :	15

Formulation of outcome or result :	R5. DGD co-leads with Belgian Ministry of Health and other relevant Belgian stakeholders on universal access to quality assured medical products (SDG 3.8)
Indicator title :	R5.2 Number of expert briefings
Indicator description :	research and technical advice requested by DGD and related Belgian stakeholders on topics of substandard, falsified health products; access to opioids; local manufacturing, equitable sharing of health technology; SoV: Policy advice (@ DGD-mail); Expertise requests by D2 & related actors incl. MoH, Cabinet of Dev. Coop., etc
Baseline :	0
Target Year 3 - 31/12/2024 :	12
Target Year 5 - 31/12/2026 :	20

Formulation of outcome or result :	R5. DGD co-leads with Belgian Ministry of Health and other relevant Belgian stakeholders on universal access to quality assured medical products (SDG 3.8)
Indicator title :	R5.3 Number of 'liaison' tasks requested by DGD and related actors on the topic of universal access to quality assured medical products (SDG 3.8)
Indicator description :	Quality assessment of support to and collaboration with DGD and other Belgian actors towards participation at global (WHO, UNODC, CND, ...) fora, and related processes; SoV: Policy advice (@ DGD- mail); Expertise requests by D2 & related actors incl. MoH, Cabinet of Dev. Coop., etc
Baseline :	Tracer documents to be defined with DGD (institutional dialogue on policy support)
Target Year 3 - 31/12/2024 :	Qualitative and quantitative analysis
Target Year 5 - 31/12/2026 :	Positive evolution compared to Y3

Activities, targets groups and beneficiaries

Classification of activities

Research:

- o Policy & Practice Research in accordance with (identified) Belgian policy needs
- o Annual Scientific Colloquium of ITM & partners
- o Senior global health experts of ITM - partners and networks

Belgian Platform 'Be-cause health':

- o Thematic working groups
- o Annual Seminar
- o Learning, sharing and influencing activities/events
- o Secretariat - coordination - steering committee

International Health Policies Network:

- o Global South internships
- o Network coordination
- o Knowledge management

Emerging Voices - Global South Researchers network:

- o Regional / local research collaboration platforms
- o Individual capacity development
- o Global South platform coordination

Target group(s)

DGD / tD2 experts on health(3), gender(2), education(1), nutrition(2), social protection (1), and human rights(1). DGD 'EU'(3) and multilateral relations'(3) staff + cabinet of minister of development cooperation(3); Collaborating institutions include ITM partner institutions (19) and alumni (1800), international networks of IHP(5300+ subscribers) and Emerging Voices (250+ alumni every 2 years); and 'Be-cause health' (25 member organizations and 302 individual members).

Beneficiaries

Ministry of Foreign Affairs and related permanent representations abroad: in particular (4) Brussels/EU, New York, Geneva, and Vienna; and (14) partner country representations (incl. Enabel representation)

- Be-cause health Newsletter subscribers 615
- country populations of IHP subscribers & EV alumni
- Emerging Voices broader community: Google group (TWG) subscribers : 500+

Title of the reference annex :	TOC_ITM_GP PS_22-26
Title of the reference annex :	RA_ITM_GP PS_22-26

Description of the Relevance

The global/international health scene is evolving very quickly, with new themes, policies and partners constantly emerging. Outbreak and pandemic preparedness and response and global health security has been on the forefront with COVID-19. The universal and equitable access to health care services and medical products (vaccines) is and will remain for coming years high on the international health policy debates and decisions. DGD partner countries (in sub-Saharan Africa) have hardly obtained access to COVID related technology (tests), vaccines and therapeutics, compared to high income countries. More broadly this refers to international reflections on health as a human right, on universal health coverage - UHC, intellectual property, innovation, and sharing of knowledge and technology. Scientific evidence provided by research is an essential tool for change,

influencing in an optimal manner international and national policies and practices that can improve health outcomes of affected populations (Strategic Goal 5 JSF). For example, nearly 1 in 3 people with tuberculosis - TB disease is still not diagnosed and notified. Research has demonstrated how rapid molecular diagnostics (RMDs) could help transform and speed up the global TB response. Research shows also the scale (up to 75%) of HIV, TB and malaria, as well as Reproductive health (SRHR) programs that are being disrupted due to lockdowns, transport stoppages and resources diverted to COVID-19.

Gender (SDG 5.6) is part and parcel of the analysis of ITM. International researchers linked to ITM are engaged as alumni, and/or member of networks such as Emerging Voices, or Women in Global Health. Accelerating progress in addressing the gender and human rights barriers to accessing health care is vital for reducing the number of infections and improving the effectiveness of health services. In sub-Saharan Africa, five in six new HIV infections among adolescents aged 15-19 years are among girls. ITM maintains a high level of expertise on maternal health, sexual reproductive health and rights and HIV (SDG 3.8, SDG 5.6).

Climate change (SDG13.3) and the climate emergency induced an accelerating health crisis that needs to be reflected in an international response. People around the world face extremes of heat, food and water insecurity, and changing patterns of infectious and chronic diseases. ITM program invests in awareness-raising and capacity building (through learning and sharing) on the interlinkages between climate emergency and health. Be-cause health holds its (2021) annual conference on the topic 'Climate Emergency and Health', to trigger a joint reflection. A subsequent working group will bring Belgian actors to develop a focus on climate emergency, and transformation of how (Belgian) health actors contribute. This effort will be coordinated within an international community of practices on Climate Justice and Health, led by international network MMI, and of the European federation of institutes of tropical medicine and international health - FESTMIH.

The above described diversity of topics, rapidly evolving, require multi-disciplinary, high-level and flexible expertise which is impossible to maintain within DGD. In line with SDGs (SDG 3, SDG16.6, and SDG 17.6), DGD and ITM have developed, over a decade, a well-structured, constructive and efficient mechanism (Strategic Goal 6 JSF) in order to provide evidence-informed policy-support to DGD in national and international forums. This expertise stems from ITM's institutional mission, and is also fed by Belgian development actors through Be-Cause health, as well as international networks such as International Health Policy network, the 'Emerging Voices' research network, informal networks around quality assurance of medical products, and various communities of practices - in particular in francophone Africa. The continuity of the Belgian platform Be-cause health - BCH is undisputed among its members, including by DGD as both 'recipient' and participant. Both the general survey and the Key Informant Interviews of the 2020 evaluation (annex) confirm that BCH fulfils the needs of the individual members, member organisations and observers / funders (Strategic goals 3 and 4 JSF). The activities and outputs of BCH appear consistent with the platform's mission, objectives, and the (Antwerp, 2001) Declaration on Health Care for All. However, members also agree that the platform vision, mission (and the HCA Declaration) would benefit from an update to keep it in line with the rapidly changing global health environment.

The program is hence a continuation of previous years however innovated. There is an acknowledgment of the increased inter-activity of stakeholders that affect the uptake of scientific evidence for policy purposes. As the Theory of change describes, the ITM-DGD partnership is placed within a broader network of collaborations. To increase likelihood of uptake of research-evidence, the program invests in the 'interface' or partnership of ITM to DGD (Strategic Goal 5 and 6 JSF), to strengthen the ability of DGD counterparts to develop evidence-influenced policies as well as increase the opportunities for DGD to be visible and engage at international debates and decision-making (Strategic Goal 1 and 2 JSF).

On the topic of access to quality assured medical products, for example, the program is framed in a network of collaborations with national and international platforms, high and low-income country research institutions, and a variety of institutional and individual partners. Such formal and informal partnerships allowed us to evolve, within the program and in response to the evolving international context, from an initial focus on quality assurance, to a broader focus on access to quality assured medicines; and further to a more structured pharmaceutical systems approach that is better fit for addressing the needs of policy makers and national health (pharmaceutical) systems (Strategic Goal 3 and 4 JSF).

Access to/quality of medical products is a transversal issue that must be built in health and pharmaceutical systems (including governance, regulation, supply....) as it's relevant in a number of global health areas (like COVID19-related health products, antimicrobial resistance, SRHR, NTDs, NCDs etc.) Policy and/or strategy responses for access to quality assured products are most likely to help the broader health system on a rolling basis -as part of the realization of the Health SDG targets. Another innovation or at least reinforced emphasis is made on the analysis that the global health debates are still dominated by 'northern' or high income country based scholars and research institutes. This program includes in its specific objective the goal to maximize the engagement and leadership of researchers of low and middle income countries - a so called 'global south'. Through the network of 'Emerging Voices' - EV, the ITM program supports young, vocal and impassioned global health changemakers (Strategic Goal 1 and 2 JSF). The effect goes beyond individual capacity building as it contributes to a 'constructive disruption' of mainstream health discourses (in areas like Decolonizing Global Health, and planetary health, ...). A key target audience of the related International Health Policy Network - IHP (hosted by ITM) is the global health governance community & health policy and systems research community. IHP provides an essential Knowledge Management (KM) function to a wide range of members (both in HIC and LMICs). In addition it is (2019 evaluation) highly relevant as 'one stop' "public good"/service for the global public health community in South and North, for the health SDG/planetary health & (post-)Covid era.

Description of Coherence

The possible unique characteristic of the program is the interface or partnership between ITM and DGD on policy support. As described in the theory of change, ITM has seconded knowledge brokers and engaged DGD staff in dialogue with ITM scientific staff, international researchers as well as facilitated dialogue between DGD and Belgian actors of development cooperation in health.

This program has an external coherence with other academic actors such as VLIR and ARES engaged with DGD on Policy Supportive Research – PSR. ITM also conducts research projects of longer term – similar to those of ARES and VLIR – upon request of DGD. The difference lies in the secondment of ITM staff to DGD and the interactivity of engagement of DGD (health) staff in the policy support activities facilitated by ITM. This leads in term to an increased identification of policy support needs that can be taken up via PSR – including by VLIR and ARES. Another level of external coherence exists with Enabel and Belgian non-governmental actors, all those active in health being member of the (ITM hosted) Belgian platform Be-cause health. For Enabel health staff (in headquarters and abroad) who rely mainly on so-called ‘action-research’ or ‘operational research’, ITM scientific staff are engaged by Enabel as scientific partners. The results of these research activities feed well into the evidence shared with DGD. The Emerging Voices network provides value to the broader health systems research community through its diversity of young voices from the Global South, who have a commitment to social justice and are invested in change. Given the voluntary nature of the Be-cause health platform and its limited resources, BCH’s is involved in a limited number and degree with external networks and fora (ex. bi-annual conference ECTMIH).

As to internal coherence, BCH responds to DGD and actors requests for strategic work, policy support, and innovative thinking. It brings together senior Belgian expertise in health, development cooperation and related research. All products developed are consistent with international norms and standards. Given relatively limited resources, The EV network new strategic plan will help the EV governance team to prioritize further the short, medium and long term goals of the network. ITM (especially the public health department) continues to play its role as a partner institute in venture & network. This will be reflected by having an ITM liaison/point-person within the EV governance team, who has an EV background herself. At the same time, EV will continue to be an example of ‘switching the poles’, engaged in the ‘Decolonizing Global Health’ movement, and building a regionally representative governance team and new Secretariat in Kenya (hosted by the partner organization APHRC)). Conceptually as well coherence is looked for within the broader ITM program (incl. the diverse DGD funded country programmes). For example on the topic of ‘access to quality assured health products’, the policy support program also provides value to the health systems strengthening efforts of ITM, by giving visibility and support to the pharmaceutical systems within them; and by bringing different pharmaceutical “domains” (e.g. quality assurance, regulation, accessibility, affordability, adequate use, pricing, innovation etc.) together into a mutually-reinforcing approach. This allows a coherent (structural) approach across different health topics - instead of vertical “case by case” approach, e.g. NTDs, NCDs, AMR, SHRH, or outbreak responses, when it comes to issues related to equitable access to quality health products. In addition, through networking and teaching activities, the program brings together stakeholders from pharmaceutical systems both in HICs and LMICs, fueling in turn mutual learning including at South-South level, and with particular attention for francophone groups.

Description of Effectiveness

An external evaluation of Policy Support and Research to DGD (2016) values the diversity of approaches of the ITM-DGD partnership. ITM provides scientific evidence to answer technical and policy related questions of DGD. Evidence can be made available via policy notes or technical briefings, as well as in the form of seminars engaging multiple stakeholders. Other requests and forms include analytical notes to strategic documents or plans of multilateral partner organizations; concept notes to elaborate policy notes; and inputs into DGD evaluations of health programmes proposed by development actors (NGOs, Enabel)

DGD also requests ITM to conduct research projects on specific scientific issues - similar to the ‘Policy Supportive Research – PSR’ provided by academic partners VLIR and ARES. A recent example is the 2020 study ‘a survey of nongovernmental organizations on their use of WHO’s prequalification program’ requested by DGD. A third type of policy support activity is representation by ITM to participate on behalf of DGD at international meetings and board meetings of multilateral partner organizations in health – incl. World Health Organization, UNAIDS, UNFPA, and the Global Fund to Fight Aids Tuberculosis and Malaria (GFATM).

The 2016 evaluation concluded that ITM meets all objectives set for policy support, namely i. support in policy preparation; ii. strengthening the knowledge within DGD; iii. Strengthening the knowledge of other Belgian actors; iv. providing international visibility. The evaluation ranked ITM among the best performing organization in academic policy provision.

A more recent DGD reflection (“Kennis document” - 2019) on the results of Belgian ODA going into the health sector ('09-'17) acknowledges the broader influence of the ITM-DGD partnership. It describes the support provided by ITM to government actors incl. other ministries, cabinet of the related minister(s), and Belgian embassies. In addition DGD appreciates the ability to engage Belgian development actors in health via the platform Be-cause health, benefiting DGD staff who participate in thematic working groups and as observer(s) within the governance of the platform.

The coordination mechanism between DGD and ITM ensures that the content and format of the expert contributions correspond with relevant policy needs and requests, while guaranteeing scientific independence and integrity. The 'product' varies from research, over in-depth policy briefing notes to active participation in international forums and organisations. The involvement of ITM and its partners had a significant impact on policy positions and papers in the field of international and global health. Vice versa, this collaboration with DGD provides ITM with contacts, experiences and expertise that are highly valuable for ITM scientific units working on international health.

The specific objective of the program is providing scientific evidence to influence DGD and related policy makers. Our assumption is that the engagement of DGD throughout the research to policy process will increase uptake : a joint process in identification of research evidence needs, translation into policy messages that are fit for purpose, the identification of opportunities for DGD and related actors to be visible and active at international fora. This uptake is our long term change and 'interest', whereas the engagement of DGD into a policy dialogue and co-development of research-evidence informed policies is at the center of our sphere of influence. Similarly, the ITM program includes within its (sphere of) influence the ability of DGD to develop and strengthen or shape partnerships with other actors. These include the partnerships with ministries of health and foreign affairs, as well as partnerships with UN and international agencies.

The program aims for improved health and well-being of people living in low-income countries. This program lays out, as a specific objective, to take a leading role in addressing inequalities (health inequity). A specific pathway of strengthening 'Emerging Voices'-EV and leadership roles of researchers of LMICs onto the global health scene will further stress the need to tackle inequalities and provide healthcare for all, as a human right, Leaving No One Behind. The EV initiative is praised for its commitment to and enactment of enabling underrepresented groups to develop their voice within the health systems research and policy space. Diversity is valued and encouraged, with its contribution to peer learning and transversal understandings of the importance of context. There is still underrepresentation of some particular groups (some language groups, indigenous people, non-privileged groups in LICs, and candidates from institutions without strong international networks). Hence, quota will be used to encourage more representation, while maintaining a 'mix' of profiles, whereby different profiles all learn from each other.

Baselines have been identified for all targets, combining both quantitative and qualitative data. Recent evaluations exist of the networks of Be-cause health (end of 2020) and EV (2020-2021) that can be used as solid baseline - including in-depth surveys of members.

An additional assessment is planned of the impact of EV alumni in leadership roles, influencing global health debates (including 'constructive disruption' of mainstream discourse). The new EV secretariat will compile and track systematically a number of M&E indicators (cfr. as suggested by the external evaluation & DGD, after strategic reflection by the EV governance team in September 2021).

For newsletters (IHP), a survey among subscribers will be organized in 2022, to assess the effectiveness/quality/reach of the IHP newsletter (+ articles IHP website), and what can be improved. (core audiences: global health governance & HPSR communities, with links to other health SDGs). A mid-term survey is also planned in year 3.

For the workstream (result 5) related to 'access to quality assured medical products', a number of (quantitative) activities and outputs are foreseen (number of research projects conducted ; number of open access research papers published; number of informal literature mailings par year; number of external institutions where teaching is done about access to quality health products; number of students attending the ITM course on Pharmaceutical Policies; events organized together with BCH - in French; and number of international events and conferences in which there's active participation with presentations.)

At the level of the objective, this program will track both the number of requests made by DGD and related actors for policy support, as well as qualitatively assess the DGD and ITM partnership, to be determined in the upcoming (2021) policy support dialogue. In addition, the program foresees a survey (mid-term) or assessment of the impact of individual partners and alumni in leadership roles, influencing pharmaceutical public health debates.

The strategy consists of multiple pathways: the first one is a **conceptual** path, whereby knowledge is generated and developed by scientific staff at ITM in close collaboration with international partner organizations and individual experts. A next step is **knowledge management**, which consists of compiling and structuring research and other forms of knowledge. This is provided via IHP. The latter is a comprehensive "once-a-week stop" to get an overview of the global health policy agenda, Global Health Governance, key reports, global health events, journal publications. The knowledge management tool facilitates the use of up-to-date research evidence and increases know-how on policy processes and policy opportunities for DGD and related actors.

A second path is a **capacity building pathway** to strengthen capacities of individual young researchers from the South (especially EVs), of IHP residents as well as knowledge brokers engaged in policy dialogues with DGD and other government actors. The EV Blended Training programme, while also providing a strong virtual component, continues to emphasize the face-to-face part of the programme, as it's key in terms of energizing, motivating and fostering strong relationships and network building amongst EVs. The training focuses on 'effective presenting & knowledge translation' (effective communication)' as well

as on innovation (via formats, communication techniques ...).

A third path concerns **connecting and networking**.

As a Belgian network, Be-cause health engages actors linked to the Belgian development cooperation in learning and sharing on global health. The platform effectively influences Belgian development cooperation health policy and to a lesser extent global health policy. It ensures regular communication and collaboration between Belgian stakeholders in health, based on trust. This results in increased synergy, complementarity and practical cooperation between member organisations and members, as confirmed by survey respondents during the herA 2020 evaluation (annex).

As an **international network**, EVs play an active 'constructive disruption' role through various platforms (blogging via IHP, HSG, ...) and journals (BMJ Global Health, IJHPM, Lancet Planetary Health, in the future also PloS Global Public Health). These young researchers will increasingly also undertake collective advocacy on selected themes under the EV umbrella. Researchers, with new cohorts added every two years, remain engaged in the network via an EV Google-group and social media. The full potential of the network will be explored (and capitalized on) further with a.o. a revamp of the database (and website), updated social media strategy, six-monthly virtual meetings, mentoring programmes for new cohorts.... An ITM liaison function within EV governance team will help facilitate this pathway of change and boost the many network activities (together with the new EV secretariat (and governance team)).

Connecting also occurs in less formal setting and networks. In the field of 'access to quality assured health products', a big number of institutional and individual stakeholders engage in academic, research, and teaching/education collaborations. This includes short "pharmaceutical modules" given at different courses at ITM and at other universities within and outside Belgium, with a big audience of future researchers and policy makers. These relations cover Belgian universities of Antwerp, Gent and Liège University, and KUL, as well as internationally, universities in high income countries- Boston University, Mc Gill University (Canada), and Oxford University on COVID19 quality monitoring - and low and middle income countries - Rwanda, South Africa, DR Congo etc.

A fourth path consists of engaging DGD and related actors into a process of reviewing and assessing research-evidence. This stage provides the evidence to influence policy processes. The skills of liaison persons are essential at this stage, to help grasp and facilitate the complexity of factors and stakeholders. This path also provides DGD with opportunities of visibility and potential influence at international fora. At this stage new needs for research evidence might be identified. The latter brings us back to phase one in this circular process of evidence-influenced policy and practice messages.

The thematic JSF HES4SD identified 3 common approaches which are all relevant : the JSF HES4SD (1) as it will contribute to academic inspired and science-driven societal change, our ITM programme (2) is a more operational approach and (3) collective learning processes, synergy and complementarity with a variety of actors will also be instrumental in achieving the goals of the JSF. There is no one-to-one link between the three approaches and the six Strategic Goals, rather, different approaches can contribute to the achievement of the intertwined Goals.

Description of Efficiency

The scientific evidence on international health topics that are translated into policy support to DGD is realized primarily by ITM research staff across three departments - Public Health / Clinical Sciences / Biomedical Sciences. These scientists co-create evidence and build knowledge with ITM partner research institutes and health researchers in LMICs. The program budget is hence composed in majority (70%) of ITM scientific staff salary contributions. The program provides only part of the salary, reflecting the proportional tasks of scientific advice, representation and other roles requested by DGD. One exception is a full time equivalent working on 'access to quality assured medical products'. A scientific advisor and as liaison person with a broad international network on this topic is needed for support to DGD and related ministry of health pluriannual strategy on access to quality assured medical products. A full time person is also seconded from ITM within the health team of DGD / D2 thematic department to act as liaison between ITM and DGD. The supply and demand of research evidence for policy and practice is based on the ability of liaison persons to engage DGD staff and related government actors. In addition, the program foresees salary support for the coordinators of networks hosted by ITM: the coordinator and administrative assistant of the Belgian platform Be-cause health; a liaison person of ITM within the network of 'Emerging Voices', and a liaison for pharmaceutical networks. The program plans short term (3-6 months) internships of scientific staff of LMICs to be part of the 'research to policy' interface at ITM and/or to strengthen DGD international partner organizations (for example WHO).

This program invests further in 'switching the N-S poles' through sustaining a secretariat of the Emerging Voices network based in Kenya, hosted by a partner organization. This secretariat should allow for capitalizing better on alumni volunteer efforts, and better separation of governance roles from operational ones for governance members. A fully operational secretariat will also help taskforces to have stronger terms of reference and clearer sets of deliverables and accountabilities, including timeframes and concrete outputs. The knowledge management and translation done by the IHP network relies upon a full-time main editor (of weekly newsletter & articles) at ITM (Antwerp). This person works collaboratively with a team of editorial members and a number of IHP correspondents, mainly from LMICs/ 'global south', taking into account a good gender balance. In addition the editor provides a number of spinoffs, seeking synergies with the EV Googlegroup among others, providing additional IHP info as

well as shares amongst IHP and EV members via daily links.

An operational budget covers mainly the costs for events and travel. Although increasingly in 'hybrid' or virtual mode, scientific colloquia and workshops remain needed to foster exchange and innovation.

A recent (2020) external (hera) evaluation concludes that Because health - BCH operates efficiently. All individual and member organizations contribute on a voluntary basis. Events co-organized by the platform often receive in-kind contributions of well-established members in the form of free access to venues, translation facilities and contributions for the travel of guest speakers. With a minimum external budget (on average € 50,000 per year), the outputs are numerous and of quality. All BCH members show great dedication to sustain the BCH platform, including Enabel and universities – members of VLIR/ARES.

Synergies with ENABEL are numerous, with many engaged in multiple working groups activities of BCH. A recent (June 2020) high level side event on local manufacturing in Africa was co-organized by ITM and ENABEL. Both have been involved in promoting the right to quality-assured medicines since at least 2007-2008.

Description of the expected Impact

The program provides scientific evidence to improve health intervention strategies and programs that impact populations in LMICs. ITM scientists' collaboration on testing of TB can increase testing rates, and allow better targeted promotion and prevention. Research on population needs and reluctance (vaccine hesitancy) can improve planning of vaccine campaigns on a new malaria vaccine. The specific objective of the program is to provide scientific evidence to influence DGD and related policy makers. Our assumption is that the engagement of DGD throughout the research to policy process will increase uptake : a joint process in identification of research evidence needs, translation into policy messages that are fit for purpose, the identification of opportunities for DGD and related actors to be (more) visible and active at international fora. The engagement of policy makers and influencers – especially via 'emerging voices' and the perspectives of other health experts working in LMICs – has the potential to 'constructively disrupt' mainstream political discourses and processes of global health. In addition, the program will have an impact at individual level. BCH offers an unique platform to a variety of stakeholders in development cooperation and international health to learn and share with each other. The EV program builds capacities for increased professional effectiveness, motivation and confidence, increased visibility, career and growth opportunities. Several previous EVs already moved into positions of influence in academia, NGOs, INGOs, and government. Similarly, we expect a positive impact for researchers and policy advocates from both Belgium and LMICs as a result of knowledge sharing, training opportunities, and networking with peers. The program on quality assurance of medical products builds capacities of Belgian NGOs and their partners which will potentially improve operational and research (impact) with partners of those NGOs in the South.

Description of Sustainability

The direct partner of this program is the DGD/D2 thematic department of which the capacities are strengthened. At all time, though, the department will be 'in the driving seat' of the ITM-DGD partnership. Particular attention is given by all ITM staff, especially the liaison staff, to assure optimal ownership and alignment of the 'demand and supply' of research-evidence for policy and practice purposes.

The specific workstream on access to quality assured medical products relies on spontaneous and informal participation from a broad range of (international) experts and stakeholders. These exchanges are valuable and rich in itself and help to share knowledge and experiences. The program will explore how to broaden the liaison role and expertise as demand currently exceeds the capacities available. A sustainable solution might be provided in formalizing and structuring continuous collaboration with junior (visiting) researchers at ITM and with key partners such as the University of Western Cape (South Africa).

With regards to Emerging voices – EV, the decision in this program phase to support a secretariat hosted in Kenya by a partner organisation is essentially made to increase the sustainability of EV. We expect this decision to help both the governance team and drive taskforces. In addition, an expanded volunteer base should also help ensure sustainability. All these key (initiative & network) tasks will be facilitated by the new secretariat and the ITM liaison within the EV governance board. Finally, setting clear strategic priorities should also allow EV to fundraise in a more professional and effective way, and seek more funders beyond the current key backers of the initiative.

The IHP newsletter is considered a 'public good' service (providing knowledge management with a focus on the global level) that merits to be sustained. The program explores further 'switching the poles', with besides the ITM staff member, a committed person from / working in a LMIC or at least with a 'global south' background, who can gradually take on more responsibilities.

A recent (2019/2020) external evaluation presented the platform Be-cause health as a dynamic and independent organisation that unites academia, NGOs working in the 'field', government and semi-public sector, as well as consultancy companies and individual global health experts. The BCH members are enthusiastic and willing to put their own time and other resources in the

organisation. BCH seems a healthy and performing platform for discussion about important global health issues, among a variety of stakeholders active in Belgian development cooperation projects and research in health. The ITM is considered a sustainable “host” for the BCH network. The her 2020 evaluation concluded that the ‘lean and mean’ BCH coordination is highly efficient and effective.

Comments on description of sustainability

Submitted by DGEO-MaartenY on Mon, 10/25/2021 - 16:11

Partner organisation

“With regards to Emerging voices – EV, the decision in this program phase to support a secretariat hosted in Kenya by a partner organisation is essentially made to increase the sustainability of EV.” Could you please specify to which partner organisation this refers?

Submitted by ITG-IMT on Thu, 10/28/2021 - 12:44 in reply to partner organisation by dgeo-maarteny

Partner organisation: APHRC

The partner organization that hosts the global secretariat of ‘Emerging Voices’ is the ‘African Population and Health Research Center’ – APHRC, based in Nairobi, Kenya. They hold the secretariat role since mid-2021, following the National Institute of Public Health, India that hosted the EV Secretariat until then. The Emerging Voices initiative and network relies on a sufficiently resourced secretariat.

Submitted by DGEO-MaartenY on Mon, 10/25/2021 - 16:12

Sustainability of informal partnerships

In the chapter on partnerships we read that: “[...] ITM relies upon several informal but solid partnerships. These are often linked to the personal engagement of the scientific expert and liaison person, invited to be at the scientific committee of a partner network or university (example IDDO/Oxford University and the chair of the SAC to their Medicines WG) University of Western Cape in South Africa,...) Rwanda University, Boston University, Direction de la Pharmacie in DRC and networks such as QUAMED asbl network, , EPN - Ecumenical Pharmaceutical Network in East Africa.” The fact that these partnerships grow from personal contacts – often with or through alumni – is one of the strengths of the ITG and its network. Yet this also raises questions about sustainability. How does the ITM ensure that these partnerships “outlive” personal contacts between the scientific expert and the liaison person?

Submitted by ITG-IMT on Thu, 10/28/2021 - 12:45 in reply to sustainability of informal partnerships by dgeo-maarteny

Sustainability of ITM’s partnerships

The interaction between people is at the center of ITM international academic cooperation, and relies indeed in part on the social skills, and ‘connection’ between individuals. The ITM alumni community of foreign students continues to grow and is increasingly also ‘activated’ into (becoming) a global health community. In other words, there’s been invested in having a sustained number of (new) people (alumni) for ITM to liaise with.

From the onset, the biggest incentive for partnerships is that it brings individuals together as members or staff of their respective institute(s). Building partnerships quickly becomes an institutional endeavor, even though it is carried (to a large extent) by the individual researchers or academics. For example, ITM staff visiting and/or teaching at University of Western Cape (UWC) will potentially lead to joint research or joint master level education programs. From the onset of these joint programs, ITM and UWC have been engaged institutionally – far beyond the individual commitment of those who initiated it; in particular, following initial individual interactions, pharmaceutical public health has become a new and main theme in the South Africa program under FA5.

Similar considerations can be done for the other mentioned institutions, even if at different level of advancement. For instance, we are currently in the initial phase of a conversation with Rwanda University and UWC, for developing a training initiative in the vaccine field, linked to the Alliance (C. Morantin); in 2021, we hosted a (online) lecturer from Boston University and gave a (online) lecture there, and we are considering joint coaching of post-doctoral researchers; the ‘Direction de la Pharmacie’ in DRC has become in 2021 a formal partner in the ongoing mixed method research on access to opioids in DRC; and the EPN has included in their data collection tools the visual inspection checklist previously developed by the ITM with partners in Ghent and Kinshasa. The research collaboration with QUAMED and its network asbl is, on the other hand, well-structured and already resulted in 5 papers in peer-reviewed journals. The same can be said for IDDO, with whom we developed joint activities, such as an online workshop in December 2020, and the ongoing translation into French of the analysis of substandard and falsified health products for COVID19.

In addition, mutual relationships are formed on the basis of the experience and network of the alumni with ITM staff and partners. For example, alumni of researchers from Guinea Conakry, maintain an academic personal relation with fellow ITM researchers (often their former mentors). Often these alumni grow into leadership positions within their institute, join or set up

new research ventures. At that moment, institutional partnerships often materialize. These are then indeed built upon long lasting personal contacts, however are forged as sustainable partnerships between their institute and ITM, thus going beyond individuals..

Description of the Partnership Strategy

This ITM program shares the analysis of the Joint Strategic Framework Higher Education and Science for Sustainable Development (JSF HES4SD) developed with VLIR and ARES. Both academic partners provide policy supportive research – PSR to DGD. These are (often long term) research projects upon request of DGD on a variety of development cooperation topics. This ITM program with a specific focus on health is complementary to these research activities. The identification of policy needs by DGD in the course of the ‘dialogues’ of the ITM-DGD partnership indirectly contributes to the Joint Strategic Framework partnership with VLIR and ARES. In addition, ITM collaborative knowledge generation often works together with universities (UA, UGent, ULB, UCL, ...) and research institutes member of ARES and VLIR-UOS.

These academic organizations are also members of the Belgian platform Be-cause health - BCH. There are also partnerships between BCH and Belgian networks Gezondheid & Solidariteit / Santé & Solidarité, QUAMED – experts working on access to quality medicines, ANSER – Academic Network for Sexual and Reproductive Health and Rights Policy and Educaid – Belgian platform on education and development. At European level BCH represents the Belgian Society for Tropical Medicine in its EU federation, FESTMIH. The her 2020 evaluation shows that members are divided on the question whether BCH should remain Belgian. The management response of the platform on the evaluation states that our target group is the Belgian international health cooperation, however the network will reach out to other European organizations (Medicus Mundi International – MMI, SHARE-NET, Dutch SRHR platform, Netherlands, European Alliance for Asset Management, etc.) for learning, sharing and coordinating our influencing strategy. In addition, organizations and individuals from the Global South, linked to the Belgian international health cooperation, will be given a stronger (institutional) position in the network.

The Emerging Voices international network maintains strong relationships with member partner organizations, whereas roles with partners post-venture will be developed further (and streamlined). The network (as one of the thematic working groups) has an institutionalized relationship with ‘Health Systems Global – HSG’ as lead of the bi-annual health systems symposia. Further engagement with HSG (among others via the new Secretariat) will allow to better understand how HSG and EV can complement each other.

International thematic partnerships are at the center of the ITM program. For the ‘access to quality assured medical products’ workstream, ITM relies upon several informal but solid partnerships. These are often linked to the personal engagement of the scientific expert and liaison person, invited to be at the scientific committee of a partner network or university (example IDDO/Oxford University and the chair of the SAC to their Medicines WG) University of Western Cape in South Africa,...) Rwanda University, Boston University, Direction de la Pharmacie in DRC and networks such as QUAMED asbl network, , EPN - Ecumenical Pharmaceutical Network in East Africa).

The expert also gives guest lectures in Belgium, e.g. Universities of Antwerp, Gent, Liège and KUL.; and develops joint publications (ex. *Lemey G, Larivière Y, Zola TM, Maketa V, Matangila J, Mitashi P, Vermeiren P, Thys S, De Bie J, Mavoko Muhindo H, Ravinetto R, Van Damme P, Van geertruyden JP. Algorithm for the support of non-related (serious) adverse events in an Ebola vaccine trial in the Democratic Republic of the Congo BMJ Global Health 2021;6:e005726*).

The ITM program explores and strengthens where possible, partnerships with a focus on French-speaking Africa. Good partner relations exist with collaborators at University of Kinshasa (e.g., a training project for Ethics Committees in DRC, funded by the WHO), especially on the topic of quality of medicines in DRC.

More details on APHRC and CERTES - the two partners that receive budgetary support under this outcome - can be found in the new Annex 'Responses December'.

Description of Synergies

The ITM-hosted Belgian platform Be-cause health has been created to seek synergies and complementarities between Belgian stakeholders, whether they are academic institutions, NGOs, government services, or development partners in the Global South. As actors engaged in Belgian international health cooperation, all of these organizations contribute – via the platform BCH – in a coordinated manner to policy support towards the Belgian international health cooperation. These synergies are not materialized through the signing of collaboration agreements, but form de facto the core of the programme (and its effectiveness has been showcases/validated in earlier evaluations).

The role of the ITM with the Belgian network of Be-cause health (BCH), is being both an active member and a host of the platform. ITM has ensured an efficient coordination of the platform over more than a decade. It has remained successful platform that builds synergies amongst Belgian development cooperation actors in health, including DGD as observer, Enabel, academics and medical NGO's, in an informal, non-institutional structure. The 2020 her 2020 evaluation confirms this lean structure

as a strength of BCH. Being a member or being involved in the platform is documented as a win-win for the participants (i.e. synergy). Through sharing and exchange they enlarge their knowledge and expertise, conclusions are shared within their own professional networks and towards DGD. The engagement of key people from across the health sector within in the network governance (steering group and working group coordinators) and outputs has been maintained over years and proven sustainable and long-term engagements. There are build-in mechanisms to have renewal of individual and institutional engagement: time limited mandates of members of the steering committee, continuous inflow of new members and member-organisations. There is a continuous, organic diversification of the network. For example there are contacts with HoGent to become a member (there is a high added value to attract Universities of Applied Sciences since they are not yet represented in the platform), there are contacts with the 4de Pijler Steunpunt and FASI (Fédération des Associations de Solidarité Internationale) to promote the platform towards 4th pillar and diaspora organisations and there is a larger participation of partners and staff of member organisations in LMIC in the network (due to the possibilities the digital tools offer for networking).

The international networks EV and IHP are engaged in a global health ecosystem (with some focus on health policy and systems) in which they interact and look for synergies with other organisations, especially if they share the same values (health equity, social justice) and paradigms (DGH, planetary health, ...). These synergies will continue to be strengthened by EV4GH's link and integration with Health Systems Global (also pointed out in the commissioned evaluation), of which EV4GH is a Thematic Working Group. Additionally, through the (0.2 FTE) ITM liaison function for EV4GH, we aim for continuous growth, interaction, and synergy building with all relevant partners. The person envisioned to fill this role is an ITM staff and former EV2018 herself, hence already knowledgeable of and embedded within the network itself. This liaison role is key in ensuring strategic and dynamic synergies across the next 5 years, as well as lending a long-term view on monitoring and progressing towards effective change.

For specific workstreams, such as 'access to quality assured medical products', a lot of synergies are satisfactory, or promising, both with partners in Belgium, in other HICs and in the South (as described in the points on partnerships). Given that "universal access to quality-assured health products" and "strengthening of pharmaceutical systems" are transversal issues, the program explores transversal operational links with other institutional partnerships, e.g. DRC, Guinea, Benin, Senegal, or Niger.

The synergy with the international expert network QUAMED asbl is important, as it provided previously a number of research deliverables (incl. on COVID: Bourasseau, A., Lavergne, L. & Ravinetto, R. Assessments of the quality systems of pharmaceutical distributors: a remote approach to be applied in times of COVID-19 and beyond. J of Pharm Policy and Pract 2021; 14, 43),

The current synergy with University of Western Cape in South Africa is a good start, and could be expanded by seeking more formalized collaboration with like-minded institutions such as Rwanda University (in collaboration with UWC and with QUAMED asbl), Jimma University in Ethiopia, and the Direction de la Pharmacie in DRC and Niger.

Regarding synergy-commitments in the JSF HES4SD, complementary to the other synergies identified in this chapter, this programme will (indirectly) contribute to the synergies identified in the JSF. This will mainly imply contributions to the JSF as a permanent platform for exchange coordination, concertation and collaboration. A number of the commitments formulated in the JSF are more institutional and related to the policy level (e.g; synergy initiatives related to scholarship policies, policy support, visa applications, etc.) or relate to initiatives that go beyond the scope of a single programme

Description of how individual or collective recommendations and lessons are to be taken into account

The program focus on policy support or "Getting Research Into Policy and Practice (GRIPP)" has integrated the recommendations and lessons identified through the Joint Strategic Framework, Strategic Dialogue(s) and learning pathways. This program does a in-depth stakeholder analysis, risk management, and engagement via an interactive partnership of ITM-DGD and related actors. At the core of this program lies knowledge management, translation and dissemination. An evaluation of policy support (and research) to DGD values the diverse contributions by ITM. A particular lesson concerns the perceived uncertainty with regards to the 'uptake' of policy support provided into the "policy making process". This is linked to DGD human resources available and their ability to receive and process the research findings and recommendations. Profiles of Belgian ministries' (including DGD) staff have shifted gradually to more general profiles, not requiring specialized thematic (public health) expertise (like before). Hence the need to sustain a 'policy research dialogue' interaction between ITM and DGD.

Travel bans due to COVID-19 measures impact on the organization of international conferences and events. Hybrid formats have the future in the post-Covid era, however a face-to-face program will remain essential for platforms and networks such as EV and BCH. Virtual formats will allow to expand the community and their reach (going beyond just EV alumni), and involving other young researchers from LMICs. Hybrid formats and platforms are important tools for networking and teaching and for technical tasks such as pharmaceutical audits. However they don't have the same benefits in terms of depth of mutual learning and building trust. Knowledge management through attending virtual conferences & webinars will continue, post-Covid,. Face-to-face participation also allows informal exchange (talks in the corridors) at fora such as the World Health Assembly. In addition, (IHP) residencies and internships are very rewarding for ITM and the resident themselves. A lesson learned is also that humor is an important and much appreciated ingredient - part of the IHP brand - that contributes to effectiveness of ITM

colloquia. A small travel budget is proposed mainly to facilitate participation of Southern (research) participants to global health fora, and for ITM staff to be part of a Belgian delegation at international meetings of Belgium multilateral partners and international fora - related to DGD's identified influence of global policies. Recent adaptations of meetings in online and hybrid format will likely further reduce the travel budget.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym APHRC

Full name African Population and Health Research Center

Budget available

2022	2023	2024	2025	2026	TOTAL
45000	45000	45000	45000	45000	225000

Budget available

2022	2023	2024	2025	2026	TOTAL
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List of cooperative partnerships for the outcome

Acronym CERTES

Full name Centre d'Expertise et de Recherche en Télémédecine et E-santé

Budget available

2022	2023	2024	2025	2026	TOTAL
10000	10000	10000	10000	10000	50000

Global programme: Synergy

Contacts

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Author information

Lead NGO/Owner :	ITG-IMT
Name of accredited actor	Instituut voor Tropische Geneeskunde - Institut de Médecine Tropicale

General

Title of the outcome - French or English (mandatory) :	Global Synergy Programme		
Title of the outcome - Dutch/Spanish (optional) :	Gloabaal Synergie Programma		
IATI activity identifier :	BE-BCE_KBO-0410057701-prg2022-17-XX		
Outcome start date :	01-01-2022		
Outcome end date :	31-12-2026		
Country of intervention :	Belgium		
Region :	Developing countries, unspecified		
Sector :	12110 - Health - Health policy and administrative management	Budget share :	100%

Other CSOs/IAs involved

VLIR and ARES (no common "country objective"; but common 3rd approach in the Thematic Joint Strategic Framework: "Collective learning processes, synergy and complementarity")

Strategic target involved

4. Enabling Higher Education and Science Institutions to ...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	4. Enabling Higher Education and Science Institutions to operate as drivers of change
Thematic/geographical :	THEMATIC JSF

3. Increased capacity of Higher Education and Science Ins...

- HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT

Description :	3. Increased capacity of Higher Education and Science Institutions
Thematic/geographical :	THEMATIC JSF

5. Co-creation, transfer and application of relevant know...

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	5. Co-creation, transfer and application of relevant knowledge
Thematic/geographical :	THEMATIC JSF

6. Science-society interface strengthened

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	6. Science-society interface strengthened
Thematic/geographical :	THEMATIC JSF

1. Increased individual capacity.

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	1. Increased individual capacity
Thematic/geographical :	THEMATIC JSF

2. Enabling individuals to act as change agents

- o HES4SD - HIGHER EDUCATION AND SCIENCE FOR SUSTAINABLE DEVELOPMENT



Description :	2. Enabling individuals to act as change agents
Thematic/geographical :	THEMATIC JSF

Approaches or sub-targets concerned

- o Joint strategic framework HES4SD
- o High quality HES4SD partnerships and scholarship programmes
- o Collective learning processes, synergy and complementarity

Geographic location of the outcome's intervention zone

Global

Outcome summary

Description of the outcome

The Global Synergy Programme aims to increase the impact of health research through synergy and networking. This will be pursued via three strategic axes. The first axis enables change through scientific networking. By the realisation of a Thematic Global Network (TGN) Health, climate change and urbanisation and Technical Capacity Networks (TCN). The second axis enables research performance, ownership and leadership for sustainable development through a Synergetic Research Capacity Fund (SRCF). The last axis unleashes the full potential of the thematic Joint Strategic Framework "Higher Education and Science for Sustainable Development (JSF HES4SD) through synergy and learning together with partners such as VLIR and Ares.

The three strategic axes will be translated in outcomes. These outcomes are strongly linked to the strategic goals (SG) of the JSF HES4SD.

The programme includes activities related to these three strategic axes. The first activity is the development, coordination and organization of network meetings and workshops concerning international mobility, scientific support and guidance, specific research costs, etc.

The second activity is the creation of a Synergetic Research Capacity Fund, with the possibility of EDCTP3 participation and coordination. This would serve as seed funding for partners to initiate or to join pilot research projects, which function as a steppingstone to large-scale international projects. It would enable partners financially to participate in relevant collaborative

research projects. The fund would give cross-cutting support to partners in all areas of research management.

The third activity is the development of new knowledge, insights and tools related to the collective learning topics identified in the JSF HES4SD. Such as Getting Research into Policy and Practices, decolonization, monitoring and evaluation of scientific collaboration and small synergy projects.

Wording of the outcome

The aim of the Global Synergy Programme is to leverage health science through synergy and networking, to eventually obtain sustainable development.

Target groups

The programme, and all its components, will primarily target former, current and potential ITM partners and the researchers who work in these organisations. The second important target group consists of the members of the JSF HES4SD, the umbrella organisations Ares and VLIR and their member Higher Education Institutions' and the different observers.

Sensitive and confidential information

N/A

Categorization: Sustainable Development Goals

SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
SDG :	Goal 3. Ensure healthy lives and promote well-being for all at all ages	SDT :	Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks
SDG :	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	SDT :	By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
SDG :	Goal 13. Take urgent action to combat climate change and its impacts	SDT :	Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

SDG :	Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	SDT :	Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism
SDG :	Goal 5. Achieve gender equality and empower all women and girls	SDT :	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life
SDG :	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	SDT :	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
SDG :	Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SDT :	Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per million people and public and private research and development spending

Markers & Tags

1. Gender Equality :	1
2. Aid to Environment :	1
3. Participatory Development / Good Governance :	0
4. Trade development :	0
5. Biodiversity :	0
6. Climate Change - Mitigation :	0
7. Climate Change - Adaptation :	1
8. Desertification :	0
9. RMNCH - Reproductive, Maternal, Newborn and Child Health :	1
10. HIV / AIDS :	0
11. Children's Rights :	1
12. Disability :	0
13. Nutrition :	0

1. D4D - Better use of big data :	Yes
2. D4D - Digital for inclusive society :	Yes
3. D4D - Digital for inclusive and sustainable economic growth :	No
4. Private Sector Development :	No
5. Health - Sexual and reproductive health :	Yes
6. Health - Quality medicines :	Yes
7. Health - Health financing and Universal Health Coverage :	Yes

8. Refugees :	No
9. Covid-19 :	Yes

Categorization: Positioning with regard to the objectives of Belgian Development Cooperation, described in its strategy papers

Agriculture and Food Security

Not applicable

Education

No alignment. In the annex of the strategy note it reads: Belgian university cooperation, which is much appreciated by the partners of the South, is an is highly appreciated by the partners of the South, is an inter-institutional cooperation. That is why this form of cooperation is not included in the priorities set out in this strategy paper, even though it occupies an important place among the educational provisions of Belgian cooperation. [...] The large amount of funding allocated to university cooperation shows the importance for partner countries of training high-level executives who can accelerate their countries' development. In this respect, universities are a breeding ground for future executives, which is conducive to a country's development. However, in many countries, universities are still not fulfilling this role properly.

Children's rights

The different research components of this programme will potentially, indirectly also affect children, and children's rights, at policy level. As research components (e.g. on malaria, access to vaccination, etc.) are developed on related topics, ITM will assure alignment to the strategy paper.

Development education

In our program we generate (scientific) evidence and policy messages with relation to health and its impact on society. These messages are not only translated towards the governments in our country of intervention, but are also disseminated to the Belgian public through the ITM communication service. In our communication, the focus lies on the global impact of health and how the wellbeing of populations in our partner countries is closely aligned to our own.

Environment and climate change

As mentioned earlier, the synergy programme aligns to the Belgian strategy on environment from different angles.

- Environment will be a key topic of the Thematic Global Network which focuses on Climate and urbanisation (cf. 4.1.3 of strategy paper on link with urbanisation). The knowledge emerging from the network will potentially have a positive effect on the environment/climate or will contribute to managing the consequences of the climate change.
- The global health research agenda is strongly influenced by Climate Change dynamics as new diseases emerge, diseases move to new areas, etc.
- ITM recent travel policy aims to minimize flying and using compensations, with a vision towards carbon-neutral travel
- Whenever possible the trainings and info sessions will be organized online or through a 'blended' format. Travel expenses in the budget are limited.

Gender

The synergy programme will focus on gender mainstreaming in the entire programme and all its activities, as reflected in the programme's indicators. This means that both in the management of the programme (and its components) and in the implementation of activities, achieving a gender balance will be an important point of attention. For example the Research Capacity Fund will support the participation of female principal investigators in the research management trainings and EDCTP3 info sessions and their participation in targeted calls will be encouraged and monitored. In case of gender imbalance target actions to remedy will be taken to ensure that female scientific leaders will not be left behind and have equal chance to set and contribute to the research agenda. Furthermore, potential seed funding for small projects could potentially involve projects that are doing research with a gender lens.

Digitalization - Digital for Development D4D

The global Synergy programme includes several networks on topics where the research activities often involve digital components. The Thematic Global Network on Health climate change and urbanization will develop research activities that makes use of spatial data to link social determinants to GIS locations of the population. In the other networking programmes digital applications and data will be used for disease surveillance purposes. The use of these data will allow to steer health policy and helps to improve health care delivery and quality.

Health

The synergy programme is obviously strongly linked to the DGD strategy paper on health. The programme links with different strategies under the overall strategies on strengthening the health sector (e.g. through networking, strengthening international partnerships, etc.) and strengthening the health care system (e.g. by generating policy relevant evidence about neglected diseases).

Subsidy bonus allocation: priority themes and strategic priorities**Human rights-based approach**

The main SDG this Global Synergy Programme is SDG 3: “. Ensure healthy lives and promote well-being for all at all ages”. In doing so it contributes to the right to health and to health care is a universal human right, as defined in the Universal Declaration article 25:

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

As indicated in the Theory of change the three main components of this programme contribute via three different pathways to individual well-being, resilient communities and responsive health systems which are directly linked to SDG3.

In doing so it will particularly with respect to the right to health and health care contribute to empower and give voice to the rights-holders to claim their inalienable, interdependent, indivisible and universal rights and participate in their own development process and to strengthen the capacity of duty-bearers to respect, protect and fulfill those rights.

Decent and sustainable work

Even though Decent Work (DW) is not ITMs core business, we do adhere to a number of principles which are part of the definition of DW as given by the DW JSF:

- Productive and freely chosen employment;
- Which provides an income sufficient to cover family needs;
- Which includes social protection;
- Which respects fundamental rights at work, including freedom of association and the right to participate in collective bargaining agreements (CBAs);
- Which includes equal treatment of all workers without making any distinctions based on sex, age, origin, political or religious beliefs;
- Which includes health and safety provisions in the workplace.

In all components of the synergy programme care will be taken to adhere to these principles. For instance: in our relations with network partners the importance of health and safety provisions for laboratory or other work will be reiterated. Research management strengthening will include care for fair payment and equal treatment of all collaborators and researchers within the partner institutes. The TGN may include multidisciplinary research on social protection and universal health coverage or social protection schemes.

Gender

Gender equality will be mainstreamed in the entire programme and all its activities, as reflected in the programme's indicators. This means that both in the management of the programme (and its components) and in the implementation of activities, achieving a gender balance will be an important point of attention. For example the Research Capacity Fund will support the participation of female principal investigators in the research management trainings and EDCTP3 info sessions and their participation in targeted calls will be encouraged and monitored. In case of gender imbalance target actions to remedy will be taken to ensure that female scientific leaders will not be left behind and have equal chance to set and contribute to the research agenda. Furthermore, potential seed funding for small projects could potentially involve projects that are doing research with a gender lens.

Environment

Following the structure of the KLIMOS toolkit, we briefly highlight the main aspects of the integration of environment as a transversal theme. The main potential impact of the programme on the environment (KLIMOS-1) will be induced by international travel. ITM's recent travel policy aims to minimize flying and using compensations, with a vision towards carbon-neutral travel (cf. action for neutralizing the potentially negative effects(KLIMOS-3)). These decisions aim for neutralizing the negative effects of frequent travel. With regard to the Research Capacity Fund it was considered that the organization of trainings and

workshops with mandatory physical presence of the participants might have a negative impact on environment/climate. Due to the Covid-19 crisis the ITM Transferable Skills programme 2021 was organized online resulting in higher numbers of participation and positive feedback by the participants. Whenever possible the trainings and info sessions will be organized online or through a 'blended' format. Travel expenses in the budget are limited.

The impact of the environment on the programme (KLIMOS-2) is limited to potential unexpected events that would slow down implementation (e.g. in case of environmental disaster). Furthermore, the global health research agenda is strongly influenced by Climate Change dynamics as new diseases emerge, diseases move to new areas, etc. The programme will include various actions that aim at having a positive impact on the environment (KLIMOS-4). Environment will be a key topic of the Thematic Global Network. The knowledge emerging from the network will potentially have a positive effect on the environment/climate or will contribute to managing the consequences of the climate change.

Common outcome within a common programme

NA

Common outcome between distinct programmes

NA

Areas of complementarity and synergy with the intervention of ENABEL

The ITM programme is potentially complementary or synergetic with Enabel, as it leaves the possibility for synergy funding for small projects responding to needs of development actors. We have reviewed the current Enabel portfolio (and consulted with them), and - due to preexisting relationships - may also be synergies with the TCN and TGN activities (in terms of knowledge sharing).

Based on needs assessment during the initial phase partner institutions will participate in the networks or their interest. Five of our 12 partner country are African bilateral countries (DRC, Benin, Burkina Faso, Guinee Conakry and Rwanda). In Guinee and DRC contacts and dialogue already exist within the framework of the country programme. This creates common ground to explore possibilities for complementarity and synergy with this Global Synergy Programme, and particularly the networks.

Description of the outcome, results and strategy

Description of the expected results

Formulation of outcome or result :	Outcome: Increased impact of health research through synergy and networking
Indicator title :	OC1 Number of multi-disciplinary research activities developed within TGN
Indicator description :	Activities include: development, peer review and implementation of multi-disciplinary research activities such as training workshops, papers, research proposals, courses
Baseline :	0
Target Year 3 - 31/12/2024 :	8
Target Year 5 - 31/12/2026 :	20

Formulation of outcome or result :	Outcome: Increased impact of health research through synergy and networking
Indicator title :	OC2 Number of Technical Capacity Networks developed
Indicator description :	Activities include: development, peer review and implementation of multi-disciplinary research activities such as training workshops, papers, research proposals, courses
Baseline :	0
Target Year 3 - 31/12/2024 :	8
Target Year 5 - 31/12/2026 :	20

Formulation of outcome or result :	Outcome: Increased impact of health research through synergy and networking
Indicator title :	OC3 Number of partner participations in competitive research funding proposals
Indicator description :	Number of partners applying in competitive research proposals
Baseline :	0

Target Year 3 – 31/12/2024 :	5
Target Year 5 – 31/12/2026 :	12

Formulation of outcome or result :	Outcome: Increased impact of health research through synergy and networking
Indicator title :	OC4 Number of EDCTP projects with BE participation
Indicator description :	Number of EDCTP3 projects that are submitted with Belgian partners
Baseline :	0
Target Year 3 – 31/12/2024 :	15
Target Year 5 – 31/12/2026 :	35

Formulation of outcome or result :	Outcome: Increased impact of health research through synergy and networking
Indicator title :	OC5 Uptake/influence of ITM-supported learning trajectories in the policies and practices
Indicator description :	Uptake/influence of learning trajectories in policies and practices of HES4SD members & observers (M&O) measured via self-assessment using scale/ladder of change: 1- knowledge has been disseminated ; 2- some first exchanges with HES4SD M&O after dissemination ; 3- actively working with HES4SD M&O on translating our findings into policy/practice ; 4- new knowledge been translated into policy or practice of some HES4SD M&O ; 5- new knowledge has become mainstream at the level of most HES4SD M&O.
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	R1 A Thematic Global Network on Health, climate change and urbanization is established
Indicator title :	R1.1 Network strategy developed
Indicator description :	TGN strategy paper is developed jointly with all partners
Baseline :	0
Target Year 3 – 31/12/2024 :	1
Target Year 5 – 31/12/2026 :	1

Formulation of outcome or result :	Result 1. A Thematic Global Network on Health, climate change and urbanization is established
Indicator title :	R1.2 Capacity strengthening activities within the network
Indicator description :	CS activities include: (virtual) workshops, exchange visits, mentoring and coaching through email and/or (virtual) meetings.
Baseline :	0
Target Year 3 – 31/12/2024 :	10
Target Year 5 – 31/12/2026 :	20

Formulation of outcome or result :	Result 2. Successful Technical Capacity Networking (TCN) is developed on key topics
Indicator title :	R2.1 Capacity strengthening activities within the network
Indicator description :	CS activities include: (virtual) workshops, exchange visits, mentoring and coaching through email and/or (virtual) meetings.
Baseline :	0
Target Year 3 – 31/12/2024 :	10
Target Year 5 – 31/12/2026 :	20

Formulation of outcome or result :	Result 3. Researchers from the Global South are supported through the Synergetic Research Capacity Fund and the ITM research office
Indicator title :	R3.1 Number of researchers trained in different areas of competitive research funding and research management (desaggregated by gender)
Indicator description :	Number of participants in the Research Management trainings and workshops. Gender distribution minimum 33% for M and F.
Baseline :	0
Target Year 3 – 31/12/2024 :	25
Target Year 5 – 31/12/2026 :	50

Formulation of outcome or result :	Result 3. Researchers from the Global South are supported through the Synergetic Research Capacity Fund and the ITM research office
Indicator title :	R3.2 Number of researchers informed on the EDCTP3 programme and calls
Indicator description :	Number of participants in the info sessions on the EDCTP3 programme and calls. Gender distribution minimum 33% for M and F.
Baseline :	0
Target Year 3 – 31/12/2024 :	25
Target Year 5 – 31/12/2026 :	50

Formulation of outcome or result :	Result 3. Researchers from the Global South are supported through the Synergetic Research Capacity Fund and the ITM research office
Indicator title :	R3.3 Number of training initiatives in collaboration with other Belgian HEIs
Indicator description :	Number of initiatives offering training or info sessions related to conducting research on competitive funding that is co-organised, or conducted in collaboration with other Belgian actors
Baseline :	0
Target Year 3 – 31/12/2024 :	5
Target Year 5 – 31/12/2026 :	10

Formulation of outcome or result :	Result 4. Synergies between HE4SD actors is strengthened in terms of knowledge production/translation and synergetic projects
Indicator title :	R4.1 Number of Learning trajectories developed
Indicator description :	Number of Learning trajectories have been developed (new knowledge, insight and tools on topics specific to HES4SD)
Baseline :	0
Target Year 3 – 31/12/2024 :	2
Target Year 5 – 31/12/2026 :	4

Formulation of outcome or result :	Result 4. Synergies between HE4SD actors is strengthened in terms of knowledge production/translation and synergetic projects
Indicator title :	R4.2 Number of synergy projects with (partners of) VLIR/Ares
Indicator description :	Number of small synergy projects developed and carried out with (partners of) VLIR/Ares
Baseline :	0
Target Year 3 – 31/12/2024 :	3
Target Year 5 – 31/12/2026 :	5

Activities, targets groups and beneficiaries

Classification of activities

The activities of the Global synergy programme can be grouped along the following lines:

- Platform development: Installation of research infrastructure, Techniques (e.g. diagnostics, ..); Methodologies/approaches (e.g.

data for action, surveillance, ecohealth,...); Learning sites (e.g. field sites, cohorts, DHSS.); Education & training (e.g. curriculum development, digitalization, ...); Research and science management, Coordination (EDCTP3)

- Education projects: fellowship programs, staff mobility, training/workshops/ info sessions ...)
- Research projects: collaborative research projects, co-funding mechanisms, seed funding
- Getting Research into Policy and Practice (GRIPP): developing activities to strengthen the capacities of partners to engage in knowledge translation activities; integration of knowledge translation in research projects; creating the conditions for policy influence & uptake/outreach
- Synergy: Networking (multi-country: south-south, south-north), synergy with other actors of the Non-Governmental Cooperation (VLIR-UOS/ARES)

Target group(s)

The programme, and all its components, will primarily target former, current and potential ITM partners and the researchers working in these organisations (quantifying or disaggregation by gender is impossible at this level, but the reach of the programme will be integrated in the monitoring framework). The members of the JSF HES4SD (The umbrella organisations Ares and VLIR and their member HEI’s and the different observers) are a second important target group

Beneficiaries

Beneficiaries and target groups partly coincide in the case of the present programme. Next to partners and JSF members, many other stakeholders will benefit from the programme such as other institutions participating in the networks, Policy makers (national, regional, international), Staff in health sector, Funders (Bill and Melinda Gates Foundation, EU, ...), the wider health research community and eventually, citizens in diverse countries.

Title of the reference annex :	TOC_ITM_GPSYN_22-26.docx
Title of the reference annex :	RA_ITM_GPSYN_22-26.pdf

Description of tasks among associate ANGCs

N/A

Description of the Relevance

This global synergy programme is well in line with a number of international frameworks and policies. As mentioned in the context analysis, the programme is a concrete translation of the **UN’s “the future is now”** in which science is considered as an important lever for sustainable global change (and reaching the Agenda 2030). In the “the future is now” the transnational and cross-cutting nature of science is confirmed and the report calls upon all stakeholders to facilitate multidirectional collaboration in science and transfer of technologies for achieving the Sustainable Development Goals. It considers academic and scientific capacity strengthening and partnerships as one of the 4 main **levers** for achieving the **2030 agenda**. Through its interconnectedness with a multitude of other themes (climate, urbanization, ...) and actors (network members, policymakers, funders, ...) this synergy programme is an important tool to deliver on this ambition to become an important lever.

Furthermore, the programme proves an answer to the importance given to both internal and external coherence (the renewed OECD-DAC criteria are a clear illustration of this tendency) or in the **Belgian context**: Synergy.

The different components of the ToC can also be considered as highly relevant for priorities of a number of actors.

- o **Networking component**: the TGN emerged from consultations between researchers from the South and North. The theme environment is an important transversal theme within the **DGD strategy and policy**, which pursues integration and coherence between environment (incl. climate change) and the four main themes of DGD development cooperation (incl. health). Climate change and urbanisation also fall under ITMs research priority themes *Sustainable health systems and strategies* and *Transdisciplinary eco-health research (ITMs institutional Policy Plan 2020_2024)*. This programme will offer a unique opportunity for ITM and its partners to fully integrate climate change and urbanisation in their research, education and capacity strengthening programmes, and to contribute to building the research, educational and policy guidance capacity of the next generation of researchers in the South. The technical capacity networking will also be both **aligned to the needs of partners** and ITM, and will fill an important gap in the current health research landscape.
- o **Synergetic Research Capacity Fund (SRCF)**: this component will provide a unique lever to researchers and institutions in the Global South to become game changers, as they will be enabled to take a more prominent position in international health research and policy, through synergies with other organisations/institutes. With this component the programme fills in an important gap, and is highly **relevant for our partners, DGD and other funders** (by providing these synergy funds).
- o Unleashing the potential of **thematic JSF HES4SD**: this component is highly relevant for realizing our ambition to make science an important lever for Belgian development cooperation, and for realising the Agenda 2030

The programme will integrate the themes of **gender and environment** in diverse ways. Environment will be a key topic of the Thematic Global Network. Furthermore, the global health research agenda is strongly influenced by Climate Change dynamics as new diseases emerge, diseases move to new areas, etc. Gender equality will be mainstreamed in the entire programme and all its activities. Achieving a gender balance in all activities will be a specific point of attention, as reflected in the programmes indicators. Especially with regard to the Research Capacity Fund the participation of female principal investigators in trainings and in the participation of the targeted research proposals will be encouraged and closely monitored. In case of imbalanced gender representation targets actions will be undertaken.

This Synergy programme is also aligned to the **Joint Strategic Framework Higher Education and Science for Sustainable Development** and its 6 strategic goals. The programme will fundamentally increase to capacities of individuals (Strategic Goal (SG) 1 increased individual capacity). More specifically the programme will strengthen the capacities of scientists (cf. involved actors JSF page 24-25) through training, peer-learning, mentoring, exchange, etc. (TGN, TCN, SRCF). The individuals that have increased their individual capacity and are involved in partner organisations (+ stakeholders), have increased their potential to be change agents (SG 2 Enabling individuals to act as change agents), by applying their newly acquired knowledge and skills. In becoming change agents, individuals may assume responsibilities and act as committed global citizens. This allows them to have a positive impact on the performance of organisations they work in as well as on their sector at large (e.g. by leading international research projects, as global voices on health & climate, etc.).

Furthermore, this programme goes beyond individual capacity development but will strengthen the capacities of their organisations (SG3 - Increased institutional capacity of HE&SIs; (cf. involved actors JSF page 24-25)) in the following fields:

1. Increased research capacity: improved research management, capacities to organise multidisciplinary research, etc.
2. Enhanced information, infrastructural and technological structures
3. Increased management capacity: governance, administration, finance, legal
4. Increased collaborative and networking capacity on key topics

By strengthening these capacities they are enabled to operate as drivers of change (SG4 - Enabling HE&SIs to operate as drivers of change) aiming at a meaningful impact in society. This will be realized via both the co-creation, transfer and application of relevant knowledge (SG5 - Increased co-creation, transfer and application of relevant knowledge) generated through the programme (e.g. on HES4SD topics, on Health-Climate, etc.), and/or via the strengthening of the science-society interface (SG6 - Science-society interface strengthened) thanks to the knowledge and capacities strengthened on engaging with stakeholders and Getting Research Into Policy and Practice (GRIPP) (cf. involved actors JSF page 24-25).

Programme pathways and their link with the strategic goals

- Enabling change through scientific networking: realizing a Thematic Global Network (TGN) Health, climate change and urbanization and Technical Capacity Networks (TCN) : Strategic goals 1, 2, 3, 4, 5, 6
- Enabling research performance, ownership and leadership for sustainable development through a Synergetic Research Capacity Fund (SRCF): Strategic goals 1, 2, 3, 4
- Unleashing the full potential of the JSF HES4SD through synergy and learning: Strategic goals 1, 2, 3, 4, 5, 6

Description of Coherence

Internal coherence:

The present synergy programme is highly **coherent with other components of the DGD supported ITM programme**. All components capitalize on the capacities built in the country programmes and add value through networking, crosscutting support (enabling international research, strengthening research management), and improving the way science can lever the Agenda 2030 (unleashing the HES4SD potential). It is also coherent with our policy support programme which also aims at enabling the Global South to take on a stronger voice in international health policies (cf. SRCF, TGN, etc.). It also has a clear coherence with the Education and Scholarships programme in the sense that target groups of the synergy programme may also include alumni of ITM's educational programme (for example former PhD postdoctoral fellows). There is also a link with the global citizenship programme as this programme (like other programme components) well feed into the global citizenship programme (e.g. through sharing of new insights, best practices, etc.)

The synergy programme also aligns well with the **ITM Institutional Policy Plan 2020-2024** and the goals of the International Collaboration and Development (ICD) of ITM's Institutional Policy Plan. For example, 'Climate change' and 'urbanisation' fall under ITM's research priority themes *Sustainable health systems and strategies* and *Transdisciplinary eco-health research*. *One of the objectives included of the ICD is to improve networking between partners.*

External Coherence

As mentioned in previous sections, the synergy-programme and all of its components focus on **specific “niches” in which no/few other organisations are working**. The networking component was, from the onset, designed to focus on topics for which a gap in the international landscape was identified (drawing from the recommendations of an evaluation of the previous DGD programme). The SRCF also focuses on a “left behind” aspect of international support for research. Few funders are willing to invest in the preconditions for South-driven research, but often prefer direct funding of research, often with institutions that already have a strong research track record (leaving other institutions behind, cf. **LNOB**). In this sense the SRCF is highly complementary to these funders. More importantly, as the SRCF will **enable participation of the Global South in international research**, it is also highly synergetic with the activities of these organisations. The European & Developing Countries Clinical Trials Partnership (EDCTP) supports the enhancement of research capacity and collaborative research in Sub-Saharan Africa, but the SRCF will enable participation of research institutions in Latin-American or Asian LMICs which are excluded from EDCTP funding. The HES4SD component of the present programme will be highly complementary to the activities that will be developed in the framework of the JSF (and thus the activities of VLIR-UOS and ARES), and will add an important value to it by professionalizing a number of learning trajectories, which can lead to a stronger uptake of new knowledge on HES4SD topics by HES4SD members/observers and stakeholders.

Furthermore, as a research institute ITM adheres to the **international standards** when it comes to ethics, such as the Declaration of Helsinki and the Guideline 1 of the CIOMS International Ethical Guidelines for Health related Research involving Humans (2016). Ethics and ethical review are essential not only in clinical research but in any kind of research involving human participants, human biospecimens or personal data. In respect of this last aspect, any research undertaken also needs to adhere to GDPR principles.

Description of Effectiveness

The Theory of change elaborates the 3 pathways to change leading to the 3 main expected results:

- Enabling change through scientific networking: realizing a Thematic Global Network (TGN) Health, climate change and urbanisation and Technical Capacity Networks (TCN).
- Enabling research performance, ownership and leadership for sustainable development through a Synergetic Research Capacity Fund (SRCF)
- Unleashing the full potential of the JSF HES4SD through synergy and learning

We strongly believe the strategies will be **effective** and the approaches will be **result-oriented** for several reasons. The synergy programme focuses on a number of components which represent themes and working modalities in which ITM has acquired vast amounts of experience and expertise. ITM has developed numerous successful **networks** in the past. The Be-Cause health network and the Emerging Voices are two recent examples which have been evaluated positively in the recent past. Furthermore, the TGN has been formulated after intense consultations with partners, showing a strong sense of ownership (and needs for) over the TGN, an important precondition for successful networking. The TCN's will build further on initiatives taken in the various partnerships at country programme level, also ensuring a smooth organisation of the TCN. Starting up new networks can always involve risks of getting it off the ground. We believe that the nature of the networks topics respond to existing needs and will help to get institutions and individuals involved, and allow the networks to become successful.

As to the second pathway of this synergy programme, the **Synergetic Research Capacity Fund**, ITM's research office – a highly experienced team strengthened by an additional FTE– will lead and support this component of the programme, assuring high quality implementation. ITM's research office has in the past already worked successfully with partners on research management and has a dedicated Transferable Skills programme (including different aspects of research management) in place and will scale-up this support through this programme. Furthermore, by providing synergy funding to the different programmes we will create access and leverage to other research funding schemes which will enhance our partners research capacity. These other research funding schemes are highly competitive, implying only the most relevant and effective proposals will receive funding, which is an additional guarantee for effectiveness.

As to the third component of the synergy programme, unleashing the full potential of the **HES4SD JSF**, we also believe that the proposed approaches are effective. We have chosen to include this component to realize the full potential and ambitions of the thematic JSF. As we have learned from the past that previous learning trajectories do not always have a high uptake/impact, this component will allow more fundamental, scientific knowledge creation on a number of specific HES4SD topics (such as research uptake, decolonization, diversity, etc.). This approach will allow for a more successful transfer to institutional policies of ITM, JSF members and observers, and ITM partners. As ITM is very experienced in such knowledge creation, we consider the potential effectiveness as high.

In the logical framework the pathways of the Theory of Change are translated in the following 4 results:

R1. A Thematic Global Network on Health, climate change and urbanization is established

R2. Successful Technical Capacity Networking (TCN) is developed on key topics

R3. Researchers from the Global South are supported through the Synergetic Research Capacity Fund and the ITM research office

R4. Synergies between HE4SD actors is strengthened in terms of knowledge production/translation and synergetic projects

Corresponding indicators are developed and can be found in the respective section. **Baseline information** has been established and is often 0 as this programme is new. Some data will be collected at the start of the programme, e.g. to assess current capabilities/capacities. or the SRCF, information on current research performance and capacity needs will be collected throughout the programme as new collaborations develop, to identify needs. Details on the sources of verification for all indicators can be found in the results matrix.

The programme integrates **LNOB** in diverse ways. First and foremost, ITM and its partners focus on issues that often impact the poorest and most marginalized of society (Malaria, Neglected Tropical Diseases, etc. all affect these groups most). Through our work, we directly contribute to the Leaving No One Behind. Furthermore, through our gender mainstreaming efforts we will ensure the inequalities between men and women will reduce in science. The Synergy Research Capacity Fund will enable partners/researchers to participate/lead international research. As mentioned earlier, this implies a focus on institutions and researchers that currently have no access to this type of funding. Through the SRCF, we ensure that they, as institutions, are not left behind.

The **thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development** (HES4SD) identified 3 common approaches to realizing its objectives which are all relevant for the present programme: the JSF HES4SD (1) was chosen as an approach itself as it will contribute to academic inspired and science-driven societal change, linking Higher Education & Scientific Institutions with the broader society. This framework will gradually develop and remain dynamic to be responsive to opportunities and policy priorities. Our ITM programme (2) is a more operational approach to delivering on the JSF's Theory of Change through development relevant partnerships. Finally (3) collective learning processes, synergy and complementarity with a variety of actors will be instrumental in achieving the outcomes and impact as defined in the ToC of the JSF. As highlighted in thematic JSF, there is no one-to-one link between the three approaches and the six Strategic Goals. Rather, different approaches can contribute to the achievement of the intertwined Strategic Goals.

More specific details and clarifications can be found in the Annex 'Responses December'.

Comments on description of effectiveness

Submitted by DGEO-MaartenY on Fri, 10/29/2021 - 13:34

TGN

About the TGN. The ITM is already involved in many knowledge-sharing platforms (Be-cause Health, Emerging Voices, ...). Has the ITM investigated the possibility of working through one of these platforms to achieve the objectives of this outcome? Could you explain in more detail why the ITM considered it necessary/appropriate to work via a new platform (TGN)?

Submitted by ITG-IMT on Thu, 11/11/2021 - 18:49 in reply to tgn by dgeo-maarteny

TGN

The TGN aims at strengthening the capacity of our institutional partners in the field of research, training and practice related to health, climate change and urbanisation. Climate change and urbanisation are among the biggest global (health) challenges, and the TGN will link researchers of our institutional partners across countries to co-design and implement research and educational programmes, and to engage in mutual learning and strengthening (south-south-north networks) in these fields. Compared with the other networks, the TGN has a different scope and different objectives. It includes different approaches and different actors and partners to pursue these. The TGN is complementary to the existing networks that ITM is involved in (Be-cause Health, Emerging Voices, Alliance) and collaborations and synergies can and will be actively created.

- Be-Cause Health is a Belgian network. It is mainly a knowledge sharing and advocacy platform, intended to bring together the Belgian policymakers, NGOs, academia and other actors in development in health. The TGN is an international network.
- The Emerging Voices platform aims at strengthening the capacity of individual young researchers, and more specifically their individual capacities, not the capacity of our institutional partners.
- The Global Alliance for Education in the Global Education programme focuses on developing capacities for education and sharing knowledge and experience in education. The TGN will develop synergies with this network e.g. through courses on climate change, urbanisation and health.

- A specific priority of the TGN is the development of learning sites, which are based on co-creation of research and learning and will gradually evolve into long-term research sites. The other networks do not offer that, nor do they focus on research capacity building.
- In general, synergies between TGN and other platforms will be actively explored. For instance, young researchers from partners working on climate change and/or urbanisation will be encouraged to apply for EV fellowships, and the TGN will participate in the Because Health working groups.

Description of Efficiency

The Global Synergy Programme focuses on synergizing. In that sense it aims at efficiency enhancement where by the sum of both elements surpasses the separate unlinked effects. In others words we aim at $1 + 1 > 2$.

As the programme specifically aims at realizing synergy in all 3 components, the programme has a strong efficiency.

The networking components are expected to be quite efficient as the networking will capitalize on existing capacities, create high added value through limited seed funding, and will also allow organizing capacity strengthening activities in a more efficient way at network level instead of at country level. This is also valid for the Synergy Research Capacity Fund (SRCF). We anticipate the SRCF will be a highly efficient component as it will allow access to important amounts of funding for partners by only investing limited resources. We strongly believe that this programme will create a strong leverage by opening up potential for synergy with other research and development programmes.

Lastly the HES4SD effort for example will imply benefits for HES4SD members, observers and stakeholders. Through these efforts we avoid a duplication of efforts and budgets.

The means are being used for the development of networks (coordination, network coordination costs, organization of network meetings and workshop, international mobility, scientific support and guidance, specific research costs, etc.); the Synergetic Research Capacity Fund (EDCTP3 participation and coordination costs, seed funding for partners to initiate or join pilot research projects as a stepping stone to large-scale international projects and to enable financed participation of partners in relevant collaborative research projects. This includes mainly operational costs and for limited investment costs. The ITM Research Office will provide cross-cutting support to partners in all areas of research management through direct support and organization of training. Lastly for the JSF HES4SD component the means will be used for developing new knowledge, insights and tools on topics specific to HES4SD related to the collective learning topics identified in the JSF HES4SD on topics such as Getting Research into Policy and Practices, decolonization, M&E of scientific collaboration, etc. The means involved include workshops, networking events and small synergy projects with high added value that are aligned with the activity of other Belgian development actors.

This synergy programme does not involve personnel costs of expats. Yet about 20% of the budget will be spent on ITM staff. On the one hand these are scientists from all 3 ITM departments providing expertise in their respective academic domains to support the networking activities and collaborative research projects both scientifically and in terms of coordination. Where possible this support is provided from Antwerp, where needed this will be done during missions abroad. On the other hand the research office provide human resources for the research management activities of the Synergetic Research Capacity Fund. If need be they will also assume the coordination of the EDCTP3 programme. The support provided is complementary to activities with the same partners in the respective country programmes and will enhance the effects of the latter.

Furthermore, as with other components of the multiyear programme, this programme is also cost-efficient in the sense that a majority of ITM staff time will not be financed through the DGD budget. As in the present multiyear programme (2017-2021) the amount charged to the DGD-funding is only a fraction of the effective input of human resources. This significantly increases the efficiency of the programme.

More details on the destination of the funds can be found in Annex 'Responses December'.

Description of the expected Impact

The sphere of interest section of the Theory of Change illustrates the anticipated long term impact. The synergy programme aims at making a clear contribution to SDG 3, and more specifically contribute to individual well-being, resilient communities and responsive health systems. To achieve this, we need to have an impact on three interrelated areas. First, Scientific Institutions in the Global South need to be drivers of change through the creation and translation of new knowledge and their influence over the global health agenda and priorities. This will allow the introduction of local/global priority setting by the Global South and the development of South-driven solutions to local and global challenges. Second, and partly a precondition for the realization of the first impact area, scientific Institutions in the Global South need to be recognized for their expertise and become drivers of international health research. Without recognition, the institutions will not have the levers to actually impact global and local health policies. Finally, in a more general sense, the programme envisions to impact the way Science can serve

as a lever for sustainable development (e.g; through a stronger science-society interface, decolonizing scientific institutions, etc.) which is needed to have a more sustainable impact of science on (amongst others) health. Indirectly, as mentioned in the ToC section, the present programme will also impact SDG 4 (global citizenship), SDG 5 (gender mainstreaming), 11 & 13 (TGN) and 17 (by stimulating South-South and triangular cooperation).

Description of Sustainability

ITM approaches partnerships along the lines of a **partnership trajectory** that ultimately favors sustainability. Partnerships gradually move from an initial phase where the emphasis lies on institutional capacity strengthening towards a consecutive phase with the emphasis on institutional collaboration. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed. In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer etc.) and on continued capacity building. Over time, partners will acquire specific capacities, knowledge and expertise. Over time this capacity will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as a hub for a network. This is, for example, how the Emerging Voices network evolved which is now managed by partners in the Global South. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice. This synergy programme strongly focuses on latter phases of the trajectory: networking, getting access to external funding and GRIPP which are all key for sustainability. In that sense, the whole synergy programme is all about creating the conditions for sustainability, be it through networking or by enabling partners to access other funding sources, moving beyond “development cooperation”. Both broad approaches will allow partners to become leaders in international research and health policy, also after this programme. Put differently, the synergy programme is an important stepping stone and lever in the sustainability of the ITM programme, and has the potential to become a true catalyst for “South”-driven health research and policy

As programme target group and partners coincide technical, social and institutional sustainability have strong overlaps. As technical sustainability includes the management by the partners and long-lasting support for the target groups, this is logically covered, since the results to achieve are based on the demands for collaboration from the partner side. This also goes for social sustainability, since our target groups have an important role in the management of the intervention and its different components. Together with ITM, they co-implement the programme.

More details on the different elements of sustainability can be found in the Annex 'Responses December'.

Description of the Partnership Strategy

First we reiterate that ITM approaches partnerships along the lines of a **partnership trajectory**. Partnerships gradually move from an initial phase where the emphasis lies on institutional capacity strengthening towards a consecutive phase with the emphasis on institutional collaboration. This should be seen as a sliding scale in the sense that the institutional capacity strengthening phase may already include some institutional collaboration, and the institutional scientific collaboration phase may continue having capacity strengthening elements where needed. In the phase of capacity strengthening, the focus is on building and consolidation of platforms (technological, methodological, knowledge transfer etc.) and on continued capacity building. Over time, partners will acquire specific capacities, knowledge and expertise. Over time this capacity will gradually allow further transition towards an increased emphasis on joint research/education and equal partnerships linked to developed platforms and/or on strengthening capacity to acquire external funding. There will be more focus on networking; the partner may for instance assume a coordinating role as a hub for a network. Partners will be able to use knowledge built to create the conditions for getting research into policy and practice.

Most partners involved in the synergy programme are partners from the 12 country programmes. The vast majority are partners with whom ITM already has a longstanding relationship. That applies to the partners in the 10 countries that are part of the present multiyear programme: RDC, Benin, Burkina Faso, Ethiopia, RSA, Guinea Conakry, Cuba, Peru, Cambodia and Vietnam. The longer the time the more they have moved along the above described partnership trajectory. In Benin and Burkina Faso we will add new partners in addition to the existing partners. We will also start collaboration in 2 new countries: Nepal and Rwanda (2 partners in each country). In those new partnerships the initial focus will be more on capacity strengthening than institutional collaboration. All those partners will be eligible to participate to both the networking programmes and synergetic research capacity fund. These synergetic activities will be complementary to the country programmes. All these partnerships are formalized with partnership agreements. Besides these country programme partners the networks and collaborative research initiatives of this global synergy programme may include other partners beyond that list that are genuinely interested and that can increase an added value. This may be because they are also confronted with the network of research topics and can both contribute and benefit from the collaboration.

Regarding the involvement of the partners in the thematic Joint Strategic Framework (JSF) Higher Education & Science for Sustainable Development (HES4SD), ITM has involved its partners in the development/validation of the thematic JSF HE4SD

process through the general council in which ITM's partners are represented and which discussed the thematic JSF process.

Comments on description of the partnership strategy

Submitted by DGEO-MaartenY on Fri, 10/29/2021 - 13:38

Partners

Related to the question asked under budget: does the ITM have an idea about how many and which partners will be involved in this project? Will the partners from the country programmes automatically be involved in this synergy programme? We read that 'Besides these country programme partners the networks and collaborative research initiatives of this global synergy programme may include other partners beyond that list that are genuinely interested and that can increase an added value'. Have there already been concrete talks with other partners to be part of this outcome? What strategy will the ITM adopt in looking for these possible other partners? Will this be an active or a passive approach?

Submitted by ITG-IMT on Thu, 11/11/2021 - 18:52 in reply to partners by dgeo-maarteny

Partners

In line with other responses, ITM currently does not know the precise number of partners that will be involved in the synergy programme. However, for the networks (TCN and TGN), it is expected partners from most or all partner countries will be involved - indeed, many already expressed their interest. The SRCF and JSF HES4SD are expected to cover part of the partners of ITM, but not all. Concerning the involvement of partners that are not part of the country programmes: these partners may be former ITM-DGD partners, or may be partners with an exceptional or very important potential role with a high sustainable development potential. Overall, partner involvement is always based on interest and commitment. All country programme partners will be invited and actively motivated to participate in all components of the Global Programme Synergy.

For networks, there will be an active approach towards current partners, though some external partners might be approached in a more active way based on their potential added value, expertise, and existing relationships. Talks have been underway with a diversity of partners and final commitments will be made when the DGD programme is approved. Within the TGN, for instance, we are in informal contact with expert researchers and centres in India, Guatemala and Uganda, who would be able to support our partners.

The SRCF will apply a bottom-up approach that is mainly investigator-driven. There will be an active approach from partner's/investigators-perspective. ITM will communicate the programme and its possibilities to all partners. We expect the following actors to be involved:

- Primarily current country programme partners
- Former partners (still active in Alliance, but not in country programmes): ITM exited 9 countries in 2017, these partners now play a different role. They may become involved and can take up a new role in the ITM network as more experienced partners
- New partners: potentially "new" partners may be included, though they will never be entirely new partners, being part of existing networks

Former and new partners that would participate in the SRCF bring an added value to the programme as they will allow genuine south-south-driven partnerships, which potentially entails another dimension to the synergy concept. The SRCF is mainly driven by relevance/potential impact. Sudden events such as emerging diseases or international health crises may also inform future decision making about partnerships.

Description of Synergies

Synergy is the core of this Global Synergy Programme. This is reflected in the Theory of change which has identified 3 strategic axes for the programme, which are reflected in 3 pathways to change:

- Enabling change through scientific networking: realizing a Thematic Global Network (TGN) Health, climate change and urbanisation and Technical Capacity Networks (TCN).
- Enabling research performance, ownership and leadership for sustainable development through a Synergetic Research Capacity Fund (SRCF)
- Unleashing the full potential of the JSF HES4SD through synergy and learning

Synergising through South-South-North Technical Capacity Networking (TCN) and Thematic Global Network

ITM aims to develop a number of networks to enable cross-country exchange, capacity strengthening and learning. These

networks will capitalize on the work done in the various **ITM supported country programmes, and will create synergy between them**. The networks will for instance enable peer learning between organisations from the Global South, the development of joint research activities, mutual learning, etc. These technical-scientific networks will be identified depending on emerging needs and demands from partner institutions. Furthermore, emerging knowledge, good practices, etc. emerging from these networks will be shared through the JSF as a permanent platform for exchange coordination, concertation and collaboration and can potentially benefit other Belgian actors. E.g. the JSF Resilience (Dignity in life, harmony with nature) could potentially be interested in the results of the Thematic Global Network.

Multiplying research capacity through a Synergetic Research Capacity Fund

With a Synergetic Research Capacity Fund, ITM wants to provide an answer to the needs and gaps identified in the context analysis. This is complementary to the different ITM country programs of this 5-year programme and we consider this is best organized through a dedicated programme. With this fund, ITM aims to create lever for Global South-driven research that provides local solutions to global problems. By the end of the programme, we want partners to be increasingly more successful in international research projects as Principal Investigator and receive international recognition for their research expertise, thereby enabling them to impact international health research and policies. We will achieve this by providing partners the much-needed stepping stones to access international research projects and the corresponding funding channels. This will enable fully-fledged participation in international development relevant research and create **synergies with other research and development funders**. Furthermore, emerging knowledge, good practices, etc. emerging from the SRCF will be shared through the JSF as a permanent platform for exchange coordination, concertation and collaboration and can potentially benefit other members (or observers) of the JSF HES4SD.

Unleashing the full potential of the JSF HES4SD through synergy and learning

With this component of the synergy programme, we want to realize a number of synergy commitments of the JSF HES4SD. ITM will develop new knowledge, insights and tools on topics specific to HES4SD in synergy with HES4SD members, observers, and other interested stakeholder.. These topics will relate to the collective learning topics identified in the JSF HES4SD and may include GRIPP, decolonization, M&E of scientific collaboration, etc. (final topics to be confirmed in dialogue with HES4SD actors). We want to go beyond the one-off learning trajectories of JSFs and invest in developing high quality new knowledge, and in creating the condition for this new knowledge/insights/tools that may be useful for policies and/or practices of other development organizations both in Belgium and in partner countries. Furthermore, ITM will provide complementary funding to small synergy projects with high added value that are aligned with the activity of other Belgian development actors. Such small projects are the most suitable approach to respond to new opportunities and urgent needs, and to create synergies with call-based organizations, such as ARES and VLIR-UOS. These projects will preferably involve ITM partners from the country programmes.

Description of how individual or collective recommendations and lessons are to be taken into account

The synergy programme is to a large extent an answer to current challenges, and lessons learned/recommendations from the past. The 2008-2016 multiyear programmes includes several Thematic networks. These were discontinued in the 2017-2021 multiyear programme as the new legal framework based on a geographic country approach left little room for multi-country initiatives. The initiative to develop networks again has been triggered by the recommendations of the final evaluation of the DGD programme 2014-2016 (FA3-III). In their evaluation, the external evaluators concluded that networking would be valuable and useful tools for stimulating south-south collaboration. The evaluator recommended ITM together with south partners to:

- Identify topics on which there is currently no network and where partners have a lot of interest to collaborate on
- Identify institutions that are able to contribute to the network in terms of time and resources. This process should be bottom up, allowing all partners to express their interest and willingness.
- Identify an institution in the South that could lead or co-manage the network.
- Ensure south-south collaboration is one of the main aims of the network, and progress towards achieving it is therefore also monitored.
- Ensure that gender is mainstreamed in the functioning, operations and deliverables of the network

ITM followed this approach to develop the networking components of this current programme, for Thematic Global Network in particular. Several partners have already expressed their interest to participate in the TGN Health Climate and Urbanization. During the initial phase involvement of one of the partner institutes in the management of the network will be further explored and south-south collaboration will be aimed at. A similar approach will be followed for the technical scientific networks as well. Existing strong partners in Peru, Burkina Faso and Benin can play a key role in co-management of the potential networks on bio-informatics, Malaria surveillance and Antimicrobial resistance respectively.

The SRCF too is an answer to lessons learned identified throughout a.o. the previous DGD programme. We've identified a specific niche and need that we try to tackle with this synergy programme (cf. context analysis).

added value that are aligned with the activity of other Belgian development actors

23,54% of the total budget for this outcome is composed of human resources (salaries) for the scientific support and coordination of these 3 components at ITM, as it is unknown now which partners will join the Global Synergy Programme for the coming 5 years.

Mandatory annexes classified by outcome

File

List of partnerships/cooperative for the outcome

List of partnerships for the outcome

Acronym tbd

Full name PARTNERS TO BE DECIDED

Budget available

2022	2023	2024	2025	2026	TOTAL
270000	270000	270000	270000	267471,58	1347471,58

List of cooperative partnerships for the outcome

Budget available

2022	2023	2024	2025	2026	TOTAL

Comments on budgetary information

Submitted by DGEO-MaartenY on Fri, 10/29/2021 - 13:34

Budget for partners

We see in the budget that €1,407,472 (32% of the budget) is earmarked for partners, but at the same time we read in the budget description that "it is unknown now which partners will join the Global Synergy Programme for the coming 5 years". On what basis was the budget for partners estimated? How can DGD be sure that the funds intended for the partners will be well spent when there is still uncertainty about who those partners will be?

Submitted by ITG-IMT on Thu, 11/11/2021 - 18:50 in reply to budget for partners by dgeo-maarteny

Budget for partners

he budget for partners has indeed not yet been earmarked for specific partners due to the nature of the programme.

- The Networks, though in preparation, have not yet been fully established, and the precise composition of the networks (in terms of partners) is not yet final. A more precise view on which partners will play what role is currently being scoped out, and will be finalized when the synergy programme is approved by DGD. For the TGN Climate change, Urbanisation and Health, for instance, we budgeted, first, for supporting a 'deep' collaboration with three partner institutions. Partners in RDC, Benin and Guinée already expressed their interest (and commitment) to set up long-term research and learning sites. Second, we budgeted for exchange visits and meetings through which other interested partners would link to the three learning and research sites.
- The Synergetic Research Capacity Fund is conceptualized as a promising lever for science for sustainable development. Partners have not yet been selected, as all funding will be allocated on a competitive basis. The budget dedicated to partners will effectively go to partners with the proposal that is deemed to have the highest impact potential in the review process. It is expected most of the partner funding will be allocated to partners from our country programmes. Other partner are also possible, e.g. in following scenario's
 - The SRCF uses a bottom-up approach with partners, and it is possible that country programme partners develop a joint proposal involving other partners.
 - Former partners (still active in Alliance, but not in country programmes): ITM exited 9 countries in 2017, these partners now play a different role. They may become involved and can take up a new role in the ITM network as more experienced partners
 - Due to an emerging disease or health crisis, it is possible that non-country programme partners are selected.

However, these “new partners” will always be known actors (that are part of the broader ITM network)

In conclusion, country programme partners will be our natural allies. In selecting proposals for the SRCF, Relevance (and hence potential impact) will always take precedence, and the feasibility of a proposal will also be an important aspect of selection (as a result, there will be a positive bias towards existing country partners) .

- For the part of the synergy programme that focuses on unleashing the full potential of the JSF HES4SD the same logic applies. Part of the budget can be used to create synergies between actors, but this part of the budget is specifically designed to be able to respond in a flexible way to Synergy-opportunities (and thus no partners have been selected yet).

Submitted by DGEO-MaartenY on Fri, 10/29/2021 - 13:35

Investments

Could you please explain the planned investments (EUR 62 000 per year) in more detail?

Submitted by ITG-IMT on Thu, 11/11/2021 - 18:51 in reply to investments by dgeo-maarteny

Planned investments

The planned investment will mainly be used for necessary investments at the level of partners, to enable them to join international projects with a high impact potential in the framework of the SRCF (50 000 €). For the different networks 12 000 € is foreseen to make necessary investments to enable the functioning of the Networks. This funding serves as a lever for partners to allow them to be part of such projects or networks, thus contributing to giving voice to the Global South in international health policy research. As these partnerships are not yet selected, these funds have not yet been earmarked to specific investments. The amount of EUR 62 000 is based on our experience in working with partners and in international research partners and is to be considered as complementary funding. If less investments are needed, these costs will be shifted to operational costs.
