TECHNICAL & FINANCIAL FILE

FOREST MANAGEMENT AND WOODY BIOMASS ENERGY SUPPORT (FMBE) PROJECT

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THE BELGIAN DEVELOPMENT COOPERATION .be

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ABBREVIATIONS

AfDB	African Development Bank
BEST	Biomass Energy Strategy
BTC	Belgian Technical Cooperation (Belgian Development Agency)
CASE	Community-assisted Access to Sustainable Energy
CATALIST	Catalyse Accelerated Agricultural Intensification for Social and Environmental Stability
CBFF	Congo Basin Forest Fund
CDF	Community Development Fund
CD	Co-management delegate
CDM	Clean Development Mechanism
DAC	Development Assistance Committee
DDP	District Development Plan
CSO(s)	Civil Society Organisation(s)
DAF	Director Administration and Finance (SPIU)
DFF	District Forestry Fund
DFMP	District Forest Management Plan
DFNC	Department of Forestry and Nature Conservation
DFNRO	District Forest and Natural Resources Officer
DFS	Deutsche Forstservice GmbH
DG	Director General
DGD	Directorate General for Development Cooperation and Humanitarian Aid
Di-FMU	District Forest Management Unit
DNA	Designated National Authority
DRC	Democratic Republic of Congo
EDPRS	Economic Development and Poverty Reduction Strategy
ENR	Environment & Natural Resources (sector)
EOP	End of project
ESSP	Energy Sector Strategic Plan
ETR	End Term Review
eSWAP	Energy Sector-wide Approach
EUEI	EU Energy Initiative (Partnership Dialogue)
FAO	Food and Agriculture Organization (of the United Nations)
FCA	Framework Cooperation Agreement
FFS	Farmers' Field School
FMBE	Forest Management and woody Biomass Energy support
FMES	Forest Monitoring and Evaluation System
FMG	Forest Management Group
FMU	Forest Management Unit
FOA	Forest Owner Association
FONERWA	Rwanda's National Fund for Environment and Climate Change
FPS	Federal Public Service

GCF	Green Climate Fund
GDP	Gross Domestic Product
GEWE	Gender Equality and Women's Empowerment
GFP	Gender Focal Point
GHG	Greenhouse Gas
GIS	Geographical Information System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GNP	Gross National Product
GoR	Government of Rwanda
HIV	Human Immuno-Deficiency Virus
ICP	Indicative Cooperation Program
ICRAF	World Agro-forestry Centre
ICS	Improved Cook Stove
ICT	Information and Communication Technology
ID	Intervention Director
IFAD	International Fund for Agricultural Development
IFDC	International Centre for Soil Fertility & agricultural Development
INDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
ITA	International Technical Assistant
LDC	Least Developed Countries
LPG	Liquefied Petroleum Gas
M4P	Market systems approaches or 'Making Markets Work for the Poor'
MAI	Mean Annual Increment (m^3 /ha/year)
M&E	Monitoring & Evaluation
MDG	Millennium Development Goals
MINAFFET	Ministry of Foreign Affairs and Cooperation
MINAGRI	Ministry of Agriculture and Animal Resources
MINALOC	Ministry of Local Government
MINECOFIN	Ministry of Finance and Economic Planning
MINICOM	Ministry of Trade and Industry
MININFRA	Ministry of Infrastructure
MINIRENA	Ministry of Natural Resources
MTEF	Medium Term Expenditure Framework
MTR	Mid-Term Review
MoU	Memorandum of Understanding
M&MRV	Monitoring and Measurement, Reporting and Verification
MRV	Measuring, Reporting and Verification
NAMA	Nationally Appropriate Mitigation Actions
NAFA	National Forestry Authority (precursor of DFNC)
NFMS	National Forest Monitoring System
NGO	Non-Governmental Organization
NPFS	National Project Forest Specialist

NTFP	Non-Timber Forest Products
ODT	Oven Dried Tonnes
PAFOR	Forest Management Support Project
PAREC	Rwanda-Belgium Study and Consultancy Fund
PAREF	Support Program to the Reforestation in Rwanda
PAREF.BE (1 or 2)	Support Program to the Reforestation in the Northern and Eastern Provinces of Rwanda (Phase 1 or Phase 2)
PAREF.NL (1 or 2)	Support Program to the Reforestation of 9 Districts of the Northern and Western Provinces of Rwanda (Phase 1 or Phase 2)
PFM	Participatory Forest Management
PFO	Professional Forest Operator
PGReF	Rwanda Sustainable Woodland Management and Natural Forest Restoration Project
PIN	Project Identification Note
PMU	Project Management Unit
PPP	Private Public Partnership
Pr-FMU	Private Forest Management Unit
PS	Permanent Secretary
PSC	Project Steering Committee
QCC	Quality Control Committee
QQA	Qualitative and Quantitative Assessment
RAB	Rwanda Agriculture Board
RAF(I)	(International) Administration and Finance Officer
RBC	Rwanda Biomedical Centre
REDD+	Reduced Emissions from Deforestation and forest Degradation
REFIT	Renewable Energy Feed in Tariff
REG	Rwanda Energy Group
REMA	Rwanda Environment Management Authority
RNRA	Rwanda National Resources Authority
R-PP	Readiness Preparation Proposal (for REDD+)
RWA	Rwanda(n)
RWF	Rwandan Franc
SC	Steering Committee
SCA	Specific Cooperation Agreement
SCC	Swedish Cooperative Centre
SE4All	Sustainable Energy for All
SEW	Sustainable Energy through Woodlots and Agroforestry in the Albertine Rift Project
SFMP	Simplified Forest Management Plan
SIDA	Swedish International Development Agency
SIEP	System of Information and Permanent Evaluation
SMP	Supply Master Plan
SNV	Netherlands Development Organisation

SPAT	Strategic Plan for Agricultural Transformation
SRHR	Sexual and Reproductive Health and Right issues
St-FMU	State Forest Management Unit
SWAp	Sector Wide Approach
SWOT	Strengths, Weaknesses, Opportunities, Threats
TA	Technical Advisor/Assistant/Assistance
TFF	Technical & Financial File
ToR	Terms of Reference
ToT	Trainer (training) of trainers
TSC	(former) Tree Seed Centre (Centre des Graines Forestières); now Tree Seed Unit
TWG	Technical Working Group
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
VAT	Value Added Tax
WB	World Bank
WISDOM	Woodfuel Integrated Supply/Demand Overview Mapping
WSMP	Wood Supply Master Plan

EXECUTIVE SUMMARY

This project supports the Government of Rwanda in its efforts to reduce the gap between the supply and demand of woody biomass.

The Forest Management and Woody Biomass Energy Support project (FMBE) is funded from the Energy 'envelope' of the Indicative Cooperation Programme (2011-2014) between the Governments of Belgium and Rwanda.

The specific objective of the current project has been formulated as: *"Woody biomass production capacity is increased on selected private and public land in the districts of intervention*".

Two results contribute to the achievement of this objective:

Result 1: Districts Forest Management Plans are developed and implemented

Result 2: Improved capacity of RNRA and districts for monitoring forest management, gender integration and benefitting from climate financing opportunities

FMBE builds on the experiences gained and lessons learned over the past eight years during the implementation of two earlier projects (PAREF BE1 and PAREF BE2) funded through the Belgian Government, which aimed to build capacities and boost the development of the forestry sector. The establishment of District Forest Management Plans (DFMPs) in the districts of intervention has been an important output of the PAREF.BE2 project as this is seen as an important instrument by the Government of Rwanda for supporting sustainable forest management.

There exists still little experience with the implementation of these DFMPs and also capacity for it is still lacking. To address this, the project will provide technical support with a strong focus on the development of the management approaches and required capacity at the different levels for the various components of the DFMPs: the establishment of PPPs for long-term concession contracts for the management of public forests; sustainable management of private forest; intensified action on agroforestry in order to find suitable areas for expanding forest/tree cover; supporting adoption of agroforestry practices through FFS extension system; and roadside plantation. The focus for these project interventions will be in the beginning of the project mainly in 3 previous PAREF.be2 districts and in a later stage in the district of Rwamagana. New DFMPs will be still developed for the district of Rwamagana and the 3 districts of 'Rural Kigali'. For the Rural Kigali districts proposals will be developed for financing certain components of the DFMP through FONERWA and/or other possible funding mechanisms. The approach of the project is geared towards strengthening the capacity of RNRA and the districts in the design and implementation of DFMPs and the efficient rolling-out to other districts.

The project has the following strategic orientations: improved forest management through the implementation of DFMPs; encouragement of private sector participation in forest management; focus on biomass production capacity on private land; linking the forest sector to possible opportunities for future climate financing and ensuring gender mainstreaming in the development and implementation of the DFMP.

The Project Management Unit is integrated into the SPIU of RNRA. The Project Steering Committee is the highest management level of the project and is responsible for guiding and supervising the strategic steering of the intervention. The project will be managed according to the co-management system. Technical Assistants will be recruited to support technical forest management in the Districts while one International Technical Assistant will be there to support the technical methodology, the coordination and the capacity building. Close involvement of RNRA in the design and implementation of the DFMPs combined with the coaching and 'learning by doing' is the guiding principle for the capacity development of RNRA at central level.

The Belgian contribution to the project is EUR 3 million, while the contribution of Rwanda is estimated to be around € 800,000. The implementation period is 3.5 years.

ANALYTICAL RECORD OF THE INTERVENTION

Intervention number	NN 30 175 44
Navision Code BTC	RWA 15 098 11
Partner Institution	Ministry of Natural Resources (MINIRENA)
Duration of Specific Agreement	54 months
Duration of Project implementation	42 months
Estimated starting date of intervention	2016
Contribution of the Partner Country	€ 800,000 (estimated)
Belgian Contribution	€ 3,000,000
Sector (DAC code)	31261: Forestry development whose primary purpose is production of fuelwood
Brief description of the intervention	Support to improve the sustainable management of forest resources through the development and implementation of forest management plans at the district level and to strengthen the performance of forest related public and private actors
General Objective	Improvement of sustainable management of forest resources contributes to poverty reduction, economic growth and environmental protection
Specific Objective	Woody biomass production capacity is increased on selected private and public land in the districts of intervention
Results	*Result 1*: Districts Forest Management Plans are developed and implemented *Result 2*: Improved capacity of RNRA and districts for monitoring forest management, gender integration and benefitting from climate financing opportunities

1 SITUATION ANALYSIS

1.1 National Policy context (for woody biomass supply and demand)

1.1.1 Vision 2020

The primary objective of Vision 2020 (Republic of Rwanda, 2012), adopted in 2000 by the Government of Rwanda, is the transformation of Rwanda by the year 2020 into a middle-income country, in which Rwandans are healthier, educated and generally more prosperous. It is founded on six pillars, at least three of which are directly relevant to the reduction of the gap between supply and demand of woody biomass. These three pillars are:

1) Human-resource development and a knowledge-based economy,

2) A private-sector-led economy and

3) Infrastructure development.

The human resource development pillar is relevant to the professionalization of the industry through skills and technology transfer. A successful forestry and charcoal industry will benefit from well-developed and viable private sector participation, while infrastructure development is a key pillar that encompasses multiple elements. These elements include land use management, urban development, transport, communication, energy, water and waste management. Each of these is relevant to a sustainable charcoal and fuelwood value chain. All three cross-cutting areas of Vision 2020 - gender equality, environment and natural resources management and encouraging the development of science, technology and ICT skills - are also relevant for the implementation of this project.

1.1.2 EDPRS

EDPRS II (2013-2018) aims to implement Rwanda's Vision 2020, ensuring that the country achieves middle-income status by 2020 by accelerating economic growth to (11.5% average), reducing poverty to below 30%, and restructuring the economy towards services and industry. Its main targets relate to: strategic infrastructure investment for exports; more private sector financing to increase exports; urbanisation; and a green economy approach to sustainability.

The Second Economic Development and Poverty Reduction Strategy (EDPRS 2) proposes to address challenges identified at the completion of EDPRS 1 through four Thematic Strategies: Economic Transformation, Rural Development, Productivity and Youth Employment, and Accountable Governance. Under Economic Transformation, there is a strong focus on strengthening the private sector while promoting a "green" economy. Rural Development (under Priority 4) aims principally to Connect Rural Communities to Economic Opportunity through improved infrastructure, including modern biomass and other cooking methods.

Environment and climate change are considered 'cross cutting issues'. They involve (i) mainstreaming environmental sustainability into productive and social sectors; (ii) reducing vulnerability to climate change and (iii) preventing and controlling pollution. Key sectors include agriculture, energy, environment and natural resources, infrastructure, health, private sector and financial sector.

EDPRS II supports the previous target of increasing forest cover to 23.5% by 2012 and reset a new indicator to reach 30% by 2018. In addition, it recommends for sustainable management of forest biodiversity and critical ecosystems through protection and maintenance of 10.25% of the land area,

and reduction of wood energy consumption from 86.3 % to 50% by 2020 as reflected in the 2020 Vision targets.

EDPRS II has explicitly identified several crosscutting issues – capacity-building, environment and climate change, gender and family (including gender-based violence), HIV/AIDS and non-communicable diseases, and disability and social inclusion – to be mainstreamed in all sector strategies and district plans. These are key points in Belgian legislation and in development cooperation policies. Given the strong connection between gender and HIV, an integrated approach to these two issues is required, as recommended in the "Gender Assessment of the Rwanda's HIV National Response" (RBC-UNAIDS, 2013). Rwanda has no specific law obliging institutions, organisations and enterprises to have an HIV workplace policy for their employees. Currently RBC is working on the development of a national HIV and AIDS workplace policy.

1.1.3 National Strategy for Climate Change and Low Carbon Development, "Green Growth and Climate Resilience"

With increasing evidence of climate change, it became necessary to align overall development goals as indicated in Rwanda's Vision 2020, with climate-change resilience, to anticipate future climate change impacts and plan interventions accordingly. The National Strategy for Climate Change and Low Carbon Development, "Green Growth and Climate Resilience[1]", adopted in 2011, therefore aims to guide the process of mainstreaming climate resilience and low-carbon development into key sectors of the economy. The Strategy includes a long-term vision for Rwanda to be a developed, climate-resilient, low-carbon economy by 2050. It addresses the three largest sources of greenhouse gas (GHG) emissions (agriculture, energy and transport) in the mitigation "big wins", which will enable low-carbon development while increasing food and energy security, reducing vulnerability to oil price spikes and reducing payments abroad. Under climate resilience and adaptation, the strategy highlights agroforestry as a means of providing wood for fuel and social protection while avoiding deforestation.

The National Strategy further identifies "quick wins", addressing the enabling pillars such as providing for financing Rwanda's Green Fund (locally known as FONERWA), and Integrated Planning and Data Management. The latter will support applications for climate finance, which require that GHG emissions are Measurable, Reportable and Verifiable (MRV) (Republic of Rwanda, 2011).

Programme 12 of the Green Growth Strategy relates to Sustainable Forestry, Agroforestry and Biomass Energy. Specific actions envisaged include:

- Promotion of Afforestation/Reforestation (A/R) through enhanced germplasm and technical practices in the planting and post-planting process;
- Improved Forest Management (IFM) for degraded forest resources;
- Joint formulation and implementation of Agroforestry by MINIRENA/MINAGRI; and
- Licensing of sustainable charcoal production techniques and promotion of improved cooking stoves (ICS) for efficient, clean wood and charcoal consumption.

To coordinate and monitor the implementation of the strategy's adaptation and mitigation actions, Rwanda has set up the Green Economy Technical Coordinating Committee and the National Fund for Environment and Climate change (FONERWA). The latter is a national green fund to mobilize additional internal and external climate funds (see also 1.4.5).

[1] http://www.uncsd2012.org/content/documents/364Rwanda-Green-Growth-Strategy-FINAL.pdf

1.1.4 Rwanda's Intended Nationally Determined Contribution to the Global Climate Agreement

Rwanda submitted its revised Intended Nationally Determined Contribution (INDC) on 2 December 2015 to the UNFCCC[2]. This was built upon its National Strategy for Climate Change and the Low Carbon Development Strategy.

The Adaptation Contribution of the INDC includes a programme of action on Sustainable Forestry, Agroforestry and Biomass Energy. Specific activities envisaged include the promotion of afforestation/reforestation of designated areas using improved germplasm, and technical practices in planting and post-planting management, and improved management of degraded forest resources. In the context of the latter, Rwanda aims to implement, by 2030, public-private partnerships to sustainably manage all its public forestry plantations through multi-year contracts with forest operators (and cooperatives) who will plant and maintain young plantations until they reach commercial maturity. All these activities will help reduce GHG emission through increased carbon sequestration.

The INDC also mentions the adoption of an integrated approach to sustainable land-use planning and management, and the development of a National Spatial Data Infrastructure.

Rwanda plans to increase the efficiency of charcoal production by up to 50% by 2030 under the "Energy efficiency and demand side management" Programme of Action. It further states (under the "Sustainable Forestry, Agroforestry and Biomass Energy" Programme of Action) that sustainable charcoal production techniques will be licensed. It is estimated that the sustainable charcoal value chain will avoid the emissions of approximately 5.7 M ton of CO_2-eq over a 15-year period (2016-2030).

Rwanda clearly indicates that the full implementation of its INDC will require predictable, sustainable and reliable support in the form of finance, capacity-building and technology transfer.

The Paris Agreement concluded in December 2015 requires each country to submit every five years an updated climate plan – termed its 'Nationally Determined Contribution' (NDC) – and it establishes the principle that these future national plans will be no less ambitious than existing ones, thereby steadily increasing their ambition in the long-term. This provides further impetus for the implementation of the actions included in Rwanda's INDC.

1.1.5 National Forest Policy

The specific objectives of the current National Forestry Policy (2010)[3] are to:

- Objective 1: increase and diversify the national forest resources
- Objective 2: improve the management of forest resources
- Objective 3: improve forestry extension
- Objective 4: increase the downstream processing of wood and non-timber forest products
- Objective 5: develop research in forestry and agro-forestry
- Objective 6: save wood
- Objective 7: improve the capacities of the public forestry institutions
- Objective 8: evaluate the contribution of goods and services provided by the forestry sector

[2] See http://www4.unfccc.int/submissions/INDC/Published%20Documents/Rwanda/1/INDC_Rwanda_Nov.2015.pdf

[3] Rwanda's National Forest Policy won the 2011 Future policy Award for the world's most inspiring and innovative forest policy. The three winning policies which most effectively contribute to the conservation and sustainable development of forests for the benefit of current and future generations were announced by the World Future Council on 21 September 2011 at the United Nations. See:

worldfuturecouncil.org/fileadmin/user_upload/PDF/2011_Future_Policy_Award_Brochure_En.pdf

- Objective 9: reinforce sub-regional and international cooperation in forestry
- Objective 10: integrate gender dimension into forestry activities.

The new project contributes to objectives 1, 2, 7 and 10. The National Forest Policy was the first concrete step of the Rwandan Government to embed the priorities of the National Poverty Reduction Strategy and EDPRS in the forestry sector. The role of forests in supplying woody biomass is not specifically mentioned.

The Policy, with support from PAREF Be2, is presently undergoing revision. Although the earlier NFP focused on critical issues threatening Rwanda's forest resources, it was observed[4] also that the issues to be addressed have since become more complex and need greater levels of rehabilitation and relatively greater financial inputs to resolve. Additionally, the institutional, management and technical capacity required to solve today's issues exceeds what was needed in the past and will require upgrading to meet this task. These issues are addressed in the draft, which is still under discussion, for the new policy: Rwanda National Forest Policy 2017.

The proposed policy is likely to emphasize on the following issues:

- institutional and professional capacity
- forest establishment & rehabilitation capacity
- private sector forest development participation
- Woody biomass energy management
- biodiversity & ecosystem conservation
- participatory forest management
- agroforestry.

The final revision is expected to be submitted for cabinet approval in the beginning of 2017 following stakeholder consultation.

1.1.6 Decentralization

The four strategic objectives of Rwanda's decentralisation policy are: (i) to raise public awareness and mobilize people in the development, implementation and monitoring of development programmes; (ii) to increase transparency and make local authorities directly responsible to their communities; (iii) to support national sensitivity to participative development and enable local leadership to facilitate structures that give priority to the needs expressed by the grassroots population; and (iv) to develop sustainable economic planning based on efficient management of locally available resources.

The arrangements currently in place date back to major reforms carried out in 2006, when:

(i) A new division of the national territory was created, comprising the city of Kigali (with three Districts), and **4 provinces** (formerly 11), **30 districts** (formerly 106) (the towns are no longer considered as administrative entities but must rather support the development of the countryside) and **416 sectors** (formerly 1545).

(ii) The *District*, as a decentralized entity, became the level of planning, development coordination and resource mobilization, while the *Sector* became the level of service delivery. Each District has a Mayor, two Vice-Mayors and an Executive Secretary. The latest organisational chart (August, 2014) is presented in Annex 5. A District Forest & Natural Resources Officer and an Environmental Officer form part of the District Agriculture and Natural Resource Unit.

[4] Indicated in a draft version of the RNFP 2017, which is still under discussion and to be finalized.

1.1.7 Biomass Energy Strategy (BEST)

With support from the European Union's Energy Initiative (EUEI) Partnership Dialogue Facility and GTZ (now GIZ), MININFRA developed a National Biomass Energy Strategy (BEST) in 2008 with a particular focus on improvements to the charcoal supply chain. The goal of the strategy was to ensure a more sustainable supply of biomass energy (i.e. firewood and charcoal) and to promote access to modern fuels. It also promoted efficient biomass combustion technologies for households and small enterprises.

The Strategy provides excellent justification for this project:

- The contribution of biomass to the national energy balance remains high. Today the contribution is around 85%, and is expected to be 50% in 2020.
- Biomass remains by far the largest source of energy used especially for domestic cooking and it is likely that this will continue for the foreseeable future. [Current estimates indicate that even with ambitious planned roll-out of electrical grid connections, more than 50% of the population will remain off-grid in 2018. Experience across Africa also suggests that demand for charcoal will increase rapidly with urbanization. Households will first use it as a complementary fuel to firewood but gradually shift entirely as it is more convenient, and alternatives such as LPG and electricity are currently expensive.]
- Biomass provides an affordable source of energy for the Rwandese population, at least relative to the alternatives. These are either less convenient (such as agricultural residues) or (much) more expensive (such as electricity and LPG, which is currently heavily taxed);
- For national energy security reasons it is important that the largest source of energy used in the country is (a) renewable and (b) does not depend on external influences or foreign exchange;
- Biomass is a green, renewable source of energy;
- Last but not least, woody biomass generates an important source of income and labour. The value of firewood and charcoal was estimated at between USD 60 – 75 million in 2007 (BEST/ MININFRA, 2008) or 3.4% of GDP. What is more, some 50% of this value remains in rural areas where it is distributed among farmers/wood growers and charcoal makers; as such, it is a true engine of rural development.

Another significant finding from the various studies undertaken as part of strategy development was that farmers can and do grow trees profitably for fuelwood and charcoal (amongst other wood products). The strategy notes the lack of forest management and proposes interventions that *'develop and promote silvicultural practices among private plantation owners, in order to preserve and improve their standing stock, increase forestry productivity (at least x 2 in managed areas) and (which) favour rational and sustainable tree-cutting.'* The strategy also acknowledges that improving the management of forests on public land is a key supply side intervention: *'Stop illegal cutting in public plantations, set up management plans for restoring public national and district plantations, develop and promote adapted tree management and rational cutting methods, train local bodies and professionals, in order to have 50% of public plantations under management and rational cutting by 2015 (75% by 2020), with considerably better forestry productivity (x 2 in managed areas); allow private management of public plantations.'*

Both these shortcomings will be addressed by the current project i.e. encouraging growing of trees by farmers and improving forest management of both public and private plantations.

A revision and update of BEST is foreseen for 2017 with the support of the Study & Expertise Fund financed by the Belgian Government.

1.1.8 Sustainable Energy for All (SE4All) Action Agenda

The SE4ALL Action Agenda highlights the important role biomass currently plays in Rwanda's energy budget. The current demand of 4.2 m T of wood is equivalent to 650 MW of electricity generation. To put this in context, current installed electricity generation capacity in Rwanda stands at about one quarter of this demand, i.e. 160 MW. This is predicted to rise to 563 MW by 2017/18.

The Agenda suggests a number of actions relevant to the new project focus:

- Reduce dependency on biomass energy (from its current level of 85%) to 55% by 2017 and to 50% by 2020;
- To close the gap (about 20% in 2009, currently around 50%) between production and consumption of biomass supply through (i) 100% access to more efficient cooking stoves than are currently used – thus doubling the efficiency of biomass energy use. Targets are an increase of 160% on 2009 efficiency by 2020 and 230% by 2030; (ii) improved charcoal production and partially replacing charcoal with biomass pellets; and (iii) increasing the production of wood by improving forestry management. The official target is still to balance supply and demand by 2020 but it looks more realistic to achieve this by 2026-2030, based on recent summary report of analysis of projection scenario on the supply/demand balance of woody biomass (RNRA, June 2016)

1.2 Institutional framework

1.2.1 MINIRENA

The Ministry of Natural Resources (MINIRENA) is relatively young, having been established in 2011 following the merger of the former Ministry of Lands and Environment (MINELA) and the Ministry of Forests and Mines (MINIFOM). It is the line ministry mandated to coordinate, formulate policy and provide policy guidance to the environment and natural resources (ENR) sector. To deliver its cross-cutting mandate, MINIRENA is supported by two semi-autonomous, sub-sector, agencies: the **Rwanda Environment Management Authority (REMA)** and the **Rwanda Natural Resources Authority (RNRA)**, which are responsible, respectively, for environmental protection and promotion, and the management of natural resources (comprising land, water, forests, mines and geology).. As well as policy formulation, MINIRENA is responsible for coordinating the ENR sector's contribution to EDPRS2 (2013-2018) development outcomes through the 5-year ENR Sector Strategy. This, with the other 15 Sectors and 30 District strategies developed concurrently are the main vehicles for implementing the EDPRS2. With the support of RNRA and REMA, MINIRENA is expected to achieve the overarching objective of the ENR Strategy, which is to ensure that environment and natural resources are utilised and managed productively in support of equitable and sustained national development and poverty reduction.

The emphasis on ENR and the pursuit of a green-economy approach to economic transformation in the EDPRS2, and the Green Growth and Climate Resilience Strategy provide MINIRENA with a unique opportunity to influence other sectors during implementation of EDPRS2.

1.2.1.1 Rwanda Environment Management Authority (REMA)

The "Climate Change and International Obligations" department of the Rwanda Environment Management Authority (REMA) addresses the issues of climate change and coordinates the implementation of regional and international environmental agreements (http://rema.gov.rw/).

The department's main functions include:

- Developing national capacity in Clean Development Mechanisms (CDM);
- Assuring the secretariat of the Designated National Authority (DNA) under the Kyoto Protocol's CDM;
- Coordinating the preparation and implementation of policy, strategy and regulatory frameworks and instruments towards mitigation and adaptation to climate change;
- Advising on opportunities and emerging issues related to climate change and climate change response measures;
- Coordinating the implementation of Multilateral Environmental Agreements and other International Environmental Obligations;
- Providing technical input in negotiating and implementing regional and international conventions, protocols and treaties relating to environmental management;
- Initiating and coordinating the drafting of the national reports, and assessing convention decisions and recommendations to update the plan by integrating relevant points;
- Providing technical advice related to Global Environmental Facility endorsement of projects.

The "Environmental Regulations and Pollution Control" department of REMA is responsible for ensuring that environmental degradation is prevented and remedial measures are proposed where degradation occurs. It also develops regulations, guidelines and procedures aimed at promoting better environmental sustainability of developmental activities.

1.2.1.2 RNRA - Department of Forestry & Nature Conservation (DFNC)

The DFNC is one of four Departments under RNRA (the others are Lands, Mapping & Registrar of Land Titles, Integrated Water Resources Management, and Geology & Mines). Each is led by a Head of Department. The DFNC has four Units: Forestry Management, Extension and Natural Ecosystems Management, Forestry Inspection and Monitoring, and Forest Seed which between them are responsible for:

1. Participating in the design of the policies and strategies relating to forestry and agroforestry, and ensuring their implementation.
2. Advising the Government on policies, strategies and legislation related to forestry management, and on the implementation of international conventions relating to forestry and the protection of natural resources such as land, water and forest biodiversity in forest area.
3. Supporting the bodies in charge of fighting soil erosion with the aim of safeguarding forestry and the environment.
4. Preparing national programmes for reforestation and forestry management, helping districts to prepare their own forestry management and processing plans, and supervising the implementation of such programmes.
5. Advising, assisting and encouraging private-sector stakeholders participating in reforestation activities, to maximise effective management and productivity.
6. Making and updating the list of tree species to be planted in the country; specifying suitable areas according to soil-type and the expected end-use of such trees; and providing advice and instructions on tree species or related products to be imported or exported.
7. Ensuring the management and exploitation of public forest resources.
8. Undertaking research, investigation, studies and other relevant activities on the importance of forestry in the national economy and the exploitation of forestry-related products, and disseminating the findings.

9. Disseminating research findings on tree-planting technology in different situations (e.g. on land for cultivation, in pastures, for reforestation); on efficient maintenance of forest and their utilization for income-generation; on rational utilization of forests and related products; and collecting all the data on forestry and related products.
10. Preparing technical norms for activities related to reforestation, protection and rational utilization of forests as well as the valuation of forestry products.
11. Evaluating and closely monitoring development programmes to ensure they adhere to the relevant standards of forest management and rational utilization.
12. Developing relationships with other forestry-related institutions and international organizations.
13. Ensure supply of quality tree germplasm and improvement of forest genetic material

1.2.1.3 RNRA – Single Project Implementation Unit

RNRA is in charge of the management of natural and forest resources and is the main government actor responsible for the sustainable supply of woody biomass. In May 2015 was decided to create the Single Project Implementation Unit (SPIU) in RNRA to contribute to efficient coordination and management of Natural Resources programmes and supported by Development Partners through RNRA. [5]. Meanwhile the SPIU has developed procedures for the finance, procurement and administration and an organizational structure has been developed. At the same time the funding mechanism of the SPIU by development partners is under discussion to determine the costs of shared use of services.

The SPIU is presently managing 4 programs: Forest, Land, Water and Climate Change Programme. Each program has a project manager with supporting staff and the SPIU Coordinator has a team with supporting staff for the overall coordination.

1.2.2 MININFRA

The Ministry of Infrastructure (MININFRA) is responsible for Transport, Water & Sanitation, Urban planning and housing development, and **Energy**. Although biomass is an important component of Rwanda's energy budget (and does get a mention in the 2015 Energy Policy (see below)), the Ministry's Energy Division does not have a specific person responsible for this. The Ministry's website is also silent on biomass as an energy source. However, the Ministry does chair the Biomass Technical Working Group which operates under its eSWAP Secretariat.

The Ministry promulgated a new Energy Policy in March 2015, in which it outlined the main policy objectives for the biomass sector. These are as follows: ' *The main policy objective for the biomass sub-sector is to facilitate fuel-switching from traditional biomass energy carriers toward modern biomass energy technologies and cleaner fuel alternatives in order to achieve a more sustainable wood fuel balance and reduce consumption of non-renewable biomass, and to deliver related social, health, and environmental benefits. In addition to measures to promote switching to more sustainable biomass energy technologies at household level, such as biogas, LPG, and peat briquettes, among others, small-scale, commercially viable biogas projects including gasification of crop residues will be promoted through inclusion under an expanded REFIT regime.* ***Existing biomass resources should be exploited in a manner that promotes greater sustainability of supply, while reducing the negative impacts of harvesting to the environment and Rwandan habitats. MININFRA will***

[5] In February 2016 an organisational assessment was conducted on the request of BTC by experts of Moore Stephans, with the aim to assist in the definition of the modalities of the project FMBE in formulation. As the SPIU was at that moment only in the start-up phase an action plan has been jointly prepared for the implementation of the SPIU.

develop strategies and action plans including capacity building and enhancing market transformation. *The implementation of sustainable biomass energy programs focused on cleaner cooking technologies shall be decentralized in order to accelerate delivery and improve impact. MININFRA will continue to provide technical assistance through REG Ltd to the districts. With support and guidance of MINALOC, district authorities will be required to incorporate delivery of sustainable biomass energy technologies into their annual performance contracts. This will promote more ownership. Districts will play a pivotal role in education and awareness-raising, and the extension of government subsidy mechanisms and microfinance schemes. ……..*'

1.2.3 MINALOC

The Ministry of Local Government (MINALOC) is the lead ministry in promotion of decentralized services delivery, and as such is a key partner in the implementation of the current project.

Decentralization has, since 2000, been a key policy of the Government of Rwanda for promoting good governance, service delivery and national development. The last decade of decentralisation has resulted in many major positive developments in participatory democratization and local accountability but it is widely agreed that much remains to be done to achieve effective citizen-centred service-delivery. Local Government structures are in place and functioning with institutional systems and staffing levels that are comparable to those in Central Government. In every domain, including public financial management, all 30 districts can be regarded as having basic competences. However, the last revision of the Policy recognises that they are not yet fully functioning as strong local governments capable of effectively initiating, planning, financing and implementing service-delivery programmes and accounting for resources in a timely and accurate manner.

Major constraints remain the inadequate functional linkages and collaboration between local government and line ministries/departments, and the lack of joint planning among local governments and between local and central government entities. Local governments may not be in position to act autonomously on some policies and programmes. However a change process is under way, from which lessons are drawn to implement the policy better in future. Fiscal decentralisation remains incomplete: in the environment and natural resources sector, for example, budget are still controlled and issued through the parent ministry.

The overall goal of the revised Decentralisation Policy (2012) is to deepen and sustain grassroots-based democratic governance and promote equitable local development by enhancing citizen participation and strengthening the local government system, while maintaining effective functional and mutually accountable linkages between central and local government entities. In order to realize this goal, the following specific objectives are being pursued:

(i) To enhance and sustain citizens' participation in initiating, making, implementing, monitoring and evaluating decisions and plans that affect them by transferring power, authority and resources from central to local government and lower levels, and ensuring that all levels have adequate capacities and motivations to promote genuine participation.

(ii) To promote and entrench a culture of accountability and transparency in governance and service-delivery by strengthening national and local accountability mechanisms to make them more relevant, credible, conducive, supportive/attractive to all citizens, leaders and non-state entities.

(iii) To fast-track and sustain equitable local economic development as a basis for enhancing local fiscal autonomy, employment and poverty reduction, by empowering local communities and local governments to explore and utilize local potentials, prioritise and

proactively engage in economic transformation activities at local, national and regional levels, and ensure fiscal discipline.

(iv) To enhance effectiveness and efficiency in the planning, monitoring, and delivery of services by promoting joint development planning between central and local governments and ensuring that service delivery responsibilities and corresponding public expenditure are undertaken at the lowest levels possible.

(v) To consolidate national unity and identity (*ubunyarwanda*) by fostering, enhancing and sustaining the spirit of reconciliation, social cohesion and common belonging as a nation hence ensuring lasting peace and security as well as community of purpose for sustainable national development.

(vi) To build and consolidate volunteerism, community work and self-reliance based on cultural and other values of collective responsibility, personal worth and productive involvement.

(vii) To fast-track and translate the regional integration agenda into politically meaningful, economically fruitful venture for Rwandans in all corners of the country, and as a strong anchor for national stability, peace and unity.

1.2.4 MINAGRI and the Rwanda Agriculture Board

As the greatest proportion of woody biomass used for energy derives from farmer's fields and the availability of private land offers the greatest potential to expand tree planting in many Districts, a fourth key Ministry which impinges on woody biomass production is the Ministry of Agriculture and Animal Resources (MINAGRI), and more particularly, one of its Agencies - the Rwanda Agriculture Board (RAB). Scientific research in forestry is the responsibility of the Rwanda Agricultural Board, although this does not have a very high priority in terms of funding or staffing. The laboratory facilities (seed centre, wood technology) are outdated or non-existent. Recently, the Tree Seed Centre (TSC) has been transferred to the Department of Forestry and Nature Conservation of RNRA (and renamed as the Tree Seed Unit) but an expected memorandum of understanding (MoU) detailing the collaboration between RNRA and RAB on forest seed is not yet signed. RAB also works closely with ICRAF (the World Agroforestry Centre) and has several good demonstrations of effective incorporation of trees (for biomass production, improvement of soil fertility, stabilisation of steep slopes etc.) in the agricultural landscape. MINAGRI, however, does not appear to have a formal policy or strategy for the promotion of agroforestry (and as with biomass and MINIFRA/MINIRENA, there is a risk that responsibility for agroforestry falls between two Ministries (MINIRENA and MINAGRI).

Apart from applied research activities, RAB is also charged with delivering agro-forestry extension services to farmers and communities, which it implements using the Farmers' Field School (FFS) and 'Twigire Muhinzi'[6] approaches. (See Section 3.3.4.1) Due to a lack of human and financial resources these agroforestry extension services are undertaken in conjunction with some of the many donor-funded projects (such as ex-PAFOR, PAREF BE & NL, and PGReF) and are thus limited in scope and extent to those districts where projects are undertaking forestry training – although scaling-up and consolidation of Twigire Muhinzi to all districts is programmed.

[6] See http://www.newtimes.co.rw/section/article/2015-02-10/185815/

1.2.5 The Private Sector Federation

Rwanda's Vision 2020 recognizes the private sector as one of the six main pillars for driving social and economic development (See Section 1.1.1). The Private Sector Federation was founded in December 1999 as the Private Sector's counterpart and umbrella organisation in the Private-Public-Partnership framework. Since then it has expanded its role to help strengthen sectoral associations. The organisation's main objectives are to:

- Promote entrepreneurship and business growth
- Build private sector capacity
- Provide effective private sector advocacy
- Support active involvement in regional and international trade
- Develop quality member services and enhance communication

The PSF is structured around ten chambers (including 'agriculture and livestock', 'industry', 'women entrepreneurs', 'commerce and services' etc.), whose memberships comprise a number of Associations.

The organisation is presently of little relevance to this project but future representation of professional forest operators and other actors in the wood fuel value chain would be a major step towards formalising the chain.

In 2011 the Rwanda Private Sector Federation developed a "Standard Minimum Package for responding to HIV and AIDS" in collaboration with UNAIDS.

1.2.6 Rwandan Cooperative Agency

Traditionally, Rwanda had its own self-help arrangements. Some of these, such as ubudehe, umubyizi and umuganda survive to the present day. Cooperatives are common in Rwanda and the formation of cooperatives is encouraged by the government. The Common law, no. 31/98 provides the legal basis for their formation and operation. All such cooperatives are registered with the Rwanda Cooperative Agency (RCA).

However, most cooperatives in Rwanda function as social rather than commercial organisations. They are seldom involved in the bulk purchasing of inputs for their members and there is little effort to concentrate production in order to achieve better market prices. Technical and business services from cooperatives to their members are often weak.

Typically, cooperatives start as associations without legal standing and when they have sufficient members they apply to be registered with the Rwanda Cooperative Agency. However, very few charcoal-making Associations have so far been registered.

1.3 Situation analysis for woody biomass energy

The challenge posed by wood energy in Rwanda (and indeed much of sub-Saharan Africa) is complex. The resources are limited, and the demand is high and increasing. The demand for fuelwood and charcoal is greater than sustainable wood production from current forest and tree resources. It is also clear that in the short- to medium-term wood, complemented by farm residues, will remain the only affordable fuel for the majority of Rwandese population. Today approximately 86% of Rwanda's primary energy comes from biomass, mainly in the form of wood that is either used directly as a fuel (57%) or converted into charcoal (23%) together with smaller amounts of crop residues and peat (6%).

(World Bank, 2012[7]). Biomass is also an important source of income and employment. The value of firewood and charcoal in 2007 was estimated to be of the order of 60-75 million USD or 3.4% of GDP. Some 50% of this value remains in rural areas where it is distributed among woodlot owners and charcoal burners, and thus represents a valuable contribution to rural livelihoods. (World Bank, *idem*)

1.3.1 Supply of woody biomass

The available data on the annual increment of plantations and natural forest formations does not support the accurate estimation of the sustainable supply potential, which is the quantity of woody biomass that can be annually produced on a sustained basis whilst maintaining the productive capacity of natural or man-made forest and shrub formations. However, based on the limited data from eucalyptus plantations and a few other species, the Rwanda Supply Masterplan for Fuelwood and Charcoal (based on an update of the 2008 WISDOM / FAO study) estimated Low and High productivity alternatives, from which a Medium productivity/mid-range value was determined. This Medium value may be considered realistic until new evidence is produced.

According to this Medium productivity estimate, the sustainable supply potential in 2009 was 3.3 million tons dry matter (or approximately 4.75 million m^3 of wood). The Southern Province accounts for 41% of the total supply potential, followed by the Western Province (29%) and by the Northern Province (15%).

Planted forests are the main source of woody biomass for energy and construction materials, accounting for 80% of the supply (2.65 million tons). Low productivity eucalyptus species make up 91% of all plantations (as pure stands or eucalyptus-dominated stands), and account for 72% of all woody biomass consumed in the country.

Agroforestry sources of woody biomass such as trees outside forest (TOF) and on-farm woodlots (<0.25 ha) are important sources of fuelwood and wood for charcoal throughout the country. Using plantation productivity as an indicative reference, the estimated supply potential of these agroforestry sources is tentatively estimated at 0.61 million tons/yr. This productivity is limited to "conventional" wood assortments, excluding other assortments such as collected deadwood, twigs, and smaller branches from periodic pruning of farm trees and shrubs that, although "marginal" from a commercial perspective, do play a crucial role in the energy economy of rural households. Natural shrub formations cover significant areas in the eastern part of the country. Their woody biomass supply potential is estimated at 51 thousand tons/year (dry matter). There is currently no data about shrub stock and productivity in Rwanda and this estimate should be considered tentative and probably conservative. (The on-going National Forest Inventory will supply this information.)

1.3.2 Demand for woody biomass

The most recent figures for consumption of woody biomass for energy and construction materials are for 2009 (WISDOM/FAO[8]), when it was estimated at 4.8 million tons dry matter (approximately 6.86 million m^3 of wood). This includes consumption in the residential, industrial, public and commercial sectors. Sawn wood consumption is excluded.

Some of this total demand is met by deadwood, twigs, and smaller branches collected from annual pruning of farm trees and shrubs. This smaller-dimension material is usually excluded from forest

[7] Establishing a Green Charcoal Value Chain in Rwanda - A Feasibility Study. World Bank (2012)
[8] See http://www.fao.org/docrep/013/ma223e/ma223e00.pdf

inventories and is thus not accounted for in statistics of conventional supply sources. These "marginal" wood assortments are commonly used as fuelwood in rural areas where conventional wood (large stems and branches) is scarce. It is not known what fraction of the demand for fuelwood is satisfied by "marginal" wood, nor what its sustainable production potential is. In the attempt to quantify its contribution, the WISDOM update study assumed that marginal wood replaced conventional wood in the rural areas where the available conventional wood (within a 4 km radius) is insufficient to satisfy the demand. Conservatively, it set the replacement fraction to 30% of the demand, as a maximum.

By revising the consumption of fuelwood in rural areas where wood resources are scarce, the total demand for "conventional" wood in Rwanda for energy and construction materials in 2009 was estimated to be 4.2 million tons (approximately 6 million m^3 of wood.) This is the wood demand that has to be set against the "conventional" wood supply potential in order to estimate and map the supply/demand balance.

Kigali City is the biggest consumer, accounting for 26% of Rwanda's entire woodfuel[9] consumption, followed by Southern Province (22%) and Western Province (21%).

According to a 'Business as Usual' scenario, the demand of woody biomass for energy and construction in 2020 is estimated to rise to 5.7 million tons (from the 4.2 of 2009). In this scenario the demand in Kigali City will account for 27% of the national demand.

The 2020 balance between supply and demand (assuming a 'Business as Usual' Demand scenario and "normal" supply potential) indicates a deficit of 2.1 million tons. While part of this gap may be filled by marginal wood products and by a higher proportion of crop residues in the household energy mix, it is certain that the increased demand without a proportionate increase of the supply potential will result in further (and faster) overexploitation of forest resources. The increased use of farm and crop residues for energy rather than leaving them *in situ* will have a negative impact on soil fertility and farm productivity.

1.3.3 Options identified for the reduction of the supply – demand gap

The table below indicates that a balance between supply and demand of energy wood in 2020 can only be achieved if all potential levers of improvement of the current production / consumption parameters are targeted, including:

1. Introduction of new energy sources (LPG, biogas, etc.)
2. Widespread use of improved stoves
3. Increase of the forest cover (plantations)
4. Use of modern (improved) carbonization kilns
5. Improvement of forest productivity
6. Increase in the number of trees planted in the agricultural environment (agroforestry)

In the Government of Rwanda's ESSP[10] document, only the first two levers are discussed in depth, while their estimated impact on the balance between supply and demand of energy wood (see table 1) only amount to 11%, and 22% respectively, when considered separately.

[9] The term 'woodfuel' is used throughout this document to indicate any energy source that comes from woody biomass. These cover a range of fuels, including fuelwood (sometimes used synonymously with firewood), charcoal, industrial fuelwood, wood pellets, biogas, cellulosic ethanol, and other advanced forms of bioenergy. Fuelwood, or firewood, consists of any unprocessed woody biomass used to fuel a small fire, most often for cooking or warmth.
[10] http://www.mininfra.gov.rw/fileadmin/user_upload/new_tender/ESSP_17th_March_2015.pdf

On the other hand, levers 3, 4, 5 and 6, whilst mentioned, have not been clearly brought out and elaborated upon, although these aspects may have the highest impact (13%, 40%, 42% and 30% respectively) on maintaining the balance between supply and demand of energy wood.

A strategy that ignores the crucial role of the points of improvement 4, 5 and 6, seriously jeopardizes the future availability of wood energy resources. Yet wood energy will continue to be the most important source of energy in Rwanda for several more years, not only in quantitative terms, but also in terms of satisfaction of the primary needs of the most disadvantaged people.

The WISDOM report concludes that among all solutions to be implemented in order to bridge the gap between demand and supply, the improvement of the charcoal value chain is the easiest to achieve (direct result in a short term) and has the most important impact (at least 40% impact on balance demand/supply with carbonization from 12% to 18%). In addition, the impact on GHG emissions is twofold including 1) GHG reduction through improved carbonization efficiency and 2) GHG sequestration through the conservation of forest resources.

Table 1: Impact of key fuelwood production and consumption parameters on the balance between supply and demand

Production/ consumption parameter	Hypothesis about the improvement of the parameter between 2009 and 2020	Impact on the reduction of the gap of 2.110 Mt in 2020 (cf. BAU)[11]	Additional strategic aspects
Improved stoves	% of use by households →+30%	22.6%	On the entire national territory
More efficient charcoal making	Carbonization rate : 12% →18%	40.0%	Actions must focus on the production Districts (those with an energy wood excess including Nyaruguru, Nyamagabe, Nyamasheke, Karongi, etc.). **Required :** organization and regulation of the chain and implementation of a new taxation system to encourage the use of modern techniques **Immediate impact**
Promotion of LPG in urban areas	% of use by households: Kigali: 15% → 30% Other towns : 4% →10%	11.0%	Primarily in Kigali and large towns
Better management of existing forests	Forest productivity: 9.5 → 12.4 odt/ha/year	42.3%	Over the entire national territory No immediate impact: first results in a minimum 5 years
Creation of 30,000 ha of new plantations		13.5%	Priority: 1. Districts with a production deficit, particularly those of the Eastern and Northern Province 2. Areas with steep slopes
Agro-forestry (3% increase of tree cover)	Coverage of trees out of forests : 5.2% → 8.2%	29.3%	Over the entire national territory : Priority:

[11] The impacts in % as presented in the table above should be considered separately for each isolated production/consumption parameter. They cannot be summed arithmetically since there may be overlaps.

Production/ consumption parameter	Hypothesis about the improvement of the parameter between 2009 and 2020	Impact on the reduction of the gap of 2.110 Mt in 2020 (cf. BAU)[11]	Additional strategic aspects
Agro-forestry (doubling of tree cover)	Coverage of trees out of forests : 5.2% → 10.4% (= doubling of the number of trees currently present in agroforestry areas)	50.8%	1. Districts with a production deficit, particularly those of the Eastern and Northern Province 2. Districts with not enough space for true reforestation 3. Areas with steep slopes

Source: Adapted from Final report Update and upgrade of WISDOM Rwanda; Agriconsulting. (2013)

1.3.4 Barriers to improving forest management and productivity

There are a number of major constraints to improving forest management and forest productivity in Rwanda. The most important of these are:

1. **Non-availability of quality tree seed:**

   In most cases, tree planting uses seed that is collected locally, without regard for genetic quality or the phenotypic qualities of productive trees. Often, the seed has not been subjected to any post-harvest treatment such as cleaning, drying, or specific conservation treatment according to species, or testing, such as for verification of germination percentage etc.

   Although it was set up to provide quality seed for forestry and agroforestry, the Tree Seed Centre (TSC) created in the early 1980s within the Forest Research Department (at the time housed within ISAR; after the Genocide, within RAB, and recently transferred to DFNC / RNRA), has not yet fulfilled its mission. Major reasons for this include the war and its consequences, limited technical capacity, and inadequate material and financial resources to sustain research and infrastructure.

2. **Inability to maintain pure-bred plantations of eucalyptus species**

   Over 70 eucalyptus species have been introduced and planted in Rwanda over the past 70 years. As many of these species readily hybridise (and have been planted in close proximity to each other, or, in some instances, in mixed stands), it is impossible to produce pure seeds of species useful for reforestation (e.g. *E. saligna, E. grandis, E. maideni*) from the existing stands, as they often include unidentified hybrids.

3. **Lack of quality land for sustained forest production**

   Given the limits of the territory and the population density, the national policy is to use the better soils for agricultural activities. Forestry activities are restricted to marginal land (on steep slopes, or on shallow, eroded or infertile soils).

4. **Restoration / conversion of degraded woodlands is expensive**

   In Rwanda, a number of eucalyptus plantations date back to the 1920s and have been coppiced continuously since then. Productivity is now very poor and the only possibility of improving it is to replant.

   However, as many public forests are located on steep slopes, replanting requires significant funds because of the high labour requirements. Traditionally, this has involved the digging out of old stools/stumps together with erosion control works.

5. **Lack of or insufficient data to guide silvicultural prescriptions for forest management**

There is currently too little forestry data regarding the majority of forest plantations and natural woodland in the country:

- A National Forest Inventory is underway but its data are not yet available;
- The process of developing / revising DFMPs is underway for some districts with the support of projects (e.g. PAREF BE2 PAREF NL2, PAGREF);
- The Forest cadastre works are not yet completed throughout the country;
- For some plantations, the date of planting (and hence the age) is unknown;
- The productivity of various woodland sites is unknown

6. **There is insufficient technical capacity at both central and decentralized levels**

For example, at national-level, there is only one person (with no support staff) responsible for forest inventory within the forest management unit at DFNC. At District-level, there is only one officer responsible for forestry – the District Forest and Natural Resources Officer (DFNRO) – who often has no formal forestry training, and again with no other support staff.

1.4 Opportunities provided by Climate financing mechanisms

1.4.1 The Paris Agreement

On 12 December 2015, 195 nations concluded an historic agreement to combat climate change and unleash actions and investment towards a low-carbon, resilient and sustainable future (http://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf). The universal agreement's main aim is to keep global temperature rise this century to below 2 degrees Celsius and to drive efforts to limit the temperature increase even further to 1.5 degrees Celsius above pre-industrial levels. The agreement also aims to strengthen the ability of countries to deal with the impacts of climate change.

To reach these ambitious and important goals, appropriate financial flows will be put in place, thus enabling stronger action by developing countries and the most vulnerable. Governments decided that they will work to define a clear roadmap on ratcheting up climate finance to USD 100 billion by 2020 while also (before 2025) setting a new goal on the provision of finance from the USD 100 billion floor. International cooperation on climate-safe technologies and building capacity in the developing world to address climate change are also significantly strengthened under the new agreement.

The Paris Agreement allows parties to pursue from 2020 onwards "co-operative approaches" and voluntarily use "international transferred mitigation outcomes" to help meet their reduction targets, while ensuring that transparency and the environmental integrity of the regime is maintained. Countries therefore must agree to robust accounting rules and must not double-count emissions reductions.

In summary, climate finance possibilities will increase in the future, through both market and non-market approaches. Monitoring, reporting and verification of effective impacts on GHG emissions will be important in both cases, requiring the collection of relevant data.

1.4.2 Nationally Appropriate Mitigation Actions

The concept of Nationally Appropriate Mitigation Actions (NAMA) first emerged in the Bali Action Plan (BAP) concluded by the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) of 2007. Although no formal definition exists, NAMAs can

be characterised as follows:

- Measures which contribute to the reduction or limitation of greenhouse gas emissions, in accordance with national circumstances and priorities.
- They contribute to the transformation of an economy towards low-carbon growth, combining development and climate change mitigation.
- NAMAs are carried out on a voluntary basis by both developed and developing countries.
- It is both possible to design and implement NAMAs unilaterally ("unilateral NAMAs"), or to rely on financial or technical support from other countries ("supported NAMAs").
- The concept of NAMAs is closely linked to Measuring, Reporting and Verification (MRV).

The UNFCCC developed a NAMA registry allowing developing countries to record information for all NAMAs seeking support for development or implementation. Parties are also encouraged to enter information for NAMAs implemented unilaterally in order to be recognized for their mitigation efforts (http://www4.unfccc.int/sites/nama).

In 2015 Rwanda submitted seven NAMA proposals seeking support for preparation to the NAMA registry (http://www4.unfccc.int/sites/nama/SitePages/Country.aspx?CountryId=145). The NAMA proposal "Developing a Sustainable Charcoal Value Chain" is directly relevant for the FMBE project. This NAMA focuses on improving the sustainability of charcoal production, transportation and retail as well as the policy and institutional framework. The Rwandan government estimates that countrywide implementation of the NAMA will lead to net GHG emission reductions of approximately 5.77 $MtCO_2e$ for the 2016-2030 period, based on the carbon-sequestration potential from avoided deforestation.

All seven NAMAs are also included in Rwanda's INDC (see 1.1.4). The Paris Agreement requires each country to submit every five years an updated climate plan – called Nationally Determined Contribution (NDC) – and it establishes the principle that these future national plans will be no less ambitious than existing ones, thereby steadily increasing their ambition in the long-term. This provides further impetus for the implementation of the actions included in Rwanda's INDC.

1.4.3 Reducing Emissions from Deforestation and Forest Degradation (REDD+)

REDD+ fosters conservation, the sustainable management of forests and the enhancement of forest carbon stocks.

Rwanda has already developed its Readiness Preparation Proposal (R-PP) document, serving as a strategy to guide Rwanda in its preparation for participation in the international mechanism for reducing emissions from REDD+ activities (FAO, October 2014). The document highlights the roadmap for designing policies and measures to protect the remaining forest resources from deforestation and degradation, and to enhance forest carbon stocks. Rwanda's R-PP further provides an organizational structure for the implementation of REDD+, taking into account pre-existing institutions and stakeholders in the forest and environment-related sectors. The first step for accessing potential REDD+ financing is the establishment of a Forest Reference (emission) Level (FR(E)L) and the technical assessment thereof at UN level. The National Forest Monitoring System (NFMS) can contribute for delivering the necessary data. The country has not yet assigned its REDD+ national entity/focal point.

The Paris Agreement recognises that Parties should take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases, including forests. Parties are encouraged to

take action to implement and support, including through results-based payments, the existing framework as set out under the UNFCCC REDD+ decisions.

1.4.4 Green Climate Fund and other climate related funds

The Green Climate Fund (GCF) was established in 2010 by 194 countries party to the UN Framework Convention on Climate Change (UNFCCC). The Fund aims to support a paradigm shift in the global response to climate change. It allocates its resources to low-emission and climate-resilient projects and programmes in developing countries. The Fund pays particular attention to the needs of societies that are highly vulnerable to the effects of climate change, in particular Least Developed Countries (LDCs), Small Island Developing States (SIDS), and African States.

The Fund offers a wide range of financial products, including grants, loans, guarantees and equity, enabling it to match project needs and adapt to specific investment contexts, including the use of its funding to overcome market barriers for private finance.

Rwanda has its institutional arrangements in place for accessing funds of the GCF: REMA has been nominated as the designated national authority for GCF. Moreover, Rwanda's Ministry of Natural Resources (MINIRENA) has been accredited as the implementing entity for the Green Climate Fund (GCF), meaning that MINIRENA may develop and submit funding proposals to the GCF and oversee the management and implementation of projects and programmes, deploying a range of financial instruments within their respective capacities (grants, loans, equity, and guarantees) and mobilizing private sector capital (http://www.greenclimate.fund/). End of 2015, Rwanda was granted financial support (300.000 USD) from the GCF to "strengthen their systems and prepare projects or programmes for funding by GCF". The project under the Fund's Readiness and Preparatory Support Programme is implemented by FONERWA over a 12 month period (http://www.greenclimate.fund/-/rwanda-secures-gcf-grant-to-accelerate-access-to-climate-finance).

MINIRENA is also accredited as the implementing entity for the UNFCCC Adaptation Fund (www.adaptation-fund.org). The Adaptation Fund finances projects and programmes that help vulnerable communities in developing countries adapt to climate change. Initiatives are based on country needs, views and priorities.

Several other multilateral and bilateral climate funds and financing initiatives exist. www.climatefundsupdate.org provides a good overview of these. Beside information on the type of climate change funds, the site also provides information on the scale of proposed and actual financing and on what focus, regions and particular projects the funds support.

1.4.5 Rwanda's National Fund for Environment and Climate Change (FONERWA)

FONERWA is Rwanda's environment and climate change fund, established in 2005 under Organic Law no.4/2005 and officially launched in 2014. Its purpose is to be the engine for the next 50 years of green growth in Rwanda through the provision of technical and financial support to the best public and private projects that align with Rwanda's commitment to a green economy (http://www.fonerwa.org/).

FONERWA is the vehicle in Rwanda through which environment and climate change finance is channelled, programmed, disbursed and monitored. As a national basket fund, FONERWA is an instrument to facilitate direct access to international environment and climate finance, as well as to streamline and rationalise external aid and domestic finance. Access to the Fund is open to line

ministries and districts, charitable and private entities, including businesses, civil society and research institutions. FONERWA carries out a formalized process of public calls for proposals.

FONERWA operates along four thematic financing windows and entry points for fund capitalisation and expenditure. Several of these windows are relevant to the activities under the FMBE-project. Afforestation/reforestation activities fall under Window 1 “Conservation & Sustainable Natural Resources Management”, while improved efficiency of charcoal production falls under Window 2 “Energy, R&D & Technology Transfer & Implementation”.

Financial instruments offered by the fund include in-kind support for proposal development, grants, low-interest loans, guarantees and investments. The choice depends on the beneficiary (e.g. government bodies, NGOs, CSOs, business enterprises, individuals, commercial banks) and the timeframe for financial support (short, medium, long term).

Several of the projects funded to date include afforestation, reforestation, agroforestry and biomass energy activities. FONERWA encourages the development of programmatic and integrated projects.

1.5 Strengths and weaknesses (opportunities and threats) of the woody biomass sub-sector

The following table presents a synthesis of the strengths, weaknesses, opportunities and threats relating to the woody biomass sub-sector in Rwanda. These are largely garnered from the previous sections of Chapter 1.

Table 2: SWOT analysis of the woody biomass sub-sector

Strengths	Weaknesses
Strong political will to improve the biomass energy value chain and encouraging PPPs Important capital of existing artificial woodlands (strong resource base (nucleus) and evidence of the potential for improvement) Tradition of agro-forestry (substantial / effective resource) Fuelwood is a very appropriate (and renewable) energy source Procedures for organising and recognising cooperatives are in place Farmer Field School system well established Rwanda has the institutional framework for attracting and managing climate financing in place, and is an early mover among the Least Developed Countries	*Weaknesses associated with the resource:* Low productivity of plantations (both on public and private land) Poor site-species/provenance matching Poor genetic quality of local seed sources Poor nursery standards Poor post-plantation management *Weaknesses associated with institutional capacity:* Forestry sector undeveloped / under-resourced Funding mechanisms of sustainable decentralized forest management not defined Lack of data on the forestry sector Forestry not taken as a priority in a number of Districts (forest indicators not sufficiently integrated in imihigo) Lack of knowledge amongst contractors / District-level forestry staff on silvicultural management of plantations: poor species-site selection; poor nursery practices; lack of maintenance of plantations; poor harvesting techniques

	Few trained forest staff at District / Sector levels Limited capacity to implement DFMPs/ SFMPs (HR and finance) (Agro-)forestry extension poorly developed or non-existent National Tree Seed Unit and seed supply chain in need of rehabilitation Limited capacities of forestry education institutions Insufficient operational budget to MINIRENA No clear institutional home for biomass energy production
Opportunities	**Threats**
Forest M&E system under development Very dynamic institutional context; many donors / significant financial resources expected over coming years Potential to capitalise on FFS for agroforestry and simple forest management extension Data from National Forest Inventory shortly available Forest Policy, Forestry Sector Strategic Plan and National Forest Management Plan in process of revision/design (expected 2016) - all integrating principles of sustainable forest management through forest management plan, and to be implemented by/with private operators (PPP) Experience of DFMP/SFMP preparation / revision from 6 PAREF Be2 Districts	Increasing gap between supply of and demand for woodfuel/charcoal leads to overharvesting and to the use of secondary biomass fuels, thus reducing soil fertility In the short term, increasing supply needs due to the demographic growth (although there is a policy goal is to reduce biomass energy use by 50%) No (updated) District Forest Management Plans in some Districts Slow public procedures with regard to the season-bound forestry activities

1.6 Support for the sector from Belgian cooperation and other development partners

1.6.1 Belgian cooperation

The Belgian Cooperation has previously funded two phases of support to the forestry sector in Rwanda. PAREF BE1 (with a budget of EUR 3 million) ran from April 2008 to September 2011 and had, as its Specific Objective, 'Quantitative and qualitative degradation of the forest resources brought under control and the needs of Rwanda for forest products increasingly met'. Results to achieve this were (1) Institutional capacities from the central level to the decentralized level are strengthened; (2) Forest resources in pilot districts (3 in the Northern Province and 3 in the Eastern Province) are increased and diversified and their management is improved; and (3) Actions of wood downstream processing and energy saving are promoted.

A second phase (PAREF BE2), with a budget of EUR 6,870,000, began in October 2011 and will end (following a no-cost extension) in November, 2016. The specific objective of PAREF BE2 was: to establish the bases of a system of sustainable management of the forest resources of Rwanda and

increasingly meet the needs of the country for forest products" – through (R1) an increased availability of trained professional foresters and strengthened technical capabilities of stakeholders in the forestry sector; (R2) reinforced institutional capacities to implement the national forest policy, from central to the decentralised level; and (R3) increased, diversified and better managed forest resources in its intervention Districts. Both phases worked in 3 Districts in Eastern Province: Ngoma, Bugesera and Kirehe and three Districts in Northern Province: Rulindo, Gicumbi and Gakenke. The main focus has been on establishing forest plantations on public land, revising DFMPs and designing SFMPs, and supporting farmers to establish on-farm woodlots and to practice agroforestry.

Key lessons learned from these two phases of support include: i) the importance of realistic planning – given the lack of human resources in the sector; ii) the need of strong support to Districts in order to ensure sustainable implementation of newly revised/designed DFMP/SFMPs and more relevant and better integrated forest indicators in the District imihigo; iii) the need to intensify action on agroforestry (through technical support and training) in order to find suitable areas for expanding forest/tree cover; iv) the need to build capacity of FMGs and private sector contractors to ensure improved management of plantation forests on public land: plantation maintenance should be included in contracts; v) the importance of supporting inter-ministerial coordination to ensure success in the woody biomass energy sub-sector; and vi) the importance of ensuring that project management is firmly embedded with the RNRA/DFNC in order to support capacity building and have an influence on policy development.

1.6.2 Other development partners

A number of other donors and projects have been operating in the woody biomass/wood energy sub-sectors over the past decade. These include:

***FAO /*Wisdom Rwanda**

Based on the work carried out under the framework of the FAO/Government of Rwanda Project "Rationalisation de la filière bois-énergie/Rationalization of wood energy" TCP/RWA/3103, a spatial analysis of woodfuel production and consumption in Rwanda was carried out, applying the "Woodfuel Integrated Supply/Demand Overview Mapping Methodology (WISDOM)".

The WISDOM methodology was applied to improve knowledge on wood-fuel supply and demand, in order to support sound policy-formulation and planning, and strengthen national capacities. Other components of the project focused on tree nurseries and distributing seedlings to local farmers, and training local operators on efficient charcoal-making and producing improved woodstoves.

The FAO study report "WISDOM Rwanda" was subsequently updated under PAREF-BE2. The final report prepared as part of the project entitled "Update and upgrade of WISDOM Rwanda and woodfuels value chain analysis" (MINIRENA / RNRA / DFNC, 2013). The main options identified to reduce the supply demand gap by the update WISDOM analysis are presented and discussed under 1.3.3. of this TFF.

World Bank

Funded by the Governments of Finland and Norway (TF-ESSD), the World Bank (WB) undertook a feasibility study entitled "Establishing a Green Charcoal Value Chain in Rwanda". This study provided an excellent overview of the current status of the sector. More importantly it suggested possible wide-ranging programmes and the investment needed to support the development of a well-regulated and competitive market for a sustainable supply of charcoal, which fits in the Government's energy policy and meets the ambitious environmental sustainability targets of Rwanda. The total cost of these (in all 30 Districts) was estimated at just over USD 25 million.

Dutch cooperation

The Netherlands supports the forestry sector through PAREF NL, which during its first phase was run by the PAREF Be Project Management Unit. PAREF NL1 had a budget of EUR 10 million, worked in nine Districts (Rusizi, Nyamasheke, Rutsiro, Karongi, Nyabihu, Rubavu, Ngororero of the Western Province; Musanze and Burera of the Northern Province) and ran for four years (January 2009-December 2012). It focused on public forest plantations with an emphasis on increasing production for wood energy. A second phase (PAREF NL2 – 'Support to Participatory Forest Management pilots and biomass energy production), with a budget of EUR 6 million, works in the same nine Districts. Implementation began in July 2013 and is due to end in 2016.

CATALIST/SEW project

The Netherlands also funded a regional Project (CATALIST/SEW), which intervened on private land. It supported farmers in creating their own woodlots and forests in six Districts (Burera, Rulindo, Bugesera, Nyanza, Nyamagabe, and Nyaruguru). The project ran from 2009 to 2011 with a budget of EUR 20 million shared between three countries (Burundi, DRC and Rwanda). In Rwanda CATALIST concentrated on a market-based approach to charcoal production. This approach used many of the key features of the 'Making markets work for the Poor' approach (M4P). [See http://www.enterprise-development.org/page/m4p]

Vi-Agroforestry and 'We Effect' (formerly the Swedish Cooperative Centre)

Vi-Agroforestry is the main NGO involved in agroforestry and land conservation in Rwanda. Under the framework of the "Lake Victoria Regional Environmental and Sustainable Agricultural Productivity Programme", the organisation's core activity is the improvement of agricultural production through agroforestry. Work focuses on four priority areas: Sustainable agriculture adapted to climate change, Gender equality, Farmers' organisations and Economic security. In Rwanda, Vi-Agroforestry currently partially covers 3 districts (6 sectors in Gasabo, 6 sectors in Rulindo and 12 sectors in Gicumbi).

AfDB / Forest Management Support Project (PAFOR)

Funded by the African Development Bank, under the supervision of MINIFOM (the former Ministry responsible for forestry), this project ran from 2003 to 2010, with a budget of USD13.5 million. The project focused on:

- Afforestation on public land, reforestation of sensitive areas: bare lands, steep areas, watersheds around lakes, buffer zone of natural forests, rehabilitation of natural forest (enrichment), roadside planting. Afforestation works are implemented by contracting local associations through the district tender board.
- Management of woodlands: works of rehabilitation/maintenance, mapping and inventory (Nyungwe Buffer Zone), maintenance of forest roads, support to the preparation of 20 District Forest Management Plans.
- Promotion of agro-forestry: the project organised the production of seedlings and their distribution to the beneficiaries.
- Promotion of improved stoves.
- Mobilization of a revolving fund to support decentralized forestry.
- Training of staff of institutions and training of afforestation cooperatives.
- Operational support to NAFA (= current DFNC) (equipment, awareness raising campaigns).

AfDB/PGReF

Funded by a EUR 4,586,859 grant from the Congo Basin Forest Fund (CBFF), PGReF is an initiative administered by the African Development Bank (AfDB). Implementation began in February 2012 and covers eight districts in the Southern Province: Nyaruguru, Nyamagabe, Gisagara, Huye, Nyanza, Ruhango, Muhanga and Kamonyi Districts.

PGReF has three components: forest management and sustainable practices (component A), livelihoods and economic development (B) and project management (C).

According to the Aide-mémoire of the MTR mission conducted in November 2014, technical implementation was as follows:

- The Revision of DFMPs had started and completion rate was estimated at 40%;
- 6,000 agroforestry seedlings were produced and planted on approximately 30,000 hectares of farmland (75% completion rate);
- The Rehabilitation / conversion of degraded woodlots has been carried out on 835 ha (53% completion rate);
- The restoration of degraded natural forests (Busaga in Muhanga District and Kibilizi-Muyira in Nyanza District) was undertaken on 150 ha (58% completion rate);
- Vulnerable populations (women, widows and Genocide survivors) have benefited from the creation of micro-woodlots on their plots totalling 235 ha (78% completion rate);
- New forest plantations on public land were carried out on 535 ha and 20,000 grafted avocado seedlings were distributed to farmers (100% completion rate).

The MTR noted that the project had suffered from a number of procurement delays.

2 PROJECT STRATEGY

2.1 Strategic orientations

2.1.1 Improved forest management through the implementation of DFMPs

The Forest Law states that each District shall prepare and implement a ten (10) year forest management plan (DFMP) for the sustainable management of the forest resources of the District. Through PAREF.be and other donor funded projects, a number of DFMPs have been prepared and are under preparation, but little experience is there with the implementation of DFMPs.

There is a general agreement that DFMPs provide a sound basis for improved forest management and therefore woody biomass production, although human and financial resources are constraints for the full implementation.

The project will, based on the lessons learned from the PAREF.be2, support on one side the development/design of DFMPs and related Simplified Forest Management Plans (SFMPs) for Forest Management Units (FMU) in some 'new' districts. On the other side, the project will support the effective implementation of DFMPs in some 'old' districts. By jointly developing with key stakeholders further concepts and guidelines, not only the capacity for participatory forest management will be developed, but also the efficient rolling out to the other districts.

2.1.2 Encouragement of private sector participation in forest management and sector development

The Government's policy for economic development includes encouraging and supporting more and more the private sector to assume lead roles in forest sector development. The intention is to support forest management on public area and on private area, through PPPs and a participative approach. The people, farmers and other actors exploiting the forest, living around a Forest Management Unit (FMU) will be supported to organize them in Forest Management Groups (FMG), which are responsible to ensure and contribute to sustainable management of such a FMU. For the forest on public land a private Professional Forest Operator (PFO) will become fully responsible for the management of the public forest (state or district) through a long-term concession contract with the state or district. This contract indicates the modalities and management rules for the production of energy wood, service wood and saw timber production. The PFO will have simultaneously an agreement (MoU) with the FMG for providing labour for the management of the forest, ensuring agreed access to NTFP. The project will, in collaboration with the districts and central level (RNRA), support the establishment of a Simplified Forest Management Plan (SFMP) for a FMU as well the managing of the contracting process and the capacity for control and M&E of the contract

For the private area with forest, a group of forest land owners will be supported to organize them in an association or cooperative for the sustainable management of their private Forest Management Unit. For this, they can consider to have or have not a business agreement/contract with a Professional Forest Operator (PFO) for fuel wood, service wood (stakes, poles, etc.) or even saw timber.

Whilst the implementation-focus is essentially private-sector led, it is important to remember that "private sector forestry" and the forestry entities of civil society in Rwanda are relatively weak. The project therefore will contribute to the strengthening of these private operators.

2.1.3 A focus on biomass production on private land

It is estimated that some 91% of woody biomass used for charcoal production and fuelwood in Rwanda is derived from trees growing on privately owned land[12]. Whilst there is also potential for supply of woody biomass from public (State and District) plantations, especially when these are being clear-felled prior to 'reconversion[13]' to more productive forest, the main thrust of the project will be on private forests on farmers' fields in addition to the support for the establishment of PPs for the forest management of public forest. The reasons for the focus on private forest are fourfold:

1) In some districts, farmers' fields provide the *only* available land for expanding the area of tree planting. This can either be in the form of small woodlots, boundary planting of trees, or trees in agroforestry systems e.g. planted to help stabilise terraces or otherwise improve soil fertility. In addition to new planting, there is also considerable scope for upgrading ('reconverting') old woodlots, which are often of low productivity and beyond responding to improved silvicultural management.

2) Growing and selling wood income to small farmers – thus offering an opportunity to improve rural livelihoods through increased household incomes. (A proviso here is, of course, that the farmer has sufficient land available to divert from crop production and is able to wait 2-3 years to realise an income stream from his tree planting activities.) On the positive side, labour requirements / hectare are significantly lower for tree plantations than for agriculture.

3) Forest management activities on public land should be guided by the silvicultural prescriptions outlined in District Forest Management Plans. Where these are not available (as will be the case, initially, in the District of Rwamagana where the project will operate), privately-owned land offers an alternative for immediate action. There is also an argument that public forest land should be used to grow high-value timber crops (rather than short-rotation wood energy crops), which because of the long rotation periods required, farmers are less able to do.

4) As mentioned above, private land already supplies some 90% of woody biomass used for energy. The project can therefore build upon existing knowledge and systems by helping farmers to grow trees more efficiently and therefore more profitably – through supporting the availability of more productive species/provenances and building capacity for improved management.

The increase of tree cover in agroforestry systems can have a great impact on the woody biomass production and therefore on the reduction of the gap between supply and demand (see § 1.3.3 table 1). Trees in agroforestry systems offer a variety of benefits for smallholders: they provide a source of fuel wood for domestic cooking, timber for construction, shade, fodder for livestock, green manure for improving soil fertility. In the DFMP agroforestry is considered as one of the important components through which trees are planted on farmland (in agroforestry systems) including in areas less than 0.25 ha. The project will give a focus on scaling up agroforestry with an emphasis on planting trees as source for fuelwood through the Farmers Field School (FFS) approach.

[12] CAMCO (Nov2014). Final report: Development of a sustainable charcoal production CDM Programme of Activities/NAMA in Rwanda

[13] 'Reconversion' is a French technical forest term for which there is no direct English translation. It is used throughout this document to refer to the clear felling and replanting of unproductive forest areas.

2.1.4 Linking the forest/biomass sectors to possible opportunities for future (climate) financing

Chapter 1.4 describes the different climate financing mechanisms and opportunities. At the Paris Climate Conference, the international community agreed to increase the amount of climate finance, both from public and private sources.

Rwanda has the institutional framework in place to develop and submit funding proposals to, and oversee the management and implementation of projects and programmes funded by, the Green Climate Fund and other climate funds.

Monitoring, Reporting and Verification of the impact on GHG emissions and/or uptake and on sustainable development of funded activities/programmes is an inherent part of any climate financing.

This implies that, for the FMBE project to be able to make the link to additional climate financing (which would then enable Rwanda to sustain / scale up the work of the project or fund new activities); the project should collect relevant data that can be used in the respective GHG accounting methodologies. It is on this basis that baseline and mitigation scenarios can be included in project/programme funding proposals that the project can develop on the basis of a proven concept.

2.2 Guiding principles of implementation

For project implementation, the current TFF is embedded in the following key principles:

- **Intervention flexibility** in order that the Project Steering Committee (PSC) can adapt the activities and their budgets to changing contexts and priorities at the time of the intervention. This is in recognition of the ***rapidly changing environment*** in the woody biomass sub-sector.
- The Project will have a ***'double anchorage'*** at both the *central level* (mainly with MINIRENA but there will be multiple institutional linkages with MINALOC/MININFRA/MINAGRI) and also at *district* level (where the main field activities in support of sustainable forest management will take place).
- By close involvement of RNRA in the design of DFMPs for the new districts and the implementation of DFMPs in some 'old' districts' (Northern PAREF.be2), the ***capacity at central level will be strengthened*** especially through 'learning by doing' and coaching and technical methodologic advise at the adequate way and right moment. Through this, the capacity development of RNRA will facilitate to play its role effectively and efficient for the support of the implementation of DFMPs in other districts.
- Achieving **clearly visible results** which can be **replicated** – develop a proven concept: given the available budget for the current project (EUR 3 million) and given that other financing is likely to come on-stream in the near future, the project should ***develop successful implementation concepts/models and demonstrating best practice that could be replicated in other districts.***
- Where possible, opportunities to leverage funds through other initiatives should be sought as well as ***to create synergies with other players in the same geographic area***. This implies that the project needs to collect sufficient data to develop a baseline and to measure the impact of its intervention. The project should strive to develop implementation models which demonstrate both 'quick wins' and also 'best practice', which could be scaled-up by the Government yes or no with the support of other (bigger) players.
- Ensuring **gender equity and empowerment** is considered in all project activities / interventions. Under PAREF BE2, guidelines have been developed to ensure that gender

aspects are mainstreamed in the District Forest Management Planning and implementation processes. These form an excellent basis for ensuring that gender issues are addressed in the wider forest / biomass energy sectors in Rwanda, and the new project should ensure that these are adopted, used and evaluated in the preparation and implementation of new DFMPs.

The project should also ensure that gender awareness is sufficiently elevated among decision-makers in the forestry sector. It will therefore monitor and report participation and outcomes of various project activities and results, including strengthening the capacities of DFNC and District staff in gender mainstreaming.

The project will provide gender-specific monitoring and evaluation in its reporting. Attention will be given to the collection of gender-disaggregated data in monitoring, and gender aspects will be included in the analyses of any evaluations.

It is also important to highlight the importance of developing a combined approach to gender, HIV/AIDS and other sexual and reproductive health and rights issues (such as the prevention of gender-based violence) as well as the rights of the child. Specific proposals have been developed[14] for the mainstreaming of HIV for ongoing interventions, such as the Farmer Field Schools (SPAT 2) and the Forestry Programme (PAREF). The focus of the proposals was essentially on prevention through continuous awareness raising and improving access to information.

- The use of the **Twigire Muhinzi/ Farmer Field School** approach for **forestry/agroforestry** extension. This is based on the concepts and principles of farmer- centred learning, and has been developed in Rwanda as an alternative to conventional extension methodologies which are often dominated by a government extension service. The Twigire Muhinzi/FFS approach is built on training of a number of 'Master Trainers' by subject-matter specialists. These Master Trainers in turn train Famer Facilitators, who then establish and work with a number of groups, each of which number about 20-30 farmers. Designed as a method of agriculture crop extension, the approach has enormous potential to be expanded to include agroforestry and simple forest management. PAREF BE2 has successfully piloted the approach[15] in three of its Districts in Northern Province – and it is proposed that the new project further expands the approach in its Districts in order to 'roll out' and support increased tree planting on farms. Twigire Muhinzi/FFS farmer groups / cooperatives or private entrepreneurs could form a focus for seedling production at Village-level but also for the awareness and introduction of improved technologies for saving biomass energy. It has been proven that facilitators are effective in scaling out agroforestry technologies. As the implication of the private sector (through tenders) in seedling production and distribution raised several issues in connection to the efficiency of the private sector e.g. seedling production not adapted to the need of farmers, poor transport of seedlings to the farmers affecting seedlings survival rate etc. Several recommendations are made for managing tree nurseries, producing and distributing seedlings of high quality according the needs of the farmers and the role of the facilitators in this and the promotion of agroforestry. In addition these groups give excellent opportunities for addressing transversal themes such as gender, and HIV.

[14] See BTC backstopping report "RWA-Mainstreaming HIV/SRHR/Right of the Child" (Bosmans, 2014)

[15] See the report "Main findings of the first workshop on the 2-3 June 2015 and the proposal of the updated Farmer Field School (FFS) method to DFNC/RAB"

2.3 Geographical coverage of the project

Given the available budget and the desire to be able to demonstrate measurable/visible impact, through the development of replicable implementation models, it has been decided to focus the current project in four main 'themes' (in districts bordering on one another located in three Provinces):

1) Preparation of DFMPs/SFMPs for the districts of Nyarugenge, Gasabo and Kicukiro Districts ('Rural Kigali Districts') and Rwamagana district (see figure 1 for the map with the intervention area).
2) Improving the capacity for the production of woody biomass through improved sustainable forest management in the districts of Gakenke, Rulindo and Gicumbi (previous PAREF.be2 districts of intervention in the Northern Province) and further in Rwamagana District (located in Eastern Province).

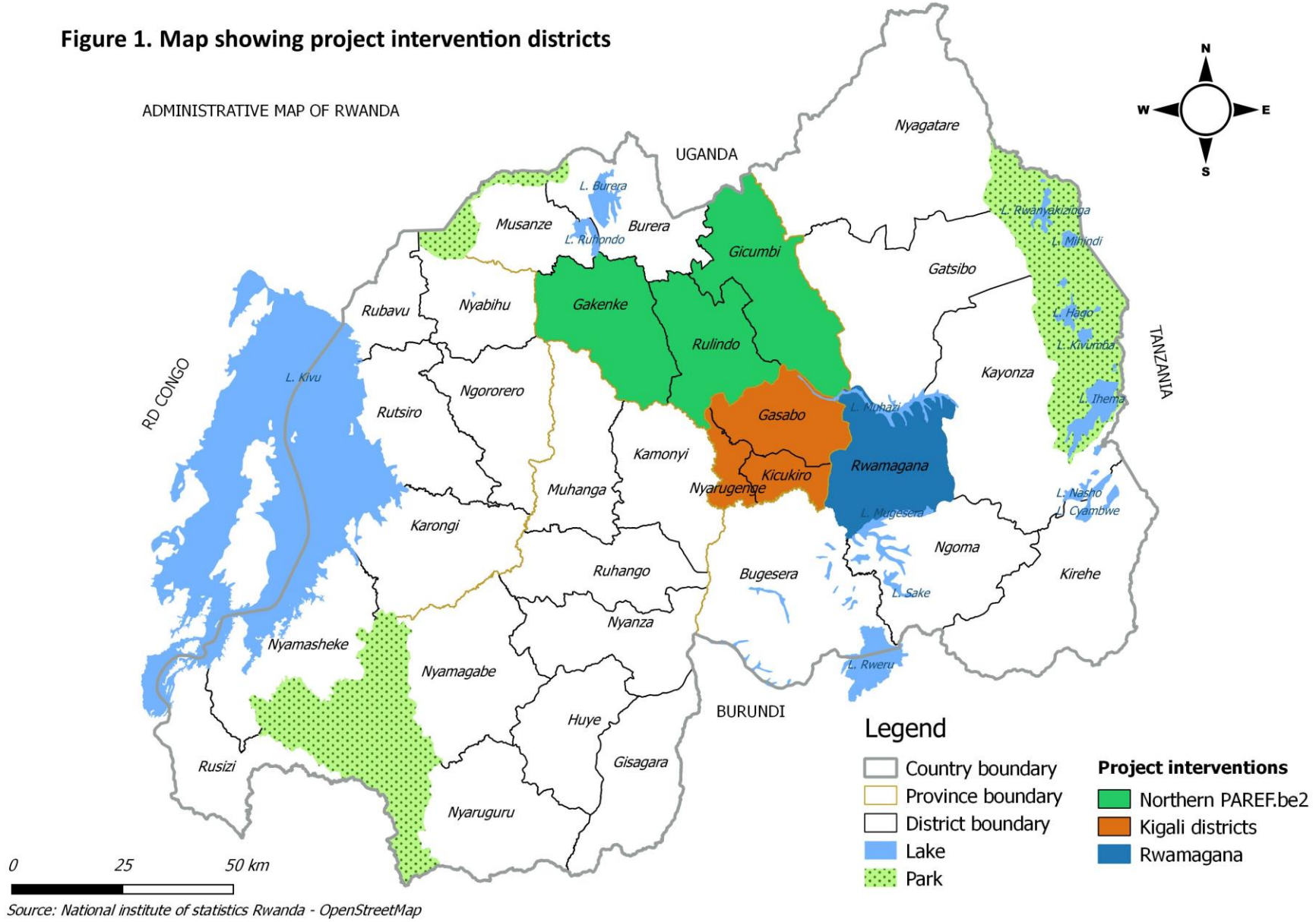
   The focus of project interventions here will be:

   i. Improved forest management through the development of the implementation approach of DFMPs and SFMPs (for PFUs) of specific components such as public forests, private forests, agroforestry and road side plantation ;

   ii. Involvement of the private sector for the management of public and private forest

3) Improved monitoring and coordination of the forest and woody biomass sectors; to be undertaken in Rwamagana, Gakenke, Rulindo and Gicumbi and at National level.
4) Support for preparation of funding proposals targeting climate finance opportunities which will support improved forest management and enhanced efficiency of the woody biomass value chain (in all seven project Districts)

Figure 1. Map showing project intervention districts



Source: National institute of statistics Rwanda - OpenStreetMap

3 INTERVENTION FRAMEWORK

3.1 General objective

The general objective is: “Improvement of sustainable management of forest resources contributes to poverty reduction, economic growth and environmental protection”.

3.2 Specific objective

The specific objective is: Woody biomass production capacity is increased on selected private and public land in the districts of intervention

3.3 Expected results

3.3.1 Result 1

Result 1 is: DFMPs are developed and implemented

Expected outputs from implementation of the activities under this Result include:

1. DFMPs are developed for 4 Districts (Rwamagana, Gasabo, Kicukiro and Nyarugenge). These districts will have therefore also an updated forest cover map and forest cadastre and a qualitative and quantitative assessment (QQA)[16] of the public forests

2. In at least in 4 districts (Rwamagana, Gakenke, Rulindo, Gicumbi) long term concession contracts for public forest are established with private Professional Forest Operators (PFO);

3. In these 4 districts, 12 Forest Management Groups (FMG) are established around 12 public Forest Management Units (State or District-FMU) which have signed a MoU with the PFO who is responsible for the management of the St-FMU;

4. Groups of private forest land owner are organized in Forest Owner Associations (FOA) (9 FOAs in the 3 Northern PAREF.be2 districts and 6 FOAs in Rwamagana district) around private Forest Management Units (Pr-FMU), for each of which SFMPs are developed and support is given for the conversion of old/poor forest in these Pr-FMU;

5. 80 groups of farmers perform within the FFS approach to support agroforestry. Each group will plant at least 2130 trees (also in the same 4 districts);

6. In Rwamagana District 40 km of new plantation along roads is realised in combination with the organizational structure for planting and maintenance. The responsibilities and ‘way of benefit sharing’ is stipulated in a MoU signed by the Assembly of villagers living in the neighbourhood of the road. In the 3 Northern PAREF Districts 50 MoUs concerning roadside plantation will be upgraded and will include ‘benefit sharing’.

[16] methodology for estimating standing wood value acquired by applying the procedure on how to calculate values per quality class starting from the standing wood volume.

7. Forest conversion and establishment of new forest on public and private lands on an equivalent of in total 550 ha and the provision of high quality seed and/or clones for these new plantations;

8. Increased capacity of officers within RNRA and the district for the development of DFMPs/SFMPs, facilitation and development of MoUs for PFM, management of tenders and arriving to long term concession contracts. In addition their capacity is also strengthened for supporting establishment of FOAs around Pr-FMUs and developing MoUs for collaboration between villagers and PFOs.

3.3.1.1 Activities (R1)

1. *Develop DFMPs/ SFMPs for targeted Districts (including forest cadastre, forest cover update & District Forest Inventory); (supports achievement of Outputs 1 and 8 above)*

   DFMPs have been prepared and revised in a number of Districts under the PAREF projects and other donor-funded projects. There is a general agreement that the DFMP provides a sound basis for improved management of district forest resources and in addition they are a legal requirement under the Forest law (see Box 2). A budget is provided under this new project for DFMPs to be elaborated in four Districts: Rwamagana and the three 'Rural Kigali Districts' (Kicukiro, Gasabo and Nyarugenge).The preparation of the plans also requires development of the public forest cadastre and a Qualitative and Quantitative Assessment (QQA) of public forest at district level. The development of the DFMPs is estimated to take between 18 to 20 months to complete (for technical validation).

   The DFMP will provide much needed baseline data on the supply and demand of woody biomass. The plans will be developed by a team comprised of:

   - International ITA: coordination, technical supervision and technical support to national TAs, RNRA and district-based staff
   - National TA, based in Districts (1 for Rwamagana, 1 for 3 Kigali districts): in charge of local complementary surveys/investigation, local contracts and facilitation, collection of socio-economic data; support and control of inventory teams; etc.
   - RNRA/DFNC will provide technical support to the districts and project team, and will be jointly responsible for the design and drafting of plans
   - SPIU – engaged GIS/Mapping Officer
   - District-based staff

   This approach (in comparison with the use of international consultancy-led team in the PAREF.Be2 project) will ensure a better development of national capacity in DFMP design and implementation through intensive on-the-job training on the technical methodology.

   QQA and updating districts forest cover maps will be conducted through 2 different sub-contracts. Updating the forest cadastre will follow the methodology used during PAREF.Be2, using a team of RNRA/LR.

   For the districts where new DFMPs will be developed awareness trainings session and workshops will be conducted for the key stakeholders for understanding and planning the process and actions to be executed for the design of a DFMP.

   In all this work, guidelines, prepared under PAREF Be2, for ensuring that gender concerns are fully addressed, will be embedded in the new planning process.

Box 1: District Forest Management Plans: definitions and the planning process.

The Forest Law Nº47bis/2013, (Article 13) states that each District shall prepare and implement a ten (10) year forest management plan. A Ministerial Order approves the District Forestry Management Plan. The DFMP is an operational document designed for the *sustainable* management of the forest resources of **the District**. It is implemented in line with the National Forest Management Plan and includes economic profitability / feasibility, preservation of the environment and improvement of the living condition of local people.

Each DFMP contains the long-term (30 years or more) silvicultural treatment planning of public forest of the **District** and mid-term **District** operational targets (10 years). The plans must be revised every 5 years. They are implemented through District annual action plans.

The DFMP covers the following categories of forest:

District forest plantations;
State forest plantation to be managed at District-level;
Roadside, riverside and lakeside plantations;
Private forest plantation (all forest plots more than 0.25 ha) in the District;
Shrubland/savanna areas in the District; and
Trees planted on farmland (in agroforestry systems), including areas of less than 0.25 ha

The DFMP must provide:

A Synthesis of analysis of the status of forest resources management in the district; long-term (30 years or more) silvicultural treatment planning of public forest, District targets (10 years) and detailed strategies of management per type of forest resources (and contribution to the NFMP);
A General description/analysis and delimitation of Forest Management Units in public forest lands;
Identification of potential Forest Management Units to be supported/promoted by the District in private forest lands; (NB: for each FMU a SFMP must be designed and implemented)
Management rules and operational modalities per type of forest resources and Management Entities; and
A District Action plan and budget to implement it.

The DFMP design / revision process

District forest areas Mapping/ Map updating (including road & infrastructure)
Public forest cadaster updating
(District forest inventories including 'Trees in Forests', 'Trees on farms'; and 'Trees outside forests'– Data from NFI will be used: no need of this costly inventory for the 4 districts)
Quantitative and Qualitative assessment of public forest stand (Volume table preparation / improvement – Data from NFI will be used: no need of new volume table for the 4 districts)
Socio-economic data analysis and Stakeholder analysis
Use of former DFMP and prescription from/link with NFMP
Wood production estimation (per type of forest and ownership)
Wood consumption and balance demand/supply estimation
Identification of strategic objective and operational targets
Identification of Management Entities and description of management prescriptions (for public forest)
Identification (and mapping), economic feasibility analysis and description of public FMUs (including roads and infrastructure)
Identification and summary description of potential private FMUs
Design model of contract and principle for FMUs contracting (public & private)
Design of action plan and budget to support design and implementation of SFMP for FMUs (public & private)
Design specific tools, management modalities and action plan for river/road/marshland side plantations
Design M&E system of DFMP (link with FMES)
Analysis and proposal regarding District Human Resources and logistic
Design District Action Plan & Budget, and propose strategy for funds support diversification/research
Estimation of incomes and impacts of DFMP on forestry sector.

[From: Guidelines for the Design/revision and Implementation of District Forest Management Plans and Simplified Forest Management Plans; Draft, July 2015; RNRA/MINIRENA]

Box 2: QQA: The Qualitative and Quantitative Assessment of (public) forest stands

Within the framework of the District Forest Management Plan (DFMP) an important aspect is that for these forests a management prescription is elaborated and an organization is proposed respecting the following main steps:

1. Identification and establishment of the demarcation of each (public) forest stands (cadastre)
2. For each public forest stand identified, **conduct the QQA**
3. For each public forest stand, based on the QQA results, elaborate a management prescription:
    a. **conversion** of old/poor forest , continued improved **management** of existing forest or **protection**
    b. the main **purpose of the wood** e.g. energy wood, service wood or timber wood
    c. **species** and **silviculture regime** (High forest or Coppice)
    d. based on the choice made (from a, b and c) a **silvicultural activities schedule** can be established for each stand for the full management cycle (rotation)
4. Identify and design for each Forest Management Unit (forest stands up to around 200 ha in average), a Simple Forest Management Plan (SFMP).

The **QQA** consist of a quick collection in a every forest stand of the following information required to allow the decision making regarding management and silvicultural prescription for each individual forest stand:

Qualitative information:

- Year of establishment, year of last cut
- Dominant tree species and spacing
- Ownership, accessibility and conflict issues/pressures
- Overall forest condition (productive, non-productive, exhausted stumps) and stand type/ treatment regime
- Overall soil quality, slope and need for anti-erosive ditches
- Management needs (conversion, thinning/harvesting, maintenance, protection)
- Potential use of existing and projected stock (energy wood, service wood, saw timber, protection, etc.)

Quantitative information (based on random sampling, using sample plots of 9,14 m radius) :

- Number of stems/ha
- volume/ha and total volume
- Forest area in ha

2. *Establishment of PPPs for long-term concession contracts for management of public forests (supports achievement of Outputs 2, 3 and 8 above)*

   For enabling the private sector to invest in and manage public forests, it is foreseen to establish long term concession contracts for managing one or more State-Forest Management Units17 (St-FMU) or District Forest Management Unit (Di-FMU) between State or District and private Professional Forest Operators (PFO). For this it is necessary that legal mechanisms are in place and guiding principles for concession contracts must be developed, validated and linked to the NFMP.

   For the considered St-FMU a SFMP will be developed. If required, the project will facilitate the resolution of conflicts, mainly border/land disputes, which will be needed at district and central

[17] State Forest Management Unit: a clearly delimited area composed by a set of different forest stands, which constitutes an economic unit to be exploited but also sustainably managed by an economic actor. This area will have a surface of at least 200 ha

level (MINIRENA) before a leasing contract can be signed as this is a pre-condition for success.

The project will give advice at Central and District level and support the capacity building for developing the ToR for the 'concession contracts' and managing the related procurement and contracting process. There should be also the capacity for controlling and monitoring the contract and clear guidelines how to act if the contractor does not respect the conditions as stipulated in the contract.

The project will, jointly with the districts and RNRA, support the PFOs with the establishment of MoUs/agreements between a PFO and (several) Forest Management Groups (FMGs). These FMGs are groups of farmers/actors living around a FMU, who will contribute to the sustainable management of the FMU and will have a certain 'benefit sharing' through for example providing labour to the PFO, having agreed access for timber and non-timber forest products (NTFP). Support will be given for the creation and required capacity building of FMGs, their capacity building and the participatory monitoring of the MoU.

Based on the experiences with the implementation, guidelines and templates will be developed, which will be relevant and can be used by other district of the country.

The above described activities will start from the beginning of the project in the 3 Northern PAREF Districts and for Rwamagana district after the DFMP has been technical validated.

The National TAs, one based at the District of Rwamagana and in one of the 3 Northern PAREF.be2 districts, will work closely with the DFNRO and RNRA to support, inter alia, the contracting, management and monitoring of private sector operators. They will also, with the support of the ITA, facilitate training sessions on participatory and improved forest management techniques for the private operators and contractors (based on training modules developed by PAREF Be2 for DFMPs) and, amongst other things, ensure that gender concerns are addressed – in line with the recommendations of the PAREF Be2 consultancy report on gender mainstreaming in the DFMP process.

3. *Support sustainable management of private forest (supports achievement of Outputs 4 and 8 above)*

The concept of sustainable participatory management of private forest is in elaboration and required jointly developing and piloting the framework and supporting guidelines and tools for this component with the concerned stakeholders.

In the districts there are private plantations which vary in size. In 6 PAREF.be2 District, more than half of the production area of trees has a size of less than 2 ha. Based on the existing 6 DFMPs developed under PAREF.BE2, it is estimated that there is a potential for establishment of around 300 Private Forest Management Units (Pr-FMU)18 per district of around 25 ha each. Each FMU will be managed by a Forest Owner Association (FOA) with or without the support of a private Professional Forest Operator (PFO).

Through the district staff, with the support of the project, there will be training and awareness sessions for the support of the establishment of FOAs. For a selected number of FMUs a SFMP will be prepared after a QQA inventory has been realised. Technical advice and

[18] Private Forest Management Unit: an area composed by a set of different forest stands owned by one or several private actors, which constitutes an economic unit to be exploited but also sustainably managed by a cooperative or association of (forest) land owners with or without the support of a Professional Forest Operator.

guidance will be given for the implementation of the SFMP and an assessment will be made for the appropriate finance mechanisms for providing support for the conversion of (a part) of the poor/old forest of their FMU.

For private sector actors, such as the PFOs, training will be given for encouraging them to increase their business activities in the forest sector through long term contracts with FOAs.

The work related to this activity will focus on the 3 Northern PAREF districts and on Rwamagana District. Initial efforts will focus on the organisation and capacity building of farmer/tree growers into groups.

4. *Support agroforestry / woodlot establishment on private lands through Twigire Muhinzi/FFS extension system (supports achievement of Outputs 5 and 8)*

   Agroforestry in the context of this project refers to both the planting/management of woodlots and also the establishment/management of single (individual) trees throughout the farm – for example along boundaries, terrace edges etc.

   Within the framework of PAREF.be2 good experiences have been achieved with working according the Twigire Muhinzi/FFS approach for the dissemination of agroforestry[19]. The support of scaling up these activities in these districts and the start in Rwamagana districts is foreseen. Therefore support for training of Master Trainers and Farmer Facilitators (80) is provided under this activity mainly through sub-contracting with a well-qualified operator/service provider for this training of Master Trainers and Farmer facilitators.

   These Farmer Facilitators are the spill for scaling up agroforestry by facilitating 80 FFS groups and therefore reaching at least 2000 farmers (men & women). The FFS groups will play an important role in their own production and distribution of seedlings and clones as well as the plantation of trees on the land of the individual members of the groups. The project will also provide improved seed and nursery equipment and technical support (through the Farmer facilitators) to cell-level farmer groups. Individual farmers provide the land for tree planting. Each FFS group is expected to plant around 2130 trees.

   For the agroforestry dissemination through FFS groups ICRAF (working on agroforestry research and extension in East Africa) might be a possible partner for collaboration in addition to RAB. This will be further analysed during the inception phase of the project, and may lead to the establishment of a MoU defining modalities.

5. *Support roadside plantation (supports achievement of output 6 and 8)*

   As the land for roadside plantation is public and the trees planted along the road are considered as public ownership, the maintenance and use of trees is often not well defined.

   The approach which has been developed under PAREF.be2 is that the district makes an agreement (MoU) with the communities living close to the road for the planting, their provision of labour, the species and spacing etc. In addition there will be now also agreements on the maintenance and use of the trees ('benefit sharing'), which requires an upgrading of the existing MoUs in the 3 Northern PAREF districts. For Rwamagana district this approach of roadside plantation with responsibilities for the communities living close to the road is new and will be supported by a pilot of 40 km new plantation along the road. For developing the management approach the district will identify the main road side and MoUs will be

[19] See Report "Main findings of the first workshop and the proposal of the updated Farmer Field School (FFS) method to DFNC/RAB submitted by AESA EAST AFRIC Ltd, June 2015

established between the District/RNRA and an Assembly of Farmers/Villagers living along the road, in which are indicated the tasks/responsibilities of the villagers, the species and spacing for planting, the maintenance, the use of forest products and the benefit sharing. A Vigilance Committee has to be established and trained and coached for performing well their role.

6. *Support forest reconversion and/or establishment of new forest on public and private land, based on priorities indicated in the developed DFMP/SFMPs (supports achievement of output 7 and 8)*

Most public and even to a greater extent private plantations are over-aged. They were often established with poor genetic material and were subsequently poorly managed (if at all). As a result, they are characterised by extremely poor productivity (<5m^3/ha/yr, compared with an expected 20m^3+/ha/yr). In almost all cases, replanting with good quality planting material, is the only commercially sensible option for increasing future productivity.

The sites for conversion and or establishment of new forest on private and public land will be selected jointly with the districts of intervention (Rwamagana and the Northern PAREF.be2) but are intended to have a link with the activities 2, 3 and 5: e.g. activity 3 which includes the reconversion of unproductive plots in the FMUs of FOAs, which will contribute to strengthen the capacity building of the institutional setting of forest management on private area.

In total a budget is available for the reconversion and/or new planting for an equivalent of around 550 ha but this is a rough estimation.

In general, reconversion is significantly more expensive (per hectare) than new planting. The project could experiment with debarking stumps to kill old stools – rather than the conventional approach of digging them out. This technique is also more appropriate in erosion prone areas and has been used successfully by the Sorwathe Tea Estate[20] (December 2015). Their task costs (in the table below) have been used to budget this Activity.

Area = 1 hectare; Salary paid: 1100 RFW/day; Plant spacing = 2.5m x 2.5 m	
Work task	*RFW/ha*
Weeding	46,000
Debarking the present stumps	36,300
Marking drains	4,400
Marking planting holes	4,400
Holing	77,000
Digging Drains	68,200
1600 plants @ 50 RFW	80,000
Planting	24,200
In-filling (beating up) after 2 months	4,400
Total cost	***344,900***

7. *Provide technical support and capacity building in Sustainable Forest Management (support achievement of all Outputs)*

Activities 1 to 6 indicated above, will be supported through the provision of technical assistance: three national TAs (forestry specialists) will be recruited – one to be based in Rwamagana District, one in the 3 Northern Districts of PAREF.be2 and one to support the

[20] Nishan Gunasekera, Manager, Sowathe Tea Estate (pers comm)

development of DFMPs for the 3 Districts of Kigali Rural. In addition, it is estimated that about 85% of the time of an ITA (forest management) will be spent on the support and coordination of the activities for obtaining the desired outputs of result 1. The ITA plays further a crucial role in the capacity building of the actors involved in the planning and implementation of the activities. (See full TOR at Section 7.3. below).

3.3.2 Result 2

Result 2: Improved capacity of RNRA and districts for monitoring forest management, gender integration and benefitting from climate financing opportunities

Expected outputs from implementation of the activities under this Result include:

1. An upgraded Forest Monitoring & Evaluation System (FMES) (allowing integration of data elements for carbon accounting) is in place and being used by MINIRENA/RNRA;

2. Project proposals for components of the DFMP and/or for upscaling the project results to other districts/national level are prepared and submitted to FONERWA or other funding sources and capacity is developed at district and national levels for preparing project proposals

3. Gender issues are understood and clearly mainstreamed in particular in the DFMP and more general in the forest sectors

4. Strengthened capacity of MINIRENA/RNRA in coordinating the design and implementation of the DFMPs

5. Effective capitalisation and knowledge managements; Lessons learned on design and implementation of DFMP and SFMP shared with other districts complemented with the availability of guidelines and related templates makes scaling-up of DFMPs in other districts in the country more efficient.

3.3.2.1 Activities (R2)

1. *Upgrade the FMES system software, integrating new needs and provide capacity for administrators, data collectors and users (relates to achievement of Outputs 1 and 4)*

   A Forest Monitoring and Evaluation System has been developed under PAREF.be2 for DFNC. This requires further development of the software to enable it to capture the data required for (for example) carbon accounting, as well as to iron out operating bugs. A budget for the necessary inputs of a software engineer (by means of an on-going service contract) is provided.

   Further capacity building support (via a budget for consultant trainers) will be provided to those collecting data for the FMES (mainly District-level staff) and for those who will be using the information (at DFNC HQ). A small budget is provided to support the supervision/control by DFNC of District data collection and the provision of small equipment to District data collectors.

   All data collected for the FMES should be disaggregated for gender and reporting should always include analyses by gender, where appropriate.

2. *Build capacity and provide support to RNRA and intervention Districts to develop proposals for FONERWA and other possible funding mechanisms (relates to achievement of Output 2)*

   The Project will provide the necessary support for proposal development. This is an important activity which can help ensure the implementation of the DFMPs into the future as lack of

funding for the implementation of DFMPs is a constraint. FONERWA funding opportunities offer the possibility of a substantial flow of funds for forest management and biomass energy-related activities – but this requires the submission of high quality proposals.

The REMA (Rwanda Environment Management Authority) will be a partner to be involved in identifying requirements (such as setting-up a Monitoring, Reporting and Verification framework) that can allow the up-scaling of the FMBE pilot experience into a Nationally Appropriate Mitigation Action (NAMA) or other instrument that can be submitted for international climate support. REMA is also relevant as it hosts FONERWA, the Rwandan Environment and Climate Change Fund.

Support might be given also by the Climate Change Unit of the Belgian Federal Public Service Public Health, Food Chain Safety and Environment through advice on climate finance opportunities and the required pre-conditions for this finance.

For the preparation of high quality proposals it is suggested to have international experts who support the national experts for preparing these high quality proposals. This can be through on the job training and technical advice and control on the quality of the proposals. Support for capacity strengthening at district and national level for identifying and preparing proposals will be also provided through the project as well as for strengthening the capacity for Monitoring, Reporting and Verification (MRV).

3. *Integrate gender in project activities (contributes to achievement of Output 3 and 4)*

   A budget to fund a framework contract to support gender mainstreaming across all project interventions is provided under this Activity. Much useful work has begun under PAREF BE2 and guidelines for mainstreaming gender in the District Forest management and planning processes have been prepared. (See table at § 6.2 below).

   A framework contract for a Consultancy agency is proposed, to provide regular inputs during the project implementation on relevant and critical aspects of Gender Equality and Women's Empowerment (GEWE). The periodical inputs will consolidate previous outputs achieved through the Consultancy and be more effective than separate inputs from different consultancies. Annex 4 presents attention points for the components of a possible framework contract for support on GEWE.

4. *Knowledge management, capitalization and dissemination of learning lessons of designing implementation and monitoring of DFMPs (contributes to achievement of Output 4 & 5)*

   Capitalization of the lessons learned for the development and implementation of DFMPs and SFMPs especially concerning the process of change/implementation, the factors of influence and the conditions needed for the desired implementation of the DFMPs and SFMPs are very important. Sharing the experience and the 'lessons learned' can facilitate an efficient scaling-up of the Forest Management Plans in the other districts of Rwanda. It will contribute to the capacity of MINIRENA/RNRA in coordinating and supporting the design and the implementation of DFMPs.

   In addition the project will support the effective coordination of the key stakeholders in the woody biomass energy sub-sector and the forestry sector through actively supporting the

coordination of the concerned Technical Working Groups[21](TWG). These TWGs offer in principle a valuable coordination mechanism for the sector but also for inter-sectoral linkage, which needs further strengthening.

The capitalization and sharing of experiences will not only be done through workshops and training but also through newsletters and/or websites or other digital communication channels. The project might analyse if support from a BTC Junior Assistant will be useful for supporting the development and maintenance of these communication channels (see chapter 4).

3.4 Indicators and means of verification

A number of indicators and their sources of verification have been proposed in the Project logical framework (presented in the Annex at Section 7.1: Logical Framework). It is suggested that during the exercise of the comprehensive baseline of the project indicators are developed who are linked to the different development processes and 'intermediate states' developed with the 'Theory of Change' (ToC) in the beginning of the project.

Baseline values and target values are mentioned based on data from PAREF.be2. Not all data are disaggregated by gender, so during the start of the project this needs to be improved where relevant.

Project management should also ensure that the indicators are linked with and feed into the national systems.

3.5 Description of beneficiaries

The primary beneficiary is MINIRENA – RNRA/DFNC and MINALOC. The project will support this Ministry to implement key components of the Forest Policy. In addition MINALOC can be considered also as primary beneficiary given the support to decentralised management of resources and the capacity building of staff at district level and the assistance with preparing financing proposals will support the implementation of DFMPs.

The second group of (direct) beneficiaries, through project capacity-building efforts, are the many farmers and forest land owners (men *and* women) who are engaged in the woody biomass production and value chain. These include the suppliers of raw material and the private sector operators who will increase their business activities in the forest sector, including from the point of establishing forests up to the transformation and sale of forest products.

The ultimate (indirect) beneficiaries are the general population of Rwanda. Reducing the gap between supply and demand of woody biomass ultimately leads to an improved environment, through added capacity of biomass production and decreased deforestation / forest degradation. More trees in the landscape will contribute to increased environmental services of soil stabilisation, increased soil fertility, reduced run-off, etc.

[21] The Technical Working Groups are co-chaired by a representative of the Development Partners elected by the members of the Donor Coordination Group – currently BTC. The Project Manager of FMBE could take the co-chair for the Forest Technical Working Group.

3.6 Risk Analysis

3.6.1 Operational risks

Risks	Risk Level	Probability	Alleviation measure
Limited availability and/or commitment of SPIU staff for the agreed contribution to project implementation can reduce the efficiency and effectiveness of the project	Medium	Medium	The SC will be informed about the SPIU contribution according planning and take measures if contribution is lower than agreed and planned;
Availability of forest experts of RNRA/DFNC is limited due to other 'urgent assignments' which hampers not only the strengthening of capacity but also the progress with the development of DFMPs	Medium	High	Highlighting on level of DG RNRA the importance of commitments of RNRA and implications if these are not fulfilled; Monthly/weekly planning with DFNC and RNRA/SPIU for agreeing on desired resources.
Delay in approving guidelines by MINIRENA for tender procedures of long term concession contracts for public forests	Low	High	Stipulating well the critical pre-conditions which should be created for achieving a specific output during the kick-off of the project; High involvement of MINRENA/RNRA in developing guidelines which can speed-up the approval of guidelines through their lobbying with decision makers
Data not collected at District level by DFNROs due to low priority and being overcharged	Medium	Medium	Data collection will be instructed to DFNRO by MINIRENA through formal instruction of MINALOC. FMES will become the only formal way to report on forestry sector data. This issue will be treated in a workshop with districts for the importance of efficient collecting of key data; Specific measures will be identified and implemented with the support of the project such as efficient system of data collection and implication of FMG and PFO in providing data

Poor attention to crosscutting issues such as HIV/SRHR/rights of child and limited priority for integration of Gender Equality and Women's Empowerment (GEWE) aspects into biomass sector programmes	Medium	Medium	Ensure that the foreseen planned framework contract GEWE is launched immediately on project start-up; Ensure that the project team is sensitive and committed to GEWE Ensure reporting and backstopping missions include these crosscutting issues

3.6.2 Development risks

(I.e. risks that may affect sustainability and effectiveness of project interventions.)

Risks	Risk Level	Probability	Alleviation measure
National budget for sustainable forest management (to RNRA/DFNC), Districts and related institutions does not increase sufficiently to enable DFMP implementation and scaling-up of FMBE interventions	Medium	Medium	Linking to other new initiatives in the sector with external funding offering the possibility of up-scaling best practices developed by the Project and awarding of proposals prepared with assistance of the project to be financed.
Gap between supply and demand for woody biomass continues to increase despite all efforts by project and other donors to address the short-fall	Medium	Low	Through participation to the Technical Working Groups of Biomass and Forestry, the project will contribute to the joint search for effective measures to reduce the gap.

3.6.3 Fiduciary risks

Risks	Risk Level	Probability	Alleviation measure
The use of SPIU's Tender Committee, newly established and on which are no project technical staff may result in delays and/or in technical decisions being taken contrary to the best interests of the project.	Medium	Medium	Ensure that technical project staff are automatically invited for any technical project-related tendering process (e.g. for technical analysis of proposals, addenda etc.)

4 RESOURCES

4.1 Financial resources

Rwandan and Belgian resources will be available for the project to implement the proposed activities.

4.1.1 Rwandan contribution

The Rwandan contribution consists of the following elements:

- Full commitment of the relevant staff of MINIRENA/RNRA/DFNC, and of relevant MINALOC staff in the intervention Districts to the success of the project, particularly Districts Forest and Natural Resources Officers. Provision of sufficient office space for the intervention. Office premises (with Internet connection, water and electricity services, parking and security) will be provided by the Rwandan partner institutions to the project team in order for them to perform all project activities in close collaboration with RNRA. In Kigali, the offices shall be located in the same facilities as RNRA. In the intervention Districts, the national TA will be housed within the District Headquarters – where s/he will work closely with the DFNRO and relevant colleagues.
- Taxes on the supplies, equipment, and works is covered by the Government of Rwanda as agreed upon in the General Development Cooperation convention between both governments

- The total Rwandan contribution is estimated at **€ 800,000.** This estimation is not a ceiling and GoR commits to ensuring that the above listed staff/services are provided, regardless of the exact amount.

4.1.2 Belgian contribution

The Belgian contribution for the FMBE project is **€ 3 million**. The detailed budget per year is presented in the table below. The “modality” mentioned in the table refers to the selected modality for fund disbursement process, see chapter 5.

BUDGET FMBE RWA 15 098 11				Unit	Quantity	Unit cost (euros)	modality	Amount in Euro	YEAR 1	YEAR 2	YEAR 3	YEAR 4
A		**OS**	**Woody biomass production capacity is increased on selected private and public land in the districts of intervention**					**1,955,213**	**477,500**	**761,063**	**552,250**	**164,400**
R	*01*		**DFMPs are developed and implemented**					***1,605,213***	***408,214***	***586,777***	***482,964***	***127,257***
A	01	01	Output 1&8: Develop DFMP/ SFMPs for Rwamagana and 3 Kigali Districts (including forest cadastre & forest cover map update & QQA of public forest): Sensitisation, public forest cadastre-RNRA implementation, QQA/inventory teams				Co-management	156,500	94,500	62,000	0	0
			Sensitization/Awareness session/ Participatory workshop	lumpsum/zone	2	2,500	co-management	5,000	2,500	2,500		
			Public Forest cadastre - RNRA implementation	public forest	900	80	co-management	72,000	72,000			
			Public forest QQA/Inventory teams	public forest	900	80	co-management	72,000	20,000	52,000		
			Other miscellaneous costs	lump sum	1	7,500	co-management	7,500		7,500		
A	01	02	Output 1&8: Develop DFMP/ SFMPs for Rwamagana and 3 Kigali Districts (including forest cadastre & forest cover map update & QQA of public forest): District forest cover map and development of interface for DFMP				BTC-management	102,000	40,000	57,000	5,000	0
			Districts Forest cover map update sub-contract (based on last existing google earth or other availabale existing recent images)	lumpsum/District	2	30,000	BTC-management	60,000	30,000	30,000		
			Database expert -Development of user friendly interface for DFMP	Lumpsum	1	42,000	BTC-management	42,000	10,000	27,000	5,000	
A	01	03	Output 2, 3 & 8: Establishment of PPPs for long-term concession contracts for public forests between State/Districts and PFOs				Co-management	93,200	25,000	40,000	27,000	1,200
			Conflict case resolution support : 1 mission per case (in 100 cases for 3 northern Districts)	conflict case	100	200	co-management	20,000	16,000	4,000		
			Awareness session and workshops on PPP and PFM for private forest concession: 1 per District	Training session	7	3,000	co-management	21,000		21,000		
			Monitoring FMU implementation: 30 day per District	1 day Team field mission	120	60	co-management	7,200		3,000	3,000	1,200
			Support development of Participatory Forest Management for public FMUs including gender approach. Awareness session (3 FMU per district)	lumpsum per FMU	12	2,000	co-management	24,000		12,000	12,000	
			Tender and contracting process support: one 5 days training session per District	Training session	7	3,000	co-management	21,000	9,000		12,000	
A	01	04	Output 4&8: Support sustainable management of private forest through establishment and training of Forest Owners Association/Coop (FOA), supporting QQA and the design of SFMP for their FMU and support reconversion of their FMUs				Co-management	140,313	19,000	60,063	61,250	0
			Training session /awareness raising	lumpsum per FOA	15	1,000	co-management	15,000	10,000	5,000		
			Support in QQA and SFMP design	lumpsum per FOA	15	3,000	co-management	45,000	9,000	36,000		
			Support/subvention of conversion of private land under SFMP	lumpsum per FOA	15	4,688	co-management	70,313		14,063	56,250	
			Miscellaneous costs	lump sum	2	5,000	co-management	10,000		5,000	5,000	
A	01	05	Output 5&8: Support agroforestry on private lands through FFS extension system and support production of quality seedlings by FFS groups				Co-management	85,200	10,000	45,000	20,000	10,200
			Sub-contracting with an operators in charge of support FFS and planting supervision (approximately 15 ha and 2130 tree planted per FFS groups,approx.1200 ha)	FFS groups	80	1,065	co-management	85,200	10,000	45,000	20,000	10,200
A	01	06	Output 6&8: Support roadside/river/lake plantation and upgrading of MoUs between Farmers Assembly and District/RNRA				Co-management	28,000	0	19,000	9,000	0
			Awareness session/assembly of farmer for upgrade of existing MoU in 3 former PAREF district: 1 session per MoU	session	50	200	co-management	10,000		10,000		
			New Planting and organizational support: 40 km in Rwamagana	km	40	450	co-management	18,000		9,000	9,000	

BUDGET FMBE RWA 15 098 11				Unit	Quantity	Unit cost (euros)	modality	Amount in Euro	YEAR 1	YEAR 2	YEAR 3	YEAR 4
A	01	07	Output 7&8: Support forest reconversion and/or establishment of new forest on public/private land				Co-management	231,000	0	50,000	150,000	31,000
			Reconversion / new planting of public/privates lands	lumpsum per ha	550	420	co-management	231,000		50,000	150,000	31,000
A	01	08	Output 7: Provision of high quality seed and/or clones for plantations				Co-management	55,000	14,000	36,000	5,000	0
			Purchase of improved seed	kg	30	1,800	co-management	54,000	14,000	35,000	5,000	
			Miscellaneous costs	lump sum	1	1,000	co-management	1,000		1,000		
A	01	09	Output 1-6: Coordination, technical support to and capacity building of district and RNRA staff - NTA				Co-management	204,000	60,000	72,000	60,000	12,000
			NTA - RWAMAGANA	man-month	39	2,000	co-management	78,000	24,000	24,000	24,000	6,000
			NTA - 3 Kigali Districts	man-month	24	2,000	co-management	48,000	12,000	24,000	12,000	0
			NTA - 3 PAREF.be2 districts	man-month	39	2,000	co-management	78,000	24,000	24,000	24,000	6,000
A	01	10	Output 1-6:Coordination, technical support to and capacity building of district and RNRA staff - ITA				BTC-management	510,000	145,714	145,714	145,714	72,857
			ITA	man-month	34	15,000	BTC-management	510,000	145,714	145,714	145,714	72,857
R	*2*		**Improved capacity for monitoring forest management, gender integration and benefitting from climate financing opportunities**					***350,000***	***69,286***	***174,286***	***69,286***	***37,143***
A	02	01	Output 1&4: Upgrade the FMES system software, integrating new needs and provide capacity building for administrators, data collectors and users				BTC-management	55,000	0	55,000	0	0
			International consultant	lumpsum	1	30,000	BTC-management	30,000		30,000		
			Training and supervision of data collectors at District level and support users in reporting	lumpsum	1	15,000	BTC-management	15,000		15,000		
			Supportive equipment	lumpsum	1	10,000	BTC-management	10,000		10,000		
A	02	02	Output 2:Prepare proposals and capacity building to develop and submit proposals for obtaining finance for districts				BTC-management	90,000	25,000	50,000	15,000	0
			Support for preparing proposal (national experts)	man-days	100	400	BTC-management	40,000	10,000	20,000	10,000	
			Support for preparing proposal (international experts)	man-days	50	1,000	BTC-management	50,000	15,000	30,000	5,000	
A	02	03	Output 3&4: Support gender equality and gender mainstreaming				BTC-management	40,000	10,000	25,000	5,000	0
			framework contract	lumpsum	1	40,000	BTC-management	40,000	10,000	25,000	5,000	
A	02	04	Output 4&5: Capitalization on and knowledge management of designing, implementation and monitoring of DFMPs & SFMPs				BTC-management	45,000	0	10,000	15,000	20,000
			Training and workshops	lumpsum	1	30,000	BTC-management	30,000		5,000	10,000	15,000
			Developing communication channels (newsletter, website, etc)	lumpsum	1	15,000	BTC-management	15,000		5,000	5,000	5,000
A	02	05	Output 1-4: Technical advice and support for coordination of monitoring and capacity building				BTC-management	120,000	34,286	34,286	34,286	17,143
			ITA	men-month	8	15,000	BTC-management	120,000	34,286	34,286	34,286	17,143
X	01		**Contingency**					**50,095**	**0**	**0**	**0**	**50,095**
X	01	01	Contingency reserve				BTC-management	50,095	0	0	0	50,095

Z			General means					994,693	341,648	274,648	239,198	139,199
Z	*01*		*Personnel costs*					***507,435***	***156,553***	***156,553***	***134,353***	***59,976***
Z	01	01	Project Manager				BTC-management	126,000	36,000	36,000	36,000	18,000
			National Project Manager	man-month	42	3,000	BTC-management	126,000	36,000	36,000	36,000	18,000
Z	01	02	SPIU part time staff				co-management	36,795	10,513	10,513	10,513	5,256
			SPIU part time staff	lump sum	1		co-management	36,795	10,513	10,513	10,513	5,256
Z	01	03	SPIU full time staff				co-management	239,640	77,040	77,040	57,840	27,720
			Forest Program Manager	man-month	42	2,450	co-management	102,900	29,400	29,400	29,400	14,700
			Accountant	man-month	42	970	co-management	40,740	11,640	11,640	11,640	5,820
			Secretary to DAF	man-month	42	400	co-management	16,800	4,800	4,800	4,800	2,400
			GIS specialist	man-month	24	1,600	co-management	38,400	19,200	19,200	0	0
			Drivers x 5	man-month	204	200	co-management	40,800	12,000	12,000	12,000	4,800
Z	01	04	BTC Programme Support staff				BTC-management	105,000	33,000	33,000	30,000	9,000
			Responsible for Administration & Finance (RAFI) (10% time investment)	man-month	42	1,500	BTC-management	63,000	18,000	18,000	18,000	9,000
			Procurement expert	days	60	700	BTC-management	42,000	15,000	15,000	12,000	0
Z	*02*		*Investments*					***112,000***	***97,000***	***0***	***15,000***	***0***
Z	02	01	Vehicles				BTC-management	67,000	67,000	0	0	0
			4x4 cars	unit	2	26,000	BTC-management	52,000	52,000	0	0	0
			Motorcycles	unit	5	3,000	BTC-management	15,000	15,000	0	0	0
Z	02	02	Office equipment				BTC-management	15,000	10,000	0	5,000	0
			lump sum	lump sum	1	15,000	BTC-management	15,000	10,000	0	5,000	0
Z	02	03	IT equipment				BTC-management	20,000	15,000	0	5,000	0
			lump sum	lump sum	1	20,000	BTC-management	20,000	15,000	0	5,000	0
Z	02	04	Office refurbishing				co-management	10,000	5,000	0	5,000	0
			office refurbishing	lump sum	2	5,000	co-management	10,000	5,000	0	5,000	0
Z	*03*		*Operational costs*					***249,258***	***71,095***	***71,095***	***70,845***	***36,223***
Z	03	01	Vehicle running & maintenance	lump sum	1	140,000	BTC-management	140,000	40,000	40,000	40,000	20,000
Z	03	02	Telecommunication	lump sum	42	750	co-management	31,500	9,000	9,000	9,000	4,500
Z	03	03	Office material & maintenance	month	1	20,000	co-management	20,000	6,000	6,000	6,000	2,000
Z	03	04	Contribution to SPIU operational costs	year	3.5	3,345	co-management	11,708	3,345	3,345	3,345	1,673
Z	03	05	Missions allowance	lump sum	3.5	10,000	co-management	35,000	10,000	10,000	10,000	5,000
Z	03	06	Representation costs and external communication	lump sum	1	4,500	BTC-management	4,550	1,000	1,000	1,000	1,550
Z	03	07	Financial transaction costs	lump sum	1	3,000	co-management	3,000	750	750	750	750
Z	03	08	Financial transaction costs	lump sum	1	1,000	BTC-management	1,000	250	250	250	250
Z	03	09	VAT (GoR contribution)	lump sum	0	0	co-management	0				
Z	03	10	VAT (GoR contribution)	lump sum	0	0	BTC-management	0				
Z	03	11	Other functioning costs, team building	lump sum	1	2,500	BTC-management	2,500	750	750	500	500
Z	*04*		*Audit, monitoring and evaluation*					***126,000***	***17,000***	***47,000***	***19,000***	***43,000***
Z	04	01	M&E costs (1 MTR + 1 ETR)	lump sum	2	40,000	BTC-management	80,000	0	40,000	0	40,000
Z	04	02	baseline survey	lump sum	1	10,000	BTC-management	10,000	10,000	0	0	0
Z	04	03	Audit	lump sum	1	12,000	BTC-management	12,000	0	0	12,000	0
Z	04	04	Backstopping expert department BTC / DG Environment	lump sum	8	3,000	BTC-management	24,000	7,000	7,000	7,000	3,000
TOTAL								**3,000,000**	**819,148**	**1,035,711**	**791,448**	**353,694**

BTC-management	**1,619,145**	**475,000**	**535,000**	**356,750**	**252,395**
CO-MANAG.	**1,380,855**	**344,148**	**500,711**	**434,698**	**101,299**

4.2 Human resources

There will be a specific Project Management Unit which is embedded within the RNRA/SPIU.

For the organizational set-up the below indicated principles and conditions have been agreed during the formulation:

- The following SPIU positions are fully (100%) supported by FMBE during the project implementation period (42 months): Forest Programme Manager, accountant (1), secretary to Director of Administration and Finance (DAF), drivers (5) and 3 National Technical Assistants (Forest Specialists) based respectively in the District of Rwamagana, Kigali and in one of the Districts of PAREF.be2 North. The GIS specialist/Mapping officer will be paid during the first 24 months of the project for 100 %. The above indicated staff is paid according the salary scale of SPIU;
- For a number of positions of the SPIU of which FMBE makes use, the contribution is established at 5.8% of their costs linked to the fact that also these positions are shared together with other DP's supporting GoR through RNRA. It concerns the positions of Coordinator of SPIU, Administrative Assistant, DAF, Chief accountant, HR Management Specialist, HR Officer, ICT Officer, and Logistic Officer. For the Procurement Specialist of SPIU, the project contribution is calculated based on number of days required according to the number of tenders of the project under co-management which results in an equivalence of 7.8% of this position;
- BTC provides a Project Manager and an ITA Forest Management Expert. In addition BTC provides on part-time bases an International Responsible for Administration and Finance (RAFI) and Procurement Expert. These last two positions are shared with other BTC programme interventions. The project manager will work with SPIU Coordinator for administrative and financial matters and SPIU Forest Program Manager for technical aspects.

4.2.1 Conditions for local RNRA HR financing

- HR payroll management will be performed by RNRA
- Differences between salaries financed by different DPs will be avoided: all the salaries will be harmonized and aligned with approved RNRA/SPIU salary framework.

4.2.2 Project staff

The list of the **project staff** is indicated in the following table (see also organizational structure in chapter 5), The ToR (job description and profile) of project staffs are presented in Annex 3.

Position	Contribution FMBE	Remarks	
SPIU Coordinator	5,8% x 42 months	Assigned by RNRA SPIU Direct counterpart of the BTC funded Project Manager for administrative and financial matters	**FMBE** **Project Management Unit**
Forest Program Manager	42 months for 100%	Assigned by RNRA SPIU Direct Counterpart of the BTC funded Project Manager for day to day management and technical matters	
Project Manager	42 months	BTC National Technical Assistant (NTA) Funded by the Belgian contribution	
Forest Management Expert	42 months	BTC International Technical Assistant (ITA) Funded by the Belgian contribution	
3 National Experts in Forest Management (Rwamagana, 3 Northern PAREF.be2 districts and for 3 Kigali districts)	2 x 39 months and 1 X 24 months	National Technical Assistant (NTA) Funded by the Belgian contribution through SPIU	
GIS/Mapping Officer	24 months for 100%	SPIU position funded by the Belgian contribution through SPIU	
SPIU full time support staff: - accountant - secretary to DAF - drivers	42 months 100 %	Assigned by RNRA/SPIU and funded by the Belgian contribution	**SPIU Support staff**
SPIU part time support staff: - HR Management - HR Officer - ICT Officer - Logistic Officer - Procurement Officer	% of 42 months 5.8 % 5.8% 5.8% 5.8% 7.8%	Assigned by RNRA/SPIU and % funded by the Belgian contribution	
Responsible for Administration & Finance (RAFI) Procurement Expert	10 % 60 days	BTC International Technical Assistants funded by the Belgian contribution	**BTC Program Support Staff**

Junior assistants can also be recruited by BTC, having only small operational costs and no additional salary costs on the project budget. The focus of their TOR could be on M&E, communication & knowledge management. The need and desired expertise will be analysed during the inception phase.

4.3 Material resources

4.3.1 Material resources

It has been agreed by the 22nd Steering Committee that 3 vehicles and useful equipment from PAREF BE2 can be transferred across to the new project. Nevertheless, limited budget allocations have been made for the purchase of two vehicles and for the purchase of five new motorcycles (for use in the Districts). In addition, funds are allocated for:

- Limited ICT investments to cover software and consumables.
- Running costs (fuel, maintenance, and insurance) for all Project vehicles (5).
- Office running costs and communications (excluding internet and electricity)

Office accommodation (within RNRA SPIU and within the relevant District Administrations) forms part of the Rwandan Government contribution to the project.

4.3.2 Services

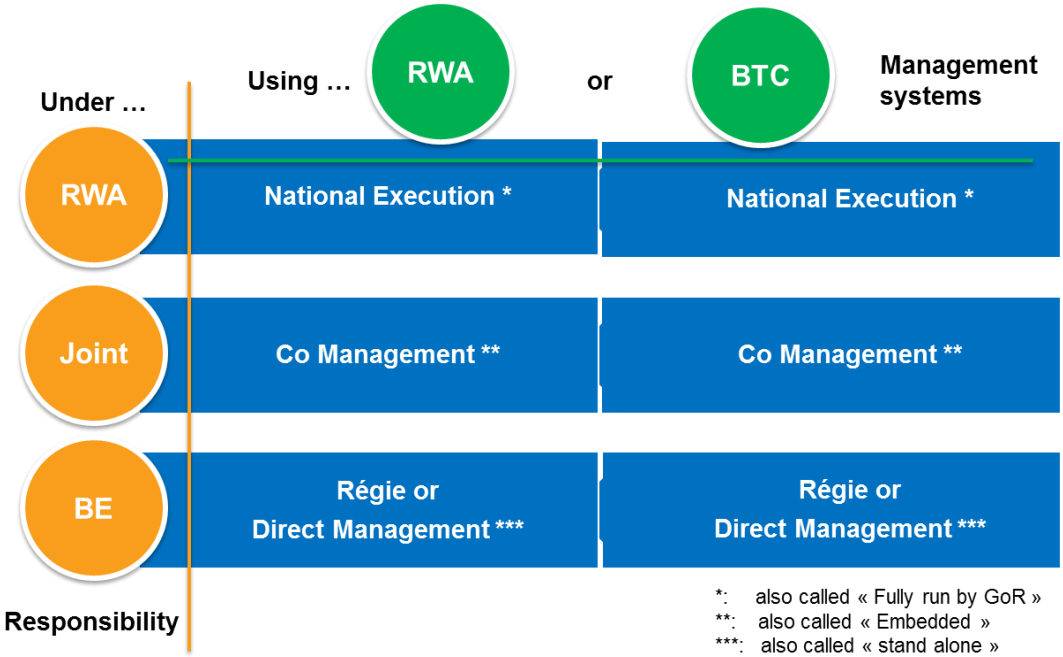
The project will contract short-term technical assistance and services providers (both national and international) as required to support the technical team of the project. Their mobilization will be based on detailed terms of reference prepared by the technical team of the project, approved by the PSC and will follow standard tendering procedures. The ToR will be special attention to capacity building to government

5 IMPLEMENTATION MODALITIES

5.1 Introduction

This chapter describes how the project will be managed, from start-up until closure, in all its management areas (strategic steering, technical content management (scope), procurement management, financial management, human resources management, quality management and audit) and is intended to enable stakeholders directly involved in the project to:

- Understand which **management system** applies to which project management area. There are two possibilities:
    - Use of the Rwandan system (or of an harmonized donor system recognized by Rwanda as its system),
    - Use of the BTC system.
- Be aware of their **responsibilities** and of those of the other stakeholders in the various project management areas. There are three modes:
    - **Rwandan responsibility**: the Rwandan partner is responsible. For the finance and procurement management areas, the term “national execution” is used.
    - **Joint responsibility**: both the Rwandan partner and BTC are responsible. For the finance and procurement management areas, the term “co-management” is used.
    - **BTC responsibility**: BTC is responsible. For the finance and procurement management areas, the term “régie” or “BTC management” is used.



(Rwanda Aid Policy Manual)

These possibilities in terms of system and responsibility mode can be related to the three modus operandi for the project support as introduced in the Rwanda Aid Policy Manual of Procedures:

- A "**Fully run by GoR**" project is a project where the Rwandan system is used under Rwandan responsibility (this situation is called "**national execution**" in Belgian terminology).
- An "**embedded**" project is a project where there is a **joint responsibility**, regardless of the system used (from Rwanda or from BTC).
- A "**stand-alone**" project is a project run under **BTC responsibility**, usually using the BTC system.

The selected responsibility mode for this intervention is "**joint responsibility"** for all management areas. Some specific processes like technical backstopping, audits, MTR, ETR, knowledge management and communication services, general means etc. will remain under Belgian responsibility.

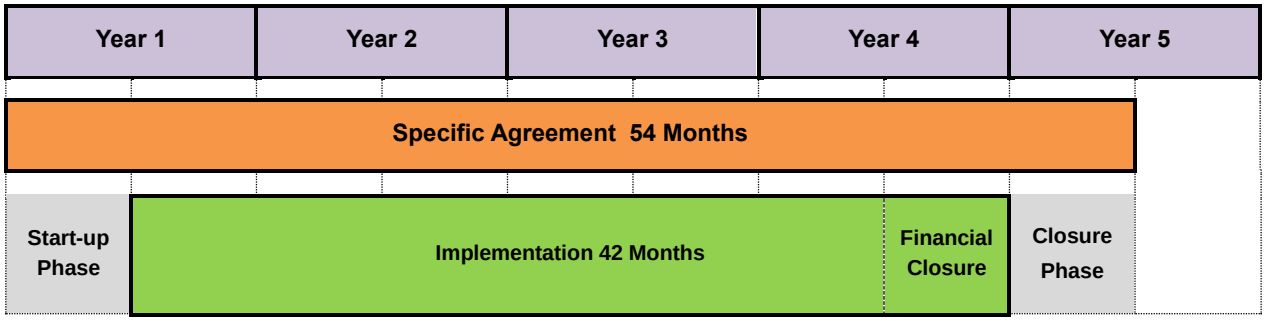
No matter the choices made in terms of systems and responsibility modes, partnership, collaboration, transparency and mutual information will apply in managing the project.

5.2 Project duration and life cycle

The duration of the Specific Agreement (SA) is 4.5 years (54 months) while the actual implementation phase of the intervention is 3.5 years (42 months). As the key team members of the previous Belgian funded afforestation project will be retained for this intervention, the implementation phase will start when the SA is signed. All project activities must be terminated at the end of the 42 months implementation period.

After the signature of the specific agreement, the project will enter its effective **start-up phase**, of about 6 months, during which additional project human resources will be hired, bank accounts will be opened, first cash call will be made, the comprehensive baseline and the first year planning will be done, culminating in the production of the start-up project report.

The implementation ends with a **closure phase** of 6 months to ensure proper technical and administrative closing and hand-over. Project final report is produced after the end of the implementation period.



Consolidation activities are planned at various moments during the project life cycle and during the closure phase.

5.3 Project organization and anchorage

5.3.1 Project Steering Committee (PSC)

5.3.1.1 Role

The PSC is the highest level of decision in the project. It is in charge of the strategic steering of the intervention. The main responsibilities of the PSC are:

- Putting in place and supervise the management structures of the project;
- Defining the project strategy and ensuring its alignment on the overall Rwandan strategy (strategic planning, annual planning and budgeting),
- Assessing the project's progress in attaining the development results (strategic quality assurance and control) and assuring sustainability
- Reviewing and approving the project plans and reports (annual results report; mid-term review and final evaluation reports) Managing strategic changes, intermediate results changes, changes on implementation modalities as well as the adaptation of the project organization and budget;
- Modifying the content of TFF when necessary (except the General and Specific objectives) and take any strategic decision required to ensure the success of the project.
- Solving problems that cannot be solved at the operational level,
- Enhancing harmonization among donors.
- Ensuring the appropriate handover during the closure of the project and approving the final report.

5.3.1.2 Composition

The Steering Committee has the following composition:

- The Permanent Secretary (PS) of MINIRENA, or his/her delegate (chair)
- The BTC Resident Representative, or his delegate (co-chair)
- The Director General of RNRA (chief budget manager)
- A representative of MININFRA (Member of the Biomass Technical working group)
- A representative of MINAGRI/RAB
- A representative of MINECOFIN
- A representative of MINALOC
- A representative of MINAFFET

Others who can be invited to provide any useful information or advice for decision making could be:

- The RNRA Head of Forests and Nature Conservation Department (DFNC)
- The RNRA Director of Forest Unit
- The RNRA SPIU Coordinator
- The BTC ITA Forest Management Expert

Also other Development Partners in Forestry Sector, Technical Experts and/or advisors can be invited by the Chair or co-chair of the Steering Committee to participate in meetings to provide any useful information.

The PSC takes decision by its members through consensus.

5.3.1.3 The Secretariat of PSC

The Secretariat of the Steering Committee is performed by the Project Manager with the support of the SPIU Forestry Program Manager. Its responsibilities include:

- delivering the written invitations to the meetings, the agenda and preparatory documents;
- drafting of the minutes of the meetings and any reports;
- preserving and maintaining the records and correspondence of the Steering Committee

5.3.1.4 Operating rules of the PSC

The PSC will meet at least twice a year by the invitation of the chair.

The steering committee can also hold a meeting any time when a decision is necessary regarding the project implementation.

The invitation must be received by the members at least 7 days before the meeting. The invitation includes an agenda, suggested decisions and supporting documents.

A PSC meeting will be postponed if less than 5/8 of its voting members are present and only if among the absentees either the chair or co-chair is included. Whenever the invitation to PSC was sent out on time (at least 7 days before) and the Chair and co-chair are available, the meeting will be held and decisions taken regardless of absentees.

Decisions are taken by consensus among present voting members. Decisions of each meeting of the PSC are recorded in minutes signed by the chair and co-chair of the PSC. .

The full operating rules will be acted during the first PSC meeting.

5.3.2 Project Management Unit (PMU)

5.3.2.1 Role

The PMU is the operational level in the project. It takes operational decisions and actions on a day to day basis in order that the project strategy is fully implemented, in time and within budget, as approved by the PSC. The main responsibilities of the PMU are to:

- Develop and implement the project strategy and operational plans
- Prepare quarterly and annual reports for the stakeholders,
- Coordinate and provide quality assurance and quality control in the processes of procuring the capacity building services and any other services, goods or works requested by the project (content management), as well as proper monitoring of the intervention.
- Ensure proper management and apply stringent accountability arrangements for the management of the financial resources allocated to the project,
- Ensure that procurement processes and procedures used by the project conform to the applicable procurement guidelines,
- Ensure proper human resources management practices conforming to the applicable guidelines,

The responsibilities of the PMU are further developed in the following paragraphs.

5.3.2.2 Composition

The members of the PMU are:

- The **RNRA SPIU Coordinator** acting as a sponsor and as an authorizing officer for the Rwandan side for all the administration and financial management of the project, executed in joint responsibility.
- The **SPIU Forest Program manager** coordinating the day-to-day technical aspects of the project.
- A BTC appointed **Project Manager** acting as an authorizing officer for the Belgian side for all technical, administrative, procurement and financial matters.
- **ITA Forest Management expert,** technical methodological advice and coordination, support to and capacity building of project's Forest Specialist and districts/RNRA staff
- **BTC Programme support staff,** part time staff shared with other BTC Energy programme interventions
    - RAFI, responsible for Administration and Finance
    - Procurement Expert
- Other support functions provided by SPIU (see § 4.2.2)

5.3.2.3 Operating rules of the PMU

The PMU meets at least once a month and at any other time deemed necessary. Meetings of the PMU are prepared, organized, follow-up, and chaired by the Project Manager, by default. Other clear arrangements can be decided by the PMU, however.

For matters executed in joint responsibility, decisions are taken by consensus between the SPIU Coordinator, the Forest Program Manager and the Project Manager.

Decisions of each meeting of PMU are recorded in minutes.

5.3.3 Organizational structure and institutional anchorage

The intervention integrates its management and support functions into RNRA

- The PMU will be located in the RNRA SPIU
- Both Project Manager and ITA Forest management expert shall take part to institutional discussion within RNRA and department coordination meetings in their domain.

The support staff will be anchored in the RNRA SPIU structure. (see figure 2)

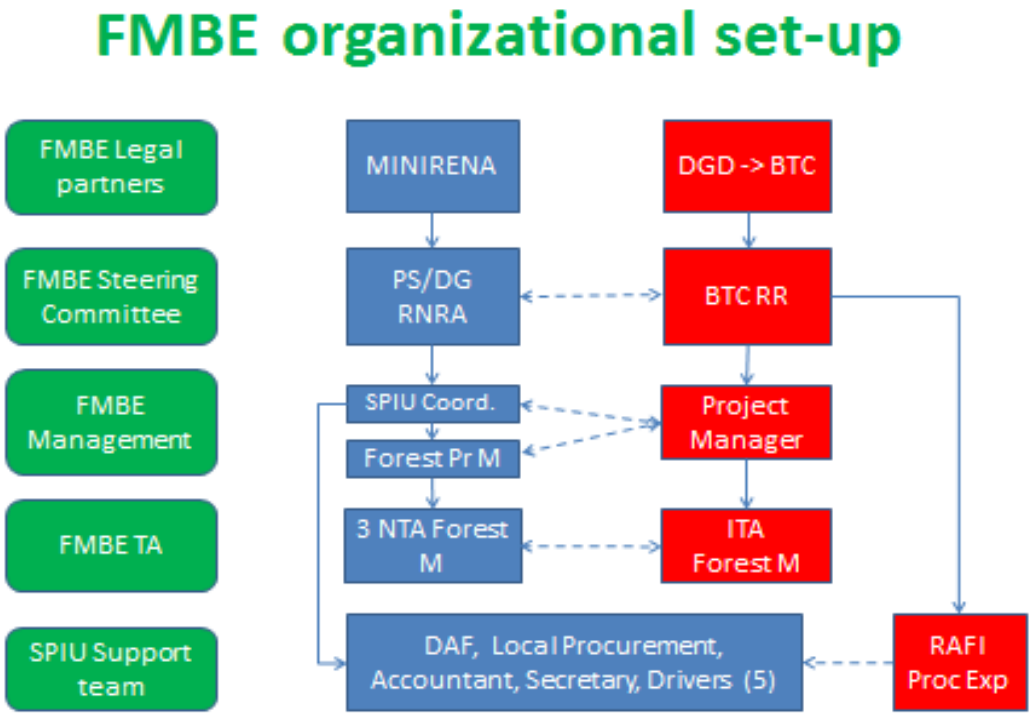


Figure 2: FMBE Organizational set-up

5.4 Technical content management

Technical content management (or scope management) encompasses the processes that transform the project strategy into activities that must be properly defined, planned, executed and monitored. It also includes the regular result-oriented reporting on project operations as well as possible backstopping by BTC HQ.

5.4.1 Operations definition, implementation and monitoring

System:	Not defined, as these processes are not really formalized
Responsibility:	Joint responsibility

The definition and writing of the technical specifications (ToR) and the technical follow-up (including provisional and final technical acceptance) for all services, goods or works to be procured by the project and the definition, implementation and follow-up of the activities lead by the project team itself, are a joint responsibility of the SPIU Forest Program Manager and the BTC ITA Forest Management Expert, except if expressly stated otherwise here under.

They are supported by the other members of the project team, by other RNRA staff and by other institutions, depending on the activity.

5.4.2 Operations coordination

System:	Not defined, as these processes are not formalized
Responsibility:	Joint responsibility

The PMU meets formally at least once a month, in order to review project progress, identify issues and risks and proactively take actions. The ITA ensures the technical coordination of the Forest Specialists located in intervention districts.

5.4.3 Technical backstopping

System:	BTC system
Responsibility:	BTC responsibility or joint responsibility

Technical backstopping is the possibility for the project or the PSC to ask the support of experts at the level of BTC HQ.

A backstopping mission can also be decided by BTC representation or BTC HQ.

Backstopping findings and recommendations are presented to the PSC.

5.5 Procurement management

Procurement processes shall be implemented according to the Rwandan Law on Public Procurement and the SPIU Manual of Procedures. In addition, specific BTC requirements apply, as described in BTC project implementation Guidelines for Rwanda.

5.5.1 Procurement planning

System:	RWA system and BTC system
Responsibility:	Rwandan responsibility for the RWA system Joint responsibility for the BTC system

BTC requires a quarterly procurement plan for all project procurement processes.

Procurement planning is performed by the BTC Project Manager and the SPIU Forest Program Manager, with the support of the procurement services of RNRA SPIU, including the SPIU Procurement officer financed by the project and the BTC ITA Forest Management Expert.

The SPIU Forest Program Manager and the BTC Project Manager both approve the quarterly procurement plan in joint responsibility.

5.5.2 Procurement implementation

System:	RWA system by default, BTC system for some clearly defined activities (see below)
Responsibility:	Joint responsibility when the RWA system is used BTC responsibility when the BTC system is used

In addition to the Rwandan system, “no objection” by BTC is required at 3 key moments during the tendering process: before launching, before awarding and before contracting. The contract must be signed by RNRA with the BTC visum.

Table: The authorizing power, depending on thresholds, for launching, awarding and contract signing, is distributed as indicated here under.

RWA	BTC	Threshold (X Equivalent EUR):
“Chief Budget Manager”	Project Manager	X ≤ 25,000
“Chief Budget Manager”	Resident Representative	25,000 < X ≤ 200,000
“Chief Budget Manager”	Resident representative, after review by BTC HQ (for awarding)	X > 200,000

X is the amount of the tender, VAT included, in EUR or converted from FRW in EUR on the day of publication, using the EUR buying rate of exchange on the National Bank of Rwanda website.

Use of the BTC procurement system:

The tendering processes that will use the BTC procurement system under BTC responsibility are:

- Consulting services for supporting BTC backstopping, if required
- Audit services for project audit on behalf of BTC
- Consulting services for the mid-term review
- Consulting services for the end-term review
- Capitalization services (BTC framework contract)
- Other procurements as described in the budget

5.5.3 Management of Grant Agreements

In accordance with Article 8 of the BTC Law, BTC can provide financing to one or more third-party partners for the achievement of part of the activities of the TFF or for an action of the third-party partner that contributes to the achievement of the objectives of the intervention. Grants will be awarded in accordance with the modalities described in the *BTC guide for the elaboration and follow-up of Grant Agreements.* Public or private entities that are awarded grants are called "beneficiary parties". The beneficiaries of the actions funded by the grant are called "final beneficiaries".

No grant agreement has been identified during the project formulation.

If a Grant Agreement is needed, it is necessary to obtain approval of the PSC, which is laid down in a

report, on the basis of a clearly reasoned justification why, for this case, the public procurement regulations do not apply. The above modalities concerning notification to the Belgian State on the beneficiary parties of the grants respectively the approval of the beneficiary parties by the Minister of Development Cooperation obviously apply.

5.5.4 Management of Cooperation Agreements

The "public-public" or "horizontal cooperation" cooperation agreements with a public partner may be materialized for BTC through "Framework Cooperation Agreements" (FCA), operationalized through "Specific Cooperation Agreements" (SCA).

This type of agreement will be used in case the intervention aims to encourage the public synergies expertise coming from other governmental public institutions, mainly Belgian ones, even if cooperation with a non-Belgian contracting authority is also possible.

In such agreements, the public interest and the concept of 'non-profit' are key. The contracting authorities shall cooperate to jointly ensure the execution of public service missions.

Specific Cooperation Agreements will be signed following the modalities described in BTC's Framework/Specific Cooperation Agreement Guide.

5.5.4.1 Identified FCA/SCA in the TFF

The Climate Change Section of the Federal Public Service (FPS) of Health, Food Chain Safety and Environment can be solicited to provide expertise through the existing Cooperation Agreement between BTC and the FPS of Health, Food Chain Safety and Environment. This support to the project can possibly be provided through one or more short term technical backstopping missions for the advice and capacity building on issues related to climate finance opportunities (see R2: activity 2).

N°	N° budget line	Name of activity	Estimated budget (€)	Specific Cooperation Agreement	Belgian public institution
1	Z_04_04__	Technical backstopping missions for the advice and capacity building on issues related to climate finance opportunities	6.000€	SCM001	FPS Health, Food Chain Safety and Environment (Climate Change Section), Belgium

The opportunity of signing a Specific Cooperation Agreement (SCA) will have to be confirmed by the PMU at the time of implementation, following an in-depth analysis (according to the BTC Framework Cooperation/Specific Cooperation Agreement Guide).

5.5.4.2 Non identified FCA/SCA in the TFF

A FCA / SCA can be identified during the implementation. It must not necessarily be identified during formulation. In this case, the Project Management Unit (PMU) must obtain the agreement of the Steering Committee and follow the procedure and modalities as described in the FCA / SCA BTC guide to initiate the process.

Two situations can arise:

- Either a FCA with the desired partner already exists: the team can directly initiate the procedure for the establishment of a SCA for the desired activity,
- Either no MFA has yet been signed between BTC and the public institution with which it wants

to develop a synergy. In this case, the PMU initiates for BTC to consider concluding a corresponding Framework Cooperation Agreement.

5.5.4.3 SCA management

The general rule for a SCA management is the respect of the procedures for commitment and monitoring of expenditure at BTC.

Like any expense, SCA related expenses must be planned in the planning tools. The FCA / SCA will be signed in BTC-management, that is to say that only the BTC is able to sign the SCA as contracting authority and using the Belgian system.

The monitoring and control of payments are made in accordance with the BTC procedures.

5.6 Finance management

All finance management processes must use at least the BTC system, as described in the global and Rwandan BTC guidelines on project implementation (administration and finance), most of them in joint responsibility.

5.6.1 Budget management

5.6.1.1 Budget planning

System:	BTC system and RWA system
Responsibility:	Joint responsibility for the BTC system Rwandan responsibility for the RWA system

The budget as indicated in § 4.1.2 sets out the budgetary limits within which the intervention must be executed. It also indicates expected disbursements per (BTC financial) year.

Budget planning processes have to be implemented in both the BTC system and the Rwandan system; in order for Rwanda to be able to track project progress in its own financial system and this must be executed under its own responsibility.

5.6.1.2 Budget follow-up and review

System:	BTC system and RWA system
Responsibility:	Joint responsibility for the BTC system Rwandan responsibility for the RWA system

The project expenses cannot exceed the total budget of the intervention and the budget per responsibility mode may not be exceeded.

Any change to the budget must be approved by the PSC on the basis of a proposal that is drawn up by the PMU, according to the BTC rules in this respect.

The use of the budgetary reserve requires a budget change proposal to be validated by the PSC.

Quarterly reports on budget implementation are produced by the SPIU Project accountant supervised by the RAFI, as part of the financial reporting.

5.6.2 Accounting, financial planning and reporting

5.6.2.1 Accounting

System:	BTC system
Responsibility:	Joint responsibility

Accounting is done on a monthly basis according to BTC rules and regulations and its own financial system.

Accounting tasks are performed by the SPIU Project accountant. The BTC Co-Manager should approve the monthly accounting. After approval the monthly accounting must be transmitted to the BTC representation every month. The RAFI will execute periodical control.

5.6.2.2 Financial planning

System:	BTC system
Responsibility:	Joint responsibility

The PMU elaborates quarterly a financial plan, according to BTC rules and regulations and its own financial system, to inform the PSC. Financial planning is based on the quarterly action and procurement plans.

Financial planning tasks are performed by the SPIU project accountant supported by the RAFI, based on the operations planning. The SPIU Coordinator and the BTC Project Manager both approve the quarterly financial plan in joint responsibility. This plan must be forwarded to the BTC representation.

5.6.2.3 Financial reporting

System:	BTC system and RWA system
Responsibility:	Joint responsibility for the BTC system Rwandan responsibility for the Rwandan system

Financial reporting processes have to be implemented using the BTC system and could additionally be adapted to the Rwandan system, in order for Rwanda to be able to track project progress in its own financial reporting system.

5.6.3 Cash management

5.6.3.1 Managing intervention accounts and payments

System:	BTC system
Responsibility:	Joint responsibility or BTC responsibility

Supporting documents for all payments must be kept in the project office.

Accounts in joint responsibility:

As soon as the specific agreement has been signed, an account in EUR (main account) and one operational account in Rwandan Franc will be opened at the National Bank of Rwanda (NBR).

Payments from these accounts require a double authorization (BTC and RWA), according to the following specifications:

Authorizing officer for RWA:	Authorizing officer for BTC:	Threshold (EUR):	Type of account
SPIU Coordinator	Project Manager	< 25,000	Operational
Chief Budget Manager	RAFI Resident Representative *following BTC mandates*	> 25,000[22]	Main

For logistical reasons, other accounts in joint responsibility may be opened with the approval of the "Chief Budget Manager" and the resident representative.

Account in BTC responsibility:

For local expenses under BTC responsibility, a project account in EUR and RWF will be opened at a local bank, with double BTC authorization.

5.6.3.2 Managing cash and transfers

System:	BTC system
Responsibility:	Joint responsibility or BTC responsibility

First transfer on the main account:

Once the signed specific agreement has been notified to BTC, a first cash call can be sent by the PMU to the BTC representation, per responsibility mode. The requested amount must correspond to the needs for the first three months of implementation.

Following transfers on the main account:

The main account is replenished quarterly according to BTC rules and regulations and its own financial system. The project must submit a cash call per responsibility mode to the BTC representation at the beginning of the month preceding the following quarter.

Cash management tasks are performed by the project accountant. The SPIU Coordinator and the Project manager both sign the quarterly cash calls in joint responsibility. The first cash call can be signed by the BTC Program Officer if the Project Manager has not been appointed yet.

5.6.4 Assets and inventory management

System:	BTC system for PMU's assets Rwandan system for assets officially transferred
Responsibility:	BTC responsibility for PMU's assets Rwandan responsibility for assets officially transferred

[22] According to BTC systems

Assets acquired by the PMU for its own use must be registered in an inventory updated on a quarterly basis according to BTC rules and regulations and its own administrative system. Their use is strictly limited to the activities of the project. At the end of the project, PMU's assets can be transferred to a partner institution after decision by the PSC. It must be formalized by an official transfer statement signed by all parties.

According to the project's objectives, the PMU can acquire infrastructure, equipment and goods to support a partner organization. The official transfer of property has to be validated by the PSC and formalized by an official transfer statement signed by all parties.

Transfer of equipment, infrastructure and goods to a partner institution has to follow rules and procedures from Rwanda in terms of inventory management.

5.6.5 Expenses before the signature of the implementation agreement (DGD-BTC)

The following expenses can be incurred by BTC before the signature of the implementation agreement, in order to speed up the start of the project:

- Investment costs: IT equipment and vehicles;
- Costs for the recruitment of the international and national funded staff. Staff can be made as soon as the project TFF has been approved by the Joint BTC-DGD Quality Control Committee (QCC) in order to allow quick start of the project.

Table: Expenses before the signature of the implementation agreement

Activity	**Amount in Euros**	Period and Comments
Recruitment	10,000	National & International staff
Capital Investments	70,000	ICT equipment and cars
Total	**80,000**	

5.6.6 Financial closure

5.6.6.1 Financial balance

From six months before the end of the project implementation phase, the PMU must elaborate each month a financial balance forecast according to BTC procedures.

5.6.6.2 Destination of balances at the end of project operations

According to the modalities of the Specific Agreement, the balances go back to the Belgian Treasury.

5.6.6.3 Expenses beyond the end date of the specific agreement

No commitment can be made in the last six months of validity of the Specific Agreement without prior approval of the PSC and on exclusive condition that activities close before the end of the Specific Agreement. After the end date of the Specific Agreement, no expenditure will be authorised except if it is related to commitments signed before the end of the Specific Agreement and mentioned in the

minutes of a PSC. Operational expenditures after the end of the Specific Agreement will not be accepted.

5.7 Human resources management

The project funds the following employee positions during the project:

SPIU staff fully supported by the project (100%)	**SPIU shared staff partially supported by the project**	**BTC full time Staff (100% on project)**	**BTC shared staff, Part-time on project**
Forest Program Manager Forest Specialist (3) GIS Specialist (1) Accountant Secretary Drivers (5)	SPIU Coordinator DAF Chief Accountant HR Specialist HR Officer Procurement specialist M&E specialist ICT officer Logistics Officer Administrative	Project Manager ITA, Forest Management Expert	RAFI Procurement Expert

For the human resource management, the following modalities apply:

System:	BTC system for BTC employees RWA system for SPIU employees
Responsibility:	Rwandan responsibility for SPIU employees and BTC responsibility for BTC employees, with some aspects of joint responsibility as detailed below.

The following table shows the primary responsibility mode per HR management process, by category:

Positions **HR processes**	SPIU Project Staff (100% on project)	SPIU Part-time staff	BTC Staff
ToR (job description and profile)	Joint	RNRA	BTC
Short listing	Joint	RNRA	Joint
Assessment	Joint	RNRA	Joint
Contracting	RNRA	RNRA	BTC
Probation and performance appraisal	Joint	RNRA	BTC
Training	Joint	RNRA	BTC
Missions/Leave	Joint	RNRA	BTC
Payroll	RNRA	RNRA	BTC
Salary scale and staff regulations	RNRA	RNRA	BTC
Early termination of contract	Joint	RNRA	BTC

Additional remarks:

All positions are open for men and women. Female candidates will be encouraged to apply.

The SPIU staff involved in the project will be trained by BTC as they will use many aspects of the BTC management system, in addition to their duties in the Rwandan management system.

Project objectives will be included in the performance contracts of both the SPIU Coordinator and the SPIU forest program manager.

5.8 Quality management (monitoring and review)

Monitoring and Evaluation (M&E) is to support accountability requirements, continuous learning and strategic steering.

5.8.1 Monitoring

The different processes are briefly explained below. For every Monitoring process, both the Project Manager and the SPIU Forest Program Manager (with the support of the PMU team) are responsible for the delivery and quality of monitoring.

5.8.1.1 Comprehensive Baseline

System:	BTC system
Responsibility:	Joint responsibility

Establishing a comprehensive baseline exercise in the beginning of the project is a BTC system requirement. The FMES framework is used with the support of the SPIU M&E specialist.

The Comprehensive Baseline exercise needs to take place at the beginning of the project (ideally within 6 months after the first project steering committee (start-up PSC) and with the involvement of the ITA).

The report of the Comprehensive Baseline exercise will be approved in joint responsibility by the SPIU Forest Program Manager and the Project Manager. The Comprehensive Baseline Report will be presented to the Project Steering Committee (PSC). The PSC takes note of the Comprehensive Baseline Report and validates the way the intervention will be monitored.

5.8.1.2 Operational monitoring (including planning)

System:	BTC system
Responsibility:	Joint responsibility

Operational monitoring refers to both planning and follow-up of the intervention's management information (inputs, activities, outputs). It is an internal management process of the intervention team and is done every 3 months.

5.8.1.3 Results Monitoring

System:	BTC system
Responsibility:	Joint responsibility

Results Monitoring refers to an annual participatory reflection process in which intervention team reflects about the achievements, challenges, etc. of the past year, and looks for ways forward in the year(s) to come. The PSC approves or disapproves recommendations made by the intervention team (see chapter 3) .

5.8.1.4 Final Monitoring

System:	BTC system
Responsibility:	Joint responsibility

The purpose of final monitoring is to ensure that the key-elements on the intervention's performance and on the development process are transferred to the partner organisation, the donor and BTC and captured in their "institutional memory". This enables the closure of the intervention (legal obligation for back-donor of BTC), the hand-over to the partner organisation and the capitalisation of lessons learned. It can be considered as a summary of what different stakeholders might want to know at closure or some years after closure of the intervention.

5.8.2 Evaluation: Mid-Term Review and End-Term Review[23]

System:	BTC system
Responsibility:	BTC responsibility

Reviews are organised twice in a lifetime of an intervention: at mid and end of term. BTC-HQ is responsible for organising the reviews. The ToR of the reviews and their implementation are managed by BTC Brussels, with strong involvement of all stakeholders (see chapter 3). The role of the PSC is to approve or disapprove the recommendations made in the reviews.

5.8.3 Knowledge management and communication

System:	BTC system
Responsibility:	Joint responsibility

A specific budget line is introduced (A 02 04) to allow for knowledge management and communication activities during the lifecycle of the project.

5.9 Audits

5.9.1 Project audits by BTC

System:	BTC system
Responsibility:	BTC responsibility

Audits will be organised by BTC in the first and third year of the project implementation. A qualified external financial auditor selected and contracted by BTC, will execute the audit. BTC will elaborate the Terms of Reference and select the audit firm. The audit will include the following items:

- verification of the existence and the respect of procedures;
- verification if the accounts of the project reflect reality

The auditor's reports will be presented to the PSC. If necessary, the project team will elaborate an action plan in order to improve the project procedures and to prove that corrective measures have been taken.

Terms of Reference of BTC audits are a BTC responsibility and will be shared with RNRA for information.

5.9.2 Project Audits by External Control Bodies

System:	BTC system or RWA system
Responsibility:	BTC responsibility or RWA responsibility or Joint responsibility

Each year, BTC accounts are audited by the Belgian government auditors, who have the right to audit

[23] In BTC terminology, the term 'review' is used for evaluations at project level.

any project implemented by BTC. BTC internal audit chief officer is also free to decide to audit any project implemented by BTC.

The Rwandan authorities, either RNRA or its parent ministry MINIRENA or the Office of the Auditor General for State Finances of Rwanda can also decide to audit the project. In this instance, the RNRA SPIU Coordinator is the primary respondent to the auditor's requests.

Project audits reports are mutually shared and presented to the PSC.

In case the project is audited by the Auditor General Office of Rwanda, it will be clear at the beginning of the audit which systems are to be used. It should be avoided to audit the project compliance to the Rwandan system where the TFF clearly states that the BTC system must be used.

Moreover the scope of control will focus on the co-management budget whereas the BTC management budget will remain under full responsibility of BTC and therefore governed by the jurisdiction of its external control bodies (Belgian Government auditors). If necessary, information on amounts spent in "BTC management" can be provided.

5.10 Modification of the TFF

The present TFF may be amended by mutual consent of the parties.

It is essential to install an attitude of expecting and encouraging a practice of regular modifications based on the insights gained during the implementation. The task of the project management unit and the PSC is to assess the quality of the argumentation for the suggested changes and to request further explanation if necessary.

Careful consideration must be given not to change the present TFF in a way that would unnecessarily change the outcome of the intervention as originally agreed between the parties. A formal agreement by the Belgian government is needed for the following changes:

- Modification of the duration of the Specific Agreement;
- Modification of the total Belgian financial contribution;
- Modification of the General and Specific Objective of the project.

The request of the above modifications has to be approved and motivated by the Steering Committee. The exchange of letters requesting these modifications shall be initiated by the Rwandese party and shall be addressed to the Belgian Embassy. The following changes to the TFF will have to be approved by the Steering Committee:

- The project results and activities and their respective budgets
- The implementation modalities
- Competences, attributions, composition and tasks of the SC
- The indicators at the level of the specific objective and the results
- The mechanism to change the TFF
- The financial modalities to implement the contribution of the Parties.

All other changes to the TFF should be approved by the chairman of the PSC and the BTC resident representative. The adapted version of the TFF shall be communicated to the BTC headquarters and to the Attaché for International Cooperation (DGD) in Kigali.

6 CROSS CUTTING THEMES

6.1 Environment

One of the major problems facing the environment in Rwanda is the ever-growing population pressure on natural resources – especially forests. An estimated 90% of population depend on natural resources for their livelihoods, which are largely based on subsistence agriculture and energy production. This project addresses one of the major drivers of forest degradation in Rwanda – the increasingly unsustainable use of forests for energy production.

The project is expected to have an entirely positive impact on the environment. By focusing on improving the management (and thereby the productivity) of both public and privately-owned forest plantations, and by increasing the rate of tree planting, especially on private land, the project will help reduce pressure on state and natural forests. The promotion of agroforestry on steep hills also helps reduce problems of erosion (thereby increasing access to clean water).

The project will help to secure a significant part of Rwanda's energy needs in a renewable, carbon-neutral form and will contribute to Rwanda's resilience to climate change.

Furthermore the activities are eligible for climate financing (see 1.4. for detailed information).

6.2 Gender

How the project will address gender issues has been extensively covered at Section 2.1.6 above. The integration of gender into project interventions is a key guiding principle of project implementation. The project will endeavour to increase the participation of women in the forestry sector and to increase the benefits that they can draw from this participation. A specific budget line for a framework contract to support this is provided for this purpose. Project monitoring will ensure the collection of gender disaggregated data.

Box 3: Gender issues in forestry in Rwanda

Whilst men and women both depend on forest resources, they tend to use them differently. According to a BTC *Rwanda Backstopping Mission Report*[24], preferences in the use of forest products in Rwanda are very different for women and men: Women, for example, tend to use wood for cooking while men engage in making and selling charcoal. Given such gender-related considerations, it is important that the project takes a gender integrated approach: a gender blind approach can reinforce negative norms that often discriminate against women.

A 2010 study of gender in Rwandan forestry noted that:

- Gender is not well integrated into the forestry sector accountability structures at the district level
- There are few female staff at Ministry and District-levels
- Men tend to be more involved in income generating activities and as employees in forestry works than women, and they participate more in project training and awareness workshops.
- Women tend to undertake 'unprofitable' activities (such as firewood collection), although they are active in the timber and charcoal trade.

[24] BTC Rwanda, *Backstopping mission report B, Integrating Gender in the DFMPs and take the gender dimension into consideration in their implementation*, Kigali, December 2014

A recent PAREF BE2 District-level workshop (in December 2015) further identified:

- Poor 'mind-set' of community members towards the division of labour in forestry activities
- Limited sharing of forestry benefits between women and men
- Decision making on forestry products is mostly done by men

as key gender issues mitigating against ownership and engagement in forest-related activities.

The Table overleaf[25] provides suggested guidelines for integrating gender into the District Forest Management Planning and implementation processes.

[25] Extracted from the 'Mid-term Report of a Consultancy mission for the integration of the gender aspect in the context of District Forest Management Plans (DFMPs) revision'. (FATE Consulting, January 2016)

AREA OF FOCUS	GENDER INTEGRATION GUIDELINES

Accountability for gender integration in the revision/development and implementation of DFMPs/SFMPs	• Appointment of gender focal points (GFPs) for the forestry sector at national and decentralized levels.
	  ○ GFPs must be directly involved and able to influence forestry activities and decisions
	• Yearly refresher training of appointed GFPs
	• Continued training and capacity building on gender for forest technicians
	  ○ Collection and analysis of sex disaggregated data for trainings and meetings
	• Capacity building for gender analysis to inform implementation progress
	• Create templates for collecting sex disaggregated data on use of forest products, income, employment
	• Explicit reference to gender in performance contracts of DFNRO/GFPs
	• Ensure permanent and accountable staff responsible for monitoring gender integration in DFMP/SFMP implementation
	• Required reporting of gender related activities and implementation of the gender integration guidelines

Community participation in the revision/ development of DFMPs/SFMPs	Ensure that women and men are engaged in the revision process • Invite individual women and representative organizations to consultation meetings • Plan community meetings with consideration of women's reproductive roles in the targeted community (timing, attendance, location) • Ensure inclusion of women and men in planning forestry activities at all levels
Gender awareness of relevant actors for DFMPs/SFMPs revision and implementation	Ensure that relevant actors have knowledge on gender integration in the DFMPs/SFMPs revision/development process • Provide gender awareness training for forestry actors (District Forest Task Force) • Promote gender equality and balanced division of labour in community consultation meetings • Ensure continued participation of gender experts in stakeholder meetings about the DFMPs/SFMPs process Continued gender awareness raising and capacity building during the implementation of DFMPs/SFMPs • Regular refresher trainings for District Forestry Officers so they can properly cover gender equality related topics in consultation and extension meetings with community members • Engage men in the community on gender equality in the forestry sector • Continued sensitization of community members ○ Address taboos and unbalanced division of labour in trainings, community meetings, manuals and other communication materials • Provide sensitization on the benefits of sharing income from forest activities • Continued sensitization of men and women on the enforcement of the succession law, focusing on implementation • Communicate gender integration guidelines to Procurement Officers at district level, and ensure follow-up on gender equality promotion in tenders and leasing of FMUs to private operators • Develop gender sensitive manuals and communication materials
Socio-economic and stakeholder analysis	Ensure sufficient gender analysis: • Consult local organizations, including women's organizations, on the DFMP/SFMP process • Develop data collection templates requesting sex disaggregated information • Ensure that socio-economic analysis indicators are gender sensitive • Present findings (sex disaggregated and gender analytical information) within reports and background information of DFMPs/SFMPs
Language of DFMPs/SFMPs documents	• Include gender integration in objectives as a key element, showing clear linkages to national policy and gender integration requirements

	• In differentiation of ownership of private forests: use language that presents sex differentiation for private owners: women and men private owners, women/men/mixed cooperatives as private owners
Short Operational Plans	Ensure gender integration in technical and financial plans • Ensure gender integration in budgets • Ensure gender integration in technical plans, based on DFMP/SFMP elaboration
Inclusion of local organizations	• Include both mixed male/female cooperatives and women's only cooperatives as available and appropriate • Encourage women's participation and leadership in mixed groups • Provide capacity building on entrepreneurship and technical support for women in forestry related cooperatives
Monitoring and Evaluation	• Ensure gender integration in M&E mechanisms at national and decentralized levels • Develop gender-sensitive indicators in RNRA and District annual action plans • Ensure sex disaggregated data collection, analysis and reporting • Implement mechanisms to collect qualitative information
GENDER INTEGRATION GUIDELINES FOR SPECIFIC ELEMENTS OF THE DFMPS/SFMPS	

Public Forests and PuFMUs	Encourage individual women entrepreneurs and women's enterprises to bid for PuFMUs private operator tenders
	• Create incentives to encourage women entrepreneurs and women's cooperatives as private actors to manage the district/sector forests
	• In the tender documents, include clear requirements for gender promotion
	  ○ The winning bidder will employ at least 30% women
	  ○ The winning bidder will show how they accommodate special needs (breastfeeding, childcare) of women employed, as well as ensuring equal pay or benefit sharing for men and women
	  ○ The winning bidder will show a gender equality promotion component of their approach to PuFMU sustainability
	  ○ Include an explicit requirement for bidders to show women's participation and empowerment components, both as specific activities and as part of gender integration
	  ○ Encourage local cooperatives to bid for the public FMU tenders, particularly those comprised of both men and women and with women in decision-making positions
	  ○ Encourage individual women entrepreneurs to bid for FMU tenders
	  ○ Enable formation of FMUs large enough to ensure profit for the private operator and to allow diversified and continued activities for sustainable income for both men and women

Private forests and PrFMUs	• Promote change of community members' mind-set towards forest management and women's involvement
	  ○ Ensure women's participation in meetings to sensitize community members on the benefits of joining privately owned forests into PrFMUs.
	  ○ Schedule community consultation meetings during times that consider women's reproductive roles
	  ○ Sensitize on the benefits of shared access and control over forests
	• Carry out geo localization of forests owned by women
	• Create incentives for private forests owners creating/joining FMUs who are taking measures to promote gender equality

Agro-forestry	• Involve gender experts in consultation meetings between RNRA and RAB
	• Ensure a gender sensitive FFS approach
	• Ensure manuals and M&E of FFSs are gender sensitive, covering topics such as:
	  ○ Men's and women's preferences in agro-forest activities and products
	  ○ Gender promotion, GBV prevention and reporting and women's empowerment measures

An analysis of the proposed project budget (by Activity), using the BTC Gender Scan Tool indicates that:

- 34.5% of expenses are considered "gender-blind" (blue in the figure below). These are not expected to have a different effect/impact on women or men. Such costs include project investments (e.g. vehicles) and operational costs such as those for running the office or project vehicle maintenance).
- 50.3% of expenses are considered "gender-sensitive" (green). These relate to the costs of activities which take into account present gender differences, mainly for practical needs. (e.g. alleviation of tasks undertaken by women and men; and those which take into account different ways of using assets). The monitoring and evaluation system is considered to be gender-sensitive (differentiation of data, numbers, statistics, monitoring of gender-specific indicators etc.).
- 15.2% are specific actions target women or men and aim to reduce the gender gap (e.g. equal representation in steering committees, strengthening of women leaders) or which correct an unequal situation (e.g. career promotion, salary equity, working conditions). These actions are referred as "transformative" (red), in that they aim to change gender relations at the political, economic, social, or cultural levels). These positive actions allow women not only to participate on an equal footing in the development processes, but also to influence them by ensuring that they can take part in decision-making processes. Examples of “gender transformative” activities are: awareness session and training related to the preparation and development of a DFMP, strengthened through a framework contract with a consultancy for the guidance and verification of the integration of gender in the whole process of development and implementation of DFMP.
- No activities of this project are directly linked to the ‘gender machinery’. There are, for example, no actions which focus on strengthening "gender" by means of capacity development activities targeting gender focal points in partner institutions.

6.3 Social economy

By choosing to strengthen groups of producers in the woodfuel value chain and forest management, the project will contribute to social economy and social cohesion. Well-organised groups are an effective means of empowering small-scale producers and building social capital. Where possible, local NGOs will be used to deliver this support.

In the medium- to long-term, improved income streams from the increased sale of wood from improved forest management and on-farm tree planting will enhance household livelihoods assets. Capacity building of farmers and community members involved in forest management, which enhances their skill base, and increases representation and advocacy through local institutions (cooperatives / associations / groups established), will also contribute to enhanced livelihoods. The project will pay specific attention to the inclusion of vulnerable populations, such as single mothers, people living with HIV, youth and people with a disability

6.4 Children’s rights

The project does not contribute to children’s rights directly. However, indirectly, improved livelihoods have been shown to contribute to improved children’s rights, with improved nutrition and school attendance strongly positively correlated with increased household income. It has also been demonstrated that additional household income is likely to be spent on medicines and health, and the

construction of improved houses, which also have positive benefits for children.

Incidences of family separation, early marriage and child labour are all negatively correlated with improved household incomes. Thus the project contribution to livelihoods is likely to have a positive impact on these indicators.

Increased financial resources have also been shown to impinge positively on the incidence of child abuse: where families lack sufficient financial resources to involve police and other legal structures, they often resort to cash settlements with the perpetrators. Better-off families are able to involve police and other legal structures and the child is more likely to receive support or treatment.

Specific attention will be given to the issue of child labour – and more particularly to eliminating the worst forms of child labour – through the development of specific gender/HIV/SRHR/child labour guidelines that are adapted to the local needs and circumstances.

6.5 HIV / AIDS

The project does have contact with rural communities and the establishment of producer groups – and especially groups of young men (as charcoal-makers often are) offers opportunities for facilitating campaigns to combat killer diseases such HIV/AIDs and malaria. The project will pay due attention to the development of a fully-fledged HIV workplace guidelines for the organisations involved in or created by the project. Such policy should not only contribute to improved access to comprehensive HIV/SRHR information, condom promotion, and treatment adherence but also facilitate the inclusion of people with HIV. As mentioned in the previous section, the focus on establishing and strengthening producer groups will provide structures which can be used as entry points for those who conduct HIV/AIDs (and other) interventions.

7 ANNEXES

7.1 Logical framework

	Logical of the intervention	Indicators	Baseline value and Target	Sources of verification	Hypotheses
GO	**General objective:** Improvement of sustainable management of forest resources contributes to poverty reduction, economic growth and environmental protection	Direct Contribution (= consumption X price) of forestry and wood fuel sector to GDP	*Baseline value*: 5% *Target value*: 5%	FMES	
		Profitability and regular income of forest put under improved management (RWF/ha/year)	*Baseline value*: to be determined during Comprehensive Baseline exercise *Target value*: to be determined during Comprehensive Baseline exercise	Specific survey/study to be done in forest where the project will intervene (at the beginning and at the end of the project)	
SO	**Specific objective**: Woody biomass production capacity is increased on selected private and public land in the districts of intervention	Sustainable supply of woody biomass in improved managed forest (m3/ha/year) on X ha private land and YT ha on public land.	*Baseline value*: 5-8m3/ha/year *Target value*: 10-15m3/ha/year	QQA (at beginning and end of project)	Local Government of selected districts is not implicated in illegal cutting and shows support and commitment for increasing woody biomass/forest production

	Logical of the intervention	Indicators	Baseline value and Target	Sources of verification	Hypotheses
R 1	**Result 1** District Forest Management Development Plans are developed and implemented	Number of districts having a technically validated DFMP	*Baseline value*: 3 districts; *Target value*: 7 districts	- Minutes of technical validation committee and DFMP document;	RNRA staff available for their participation in the development of the 4 DFMP and for the implementation of the 4 DFMPs Selected districts are committed to participate and facilitate in the process of development and implementation of the selected measures and approach by the project based on their available resources Governments commitment to encourage involvement of private sector actors in forest management is maintained Interest present of Private operators willing to operate under long term concession contracts with the state and under the agreements with private FM groups
		Number of public FMUs having a long-term concession contract which is signed with a private partner	*Baseline value*: 0; *Target value*: Rulindo: 3; Gakenke: 3; Gicumbi: 3; Rwamagana: 1	Concession contracts	
		Number of FOAs established around Private FMUs having each a SFMP	*Baseline value*: 0 FOAs *Target value:* 15 FOAs	Founding paper FOAs with SFMP	
		Number of hectares that are converted according SFMP with project support	BL value: 0 Target value: 300 ha	District report	
		Number of FFS groups with agroforestry activities Number of trees planted by members of the FFS/agroforestry groups	*Baseline value*: 48 FFS groups with agroforestry activities; *Target value*: 80 'new' FFS groups with agroforestry activities Baseline: 0 Target value: FFS groups planted in total 150.000 trees(in 4 districts).	Survey under FFS groups	
		Distance of roadside plantation (km) Number of MoUs signed in the district of Rwamagana (on the 40 km roadside plantation realised through the project)	Baseline value: 0; Target value: 40 Base value: 0 Target value: X MoUs signed by X village assemblies adjacent to the road stretch (to be determined during Comprehensive Baseline exercise)	Signed MoUs	
		Number of MoUs upgraded in 3 PAREF districts including benefit sharing	Baseline : 0 upgraded MoUs; Target value: 90 upgraded MoU with 'benefit sharing';	Signed upgraded MoUs	

		Number of ha of private and public land additional reconverted or with new plantation in 4 districts by project	Baseline: to be provided by DFMP of Rwamagana District; Target value: additional 500 ha with new plantation and/or converted	District report with survey	
R 2	**Result 2:** Improved capacity of RNRA and Districts for monitoring forest management, gender integration and benefitting from climate financing opportunities	Upgrading of FMES with integration of new requested indicators by MINIRENA	baseline: number of present indicators for which reliable data are collected Target value: x new indicators suggested by consultant	FMES	DFNC takes ownership of the tools developed and uses the analyses available from the FMES to improve forest management in Rwanda Available funds through CC related instruments and/or other financial sources (such as for instance philanthropy) provides fair chance for rewarding well elaborated proposals from the districts for financing A quite harmonized approach for developing and implementation of DFMP on the other districts of the country
		Number of proposals submitted through project support for financing by specific donors and/or institutes related to Climate Finance or other Financing	Baseline value: 0 Target value: 5 proposals	Proposals with proof of being submitted	
		Inclusion of gender promotion in tender documents (according gender integration guidelines)	Baseline: 0 (no tender) Target: all tender documents include gender aspects and invite especially individual women entrepreneurs/ women owned enterprises for a bid	ToR of Tender and monitoring report of execution of tender	
		Data collection templates for M&E requesting sex aggregated information	Baseline: no template Target: 1 template indicating executed gender sensitive actions as planned in annual action plans and linked to DFMP/SFMP,	Annual report of District on NR/FM and used indicators for reporting; Reporting of Gender Consultant through framework contract	
		At least one communication channel for regular updating on DFMPs (design and implementation)	Baseline: 0 Target value: 1	Communication channel(s) used and number of DFOs aware of channel	

GO	**Improvement of sustainable management of forest resources contributes to poverty reduction, economic growth and environmental protection**			**Estimated Belgian Contribution** (Euros)
SO	**Woody biomass production capacity is increased on selected private and public land in the districts of intervention.**			**3 M euro**
R 1	**Districts Forest Management Plans are developed and implemented**			**1,605,213**
R 2	**Improved capacity of RNRA and Districts for monitoring forest management, gender integration and benefitting from climate financing opportunities**			**350,000**
	Activities to achieve Result 1	**OUTPUTS**	**Means**	
A 1.1 & A 1.2	Develop DFMP/SFMPs for Rwamagana, Kicukiro, Gasabo and Nyarugenge districts including update forest cover map, establishment forest cadastre, including direct resolution of 'simple' landowner conflicts and Quick Qualitative Assessment (QQA) of each public forest	4 new DFMPs 4 districts with updated forest cover map, forest cadastre, QQA of the public forests Capacity with RNRA and relevant district officers on designing a DFMP, executing and assessing QQAs	Awareness sessions, Trainings & workshops Cadastre/solving conflicts Forest mapping QQA public forests/Forest Inventory Developing user-friendly interface for DFMP planning Local surveys	258,500
A 1.3	Establishment of **PPPs for long-term concession contracts for public forests** between State/districts and PFOs through support in developing procedures and templates for procurement and management of contracts, creation and establishment of FMGs, simple conflict cases solved, elaboration of MoUs between PFO and FMGs. Provision of technical support and on-the-job training to Districts/DFNC staff and to contractors/operators for monitoring and implementation of developed DFMP/SFMPs	At least 7 districts have each a long term concession contracts for public forest established with PFO's In 4 districts, 12 FMGs established and supported by PFOs, ensuring PFM in concerned FMUs 12 MoUs signed by PFO and FMGs and monitored on execution 4 districts have capacity for facilitating and developing MoUs for PFM, managing a tender and arriving to a long term concession contract for public forest	Workshops on PPP for private forest concession Awareness sessions and on-job technical training and coaching on development PFM for public FMUs Support process for tendering and contracting	93,200

A 1.4	Support **sustainable management of private forest** through establishment and training of Forest Owners Association/Coop (FOA), supporting QQA and the design of SFMP for their FMU and support reconversion of their FMUs	15 FOA established around PrFMUs of in average 25 ha each (total of 375 ha) SFMPs developed for their PrFMUs Support for the conversion of their old private plots according the SFMP 4 Districts have capacity to support establishment of FOAs /Pr FMU and to support design/ implementation of their SFMP	Training/awareness sessions of District staff / FOAs; QQA and SFMP design Support/Subvention reconversion of FMU	140,313
A 1.5	Support **agroforestry** / woodlot establishment on private lands through Twigire Muhinzi/FFS extension system and support of production of quality seedlings by FFS groups	In 4 districts, 80 FFS groups (at least 2000 farmers, m&w) perform within the FFS approach for agroforestry under a functional FFS system in which farmers facilitators are the spill for scaling up agroforestry in seedling demand, production and distribution, permanent learning and jointly monitoring. More efficient system of seedling production, distribution and plantation. 80 FFS groups have planted each in average 15 ha with 2130 trees so in total around 1200 ha. 4 districts 80 farmers facilitators are trained who are able to facilitate their FFS group and the groups have tree nurseries for which the provision of seedlings is supported.	Contract for a private operator for ToT /Master trainers (for FFs), support/supervise nursery establishment and management by FFS, coaching planting and joint monitoring of planting. Trainings, workshops, field days, exchange visits, Support establishment of nurseries and distribution seedlings.	85,200
A 1.6	Support **roadside plantation** and process for establishment and upgrading of MoUs between Farmers Assembly and District/RNRA, including 'benefit sharing' aspect	Rwamagana: pilot of 40 km new plantation along roads and organizational structure established including MoUs signed with Assembly of farmers/villagers playing active role in planting and maintenance; 3 Paref/North Districts: 50 MoUs upgraded including also 'benefit sharing' Capacity with villagers and decentralized government for organization and making agreements which allow sustainable FM on roadside plantation.	Awareness/training sessions, Assemblies with farmers/villages Support planting roadside	28,000

A 1.7	Support **forest reconversion** and/or **establishment of new forest on public/private land**, based on priorities of developed DFMP/SFMP	Reconversion/new planting on an equivalent of 550 ha of private/public lands (Rwamagana district)	Nursery establishment and support Reconversion / new planting of public/private lands	231,000
A 1.8	Provision of **high quality seed and/or clones** (through importation if required) for plantations	30 kg of high quality seed/clones of selected species purchased/imported	Purchase of high quality seed of selected species	55,000
A 1.9 **&** **A 1.10**	Coordination, **technical support to and capacity building of district and RNRA staff** for designing and implementation of DFMPs	3 NTAs supporting the programme: 1 NTA for 3 Kigali Districts, 1 NTA for Rwamagana and 1 NTA for 3 PAREF/North districts for in total 98 months; 1 ATI for technical support for all districts for 34 months	3 NTAs and 1 ATI (81% of total available time of ATI)	714,000
	Activities to achieve Result 2	**Outputs**	**Means**	**Belgian Contribution**
A 2.1	Upgrade the **FMES** system software, integrating new needs and provide capacity building for administrators, data collectors and users	Upgraded adapted user-friendly FMES software system which can be managed by RNRA administrators, allowing integration of new requested indicators (such as for Climate Change Fund, etc..) Data collectors ensure adequate data feeding of the system and users can use efficiently the information.	Contract with Consultant Training/coaching and supervision for administrators, data collectors, users Supportive equipment	55,000
A 2.2	Build capacity and provide support to RNRA and staff and private actors of the intervention Districts to **develop proposals for obtaining finance** through FONERWA or other possible funding mechanisms and be able to do the required Measuring, Reporting and Verification (MRV)	At least in 4 'new' districts (Gas., Kic., Nya. and Rw.) proposals for financing components of the DFMP are submitted and support is given to 'old' districts that have identified components eligible for financing and for which proposals are prepared. Capacity strengthened at district and national level for preparing quality project proposals MRV capacity strengthened	Framework contract with international and national consultant	90,000

A 2.3	Support **gender equality and gender mainstreaming** in project related aspects of DFMP/ woody biomass sector/PFM	Gender integration and accountability in the development and implementation of the DFMPs/SFMPs; Gender integration in M&E mechanisms at national and decentralized level. Increased participation of women in the forestry sector resulting in increased benefits for them.	Framework contract	40,000
A 2.4	**Capitalization and knowledge management for development, implementation and monitoring of DFMPs** & SFMPs and other related aspects to PFM	Capacity of MINIRENA/RNRA strengthened in coordinating and supporting the design and implementation of DFMPs; Scaling-up of DFMPs implementation to all other districts in the country supported by availability and dissemination of developed guidelines and templates as well by the sharing of 'lessons learned'.	Workshop/training, newsletter and website/communication channels	45,000
A 2.5	Technical advice and support for coordination of monitoring and capacity building	Strengthened capacity at national level for the monitoring forest management, gender integration and capitalisation.	ITA 8 months (19% of total time)	120,000
	General means *(Personnel costs, Investments, Operational costs, Audit, M&E and Backstopping)*			994,693
	Contingency			*50,095*

7.2 Chronogram

Budget code			Result/Activities	Y1				Year 2 S1	Year 2 S2	Year 3 S1	Year 3 S2	Year 4 S1
				Q1	Q2	Q3	Q4					
A	*01*		Districts Forest Management Plans are developed and implemented									
A	01	01	Develop DFMP/SFMPs for Rwamagana, Kicukiro, Gasabo and Nyarugenge									
			Awareness session, participative workshop									
			Forest Cadastre: preparation, team training, implementation, simple conflict cases resolution									
			Forest cover Map updating: tendering and implementation/supervision									
			QQA: tendering and implementation/supervision									
			Friendly user database development: tendering, development, testing, debugging									
			DFMP design									
A	01	02	Establishment of PPPs for long-term concession contracts for public forests									
			Development of guidelines and template for TORs, tender doc and contract									
			Support in development/update of eventual requested ministerial decree									
			Awareness session- training on FMU concession process									
			Conflict cases resolution									
			Support in FMU tendering process and contracting									
			Awareness session- training of contracted/potential operators (PFOs) on PPP and PFM									
			Support/guidance in establishment and implementation of MoU between FMGs and PFOs									

Budget code			Result/Activities	Y1				Year 2 S1	Year 2 S2	Year 3 S1	Year 3 S2	Year 4 S1
				Q1	Q2	Q3	Q4					
			Support/guidance in monitoring of FMU implementation by PFO									
			Based on lesson learned: update of guidelines/template for tender doc/contract, ministerial decree, etc.									
A	01	03	Support sustainable management of private forest through establishment and training of Forest Owners Association									
			Awareness/training session for District staff									
			Identification of best potential private forest area/ champions									
			Awareness/training of identified forest owners and support in FOA establishment									
			Support in QQA and SFMP design of identified FOAs/private FMUs									
			Support of conversion according to private FMU SFMPs (2 potential seasons)									
			Assessment of FOA/private FMU dynamics and lesson learned									
A	01	04	Support agroforestry / woodlot establishment on private lands through Twigire Muhinzi/FFS extension system									
			Identification of best potential FFS groups									
			Tendering and contracting process for a consultancy/local operator support									
			Training of identified FFS facilitators/groups and support/supervision in nursery management/seedling production									
			Training of identified FFS facilitators/groups and support/supervision in agroforestry tree planting and related crops management									
			Training of identified FFS facilitators/groups and support in management of trees planted according to agroforestry technics									

Budget code			Result/Activities	Y1				Year 2 S1	Year 2 S2	Year 3 S1	Year 3 S2	Year 4 S1
				Q1	Q2	Q3	Q4					
			Support of best FFS groups in cooperative organization and technical guidance to compete as local service provider/operator									
			Assessment and lessons learned + improvement of template/ToRs for contracting support of FFS									
A	01	05	Support roadside plantation and process for establishment and upgrading of MoUs between Farmers Assembly and District/RNRA, including 'benefit sharing' aspect									
			Support development/finalization of guidelines and requested ministerial decree defining rules and modalities of benefit sharing for specific case of road side plantation									
			Upgrade of existing MoU for road side									
			Identification of new road side to be planted									
			New plantation of road side (tendering/contracting and implementation) (1 season)									
			New MoUs establishment and monitoring									
			MoU assessment and lessons learned + improvement of guidelines/templates, etc.									
A	01	06	Support forest reconversion and/or establishment of new forest on public/private land, based on priorities of developed DFMP/SFMP (Rwamagana)									
			New plantation/conversion (tendering/contracting and implementation) (2 seasons) according to Rwamagana DFMP									
A	01	07	Provision of high quality seed and/or clones (through importation if required) for plantations									
			Identification of potential source/origin and providers									
			Importation according to need for planting									
A	01	08	Coordination, technical support to and capacity building of district and RNRA									

Budget code			Result/Activities	Y1				Year 2 S1	Year 2 S2	Year 3 S1	Year 3 S2	Year 4 S1
				Q1	Q2	Q3	Q4					
			staff for designing and implementation of DFMPs									
			ITA									
			NTA - Rwamagana									
			NTA – 3 Kigali District									
			NTA – 3 Paref District									
A	*02*		Improved capacity for monitoring forest management, gender integration and benefitting from climate financing opportunities									
A	02	01	Upgrade the FMES system software, integrating new needs and provide capacity building for administrators, data collectors and users									
			Identification of new need, problem to be solved , new indicators to be added									
			Consultant support for system upgrade (tendering and implementation)									
			Training of data collectors and users									
			Identify need and Provide supportive equipment									
A	02	02	Build capacity and provide support to RNRA and staff and private actors of the intervention Districts to develop proposals for obtaining finance through FONERWA or other possible funding mechanisms and be able to do the required Measuring, Reporting and Verification (MRV)									
			Identification of main opportunities for financing (both in terms of activities/results that are eligible for up-scaling and in terms of potential financial sources available), develop Consultancy support ToRs accordingly and tendering/contracting									
			Consultancy support for proposal development									
			Support in lobbying and facilitation for financing research									
A	02	03	Support gender equality and gender mainstreaming in project related aspects of DFMP/ woody biomass sector/PFM									

Budget code			Result/Activities	Y1				Year 2 S1	Year 2 S2	Year 3 S1	Year 3 S2	Year 4 S1
				Q1	Q2	Q3	Q4					
			Tendering and contracting (framework expert contract)									
			Analysis of gender sensitivity of project activity and identification of opportunity and design of detail action plan and role of gender expert									
			Support of gender expert during awareness/training session for: - FMGs identification and MoU establishment for public FMU, - FOA identification and organization - Assembly of farmer organization for road side - FFS groups supports									
A	02	04	Capitalization and knowledge management									
A	02	05	Technical advice and support for coordination of monitoring and capacity building									

7.3 ToR for long-term personnel

7.3.1 Forest Management (ITA)

Duty station:

Kigali, with frequent trips in the 7 districts.

Duration of the assignment:

3.5 years (42 months)

Responsibility:

The Forest Management Expert is responsible to oversee and to guide the technical implementation of the project, in accordance with the orientations of the Technical and Financial File and those of the Steering Committee of the project. He/she ensures that the strategy of the project is consistent and that the implementation of the project is technically sound. He/she provides technical no-objection at key moments.

His/her role is to ensure that in collaboration with the project manager and the direct counterparts, the scope of the project is properly implemented and monitored. He/she provides advice and technical support and guidance to the Rwanda Natural Resources Authority (RNRA) / Forest and Nature Conservation Department (DFNC) and district teams in all technical aspects of project implementation, giving high priority to the capacity development of his direct counterparts and other key actors.

Counterparts:

The direct counterparts of the Expert are:

- The Forest Program Manager, in the Single Project Implementation Unit (SPIU) of RNRA,
- The Head of the DFNC,
- The Director of the Forest Management Unit of the DFNC
- The District Forest and Natural Resources Officers (DFNRO) of intervention districts

He/she will work directly with and in support of the Project Manager and technical team that will be composed by the staff of SPIU working (partially) for the project as well as the staff of DFNC under RNRA and of the target districts.

Reporting line:

The Expert reports to the Project Manager of the intervention, who will be his/her direct supervisor, under the leadership of the Resident Representative.

Main activities:

- Participate in in meetings of the project management, the Technical Working Group of Forestry and as guest for the Steering Committee
- In support of the project manager, contribute to the establishment of a system for the monitoring of the project activities and the monitoring itself, contribute to the preparation of work plans and timetables of the activities, and contribute to the periodic reporting on technical activities and outputs achieved (quarterly and annual), as well as to the review activities (mid-term and final);
- Provide technical input to, and support for, all tenders (works, studies, services,…), commissioned by the project; Provide technical support for the preparation of tender documentation and ToRs (studies, consultancies, works,) related to forest activities, take part in and support the technical

evaluation of offers, and, as required, for the monitoring of contracts execution and give technical no-objection on key milestones of the tendering and implementation phases of each tender;

- Take part in monitoring and supporting the desired change processes, technical evaluation of project activities and the production of technical documents on analyses, compile lessons learned and contribute to knowledge management.
- Support the development and implementation of District Forest Management Plans (DFMP)
    - Ensure the technical coordination and on-job training/capacity building of the national District-based Project Forest Specialists (project technical assistant) to support the District Administrations in the design and practical implementation of forest management plans, based on resources from the project, from government, and/or from other partners.
    - Ensure the technical coordination and supervision of the design of new DFMPs.
    - Provide technical inputs/guidance and on-the-job training of DFNC/District technical team participating in the design and implementation of DFMP/SFMPs;
    - In support of the experts that will be contracted, contribute to the preparation of the proposals for financing forest management in line with the designed DFMP,
    - Ensure the participative assessment of technical approaches piloted in the field for DFMP design and implementation, and provide a documentation on lessons learnt with recommendations on improved methods/templates, and required enabling environment
    - Ensure the technical coordination/supervision of teams/experts in charge of activities requested for the design of new DFMPs, such as public forest cadastre, forest cover map updating, quality and quantity assessments (QQA) of public forests, development of user friendly software database for DFMP design, etc.. Based on these results, ensure the design of new DFMPs in collaboration with project/DFNC/District staff and in a participative and on job training approach, ;
- Provide technical support to RNRA/DFNC in order to establish, in collaboration with all concerned stakeholder, legal and technical framework (tender/contract templates, technical guidelines/procedures, eventual requested ministerial decree, etc.) allowing implementation of PPP and PFM through:
    - Long term concession of public forest to private operators;
    - Support of small private forest owners in design and implementation of private Forest Management Unit (FMU)
    - Establishment of MoU between assembly of farmers and District/RNRA for road/river/lake side plantation management with benefit sharing principles
- Support RNRA/DFNC and District in the tendering and contracting processes for concession of public FMUs to PFOs
- Provide technical support (through specific training session and on-job training) to national District-based Project Forest Specialists, RNRA/DFNC/District teams in charge and involved private operators for experimentation (piloting) of new approaches for:
    - Implementation of PFM in public forest by establishment and monitoring of MoU between PFO and FMGs;

- Support establishment and monitoring of MoU between farmers and District/RNRA for planting and management of roadside plantation;
- Support of small private forest owners in establishment of FOA/FMU, in design of related SFMP and in conversion of old/poor forests;
- Agroforestry development through support/training of existing FFS groups.

- Provide technical support to DFNC/ Tree Seed Unit in the importation of high quality germplasm (seed/clones) according need of the project for planting activities;
- Support RNRA-DFNC and intervention District in the upgrade/improvement and implementation of the Forest Monitoring and Evaluation System (FMES);
- Ensure that with the support of a well-qualified consultancy agency, gender is mainstreamed in all project activities;

Qualifications:

- Forest Engineer or master's degree in forest sciences or environmental sciences;
- At least 8 years' experience in silviculture and design/implementation of forest management plans in tropical or subtropical countries;
- Proven experience of at least 5 years in the institutional strengthening and capacity building of forestry services at all levels (central, decentralized and local);
- Proven experience with involvement of the private sector in forest management;
- Proven experience in participatory approaches to forest and agroforest management;
- Gender sensitive and proven experience in integrating gender into forestry and biomass activities
- Experience in the following disciplines would be added benefit: forest policy, forest legislation; GIS and other information systems (development, management);
- Technical expertise in the following disciplines is desirable: biomass value chain, watershed management and erosion control, integrated rural development;
- Experience with the forest management in Rwanda/Region is an asset
- Good reporting and communication skills;
- Written and spoken fluency in English and French.

7.3.2 Project Manager

Duty station:

Kigali, with occasional trips in the 7 districts.

Duration of the assignment:

3.5 years (42 months)

Responsibility:

The project manager is in charge of managing the project, in order to guarantee its optimal implementation, in accordance with the orientations of the Technical and Financial File and those of the Steering Committee of the project.

His/her role is to ensure that the project is properly implemented and monitored, according to the BTC project implementation guidelines and in line with the Rwandan systems when they apply. In order to

achieve this objective, the manager works closely with his/her counterparts, the BTC development cooperation expert, the project management unit team and the project stakeholders. He/she provides advice, support, oversight and guidance to the project team, including SPIU staff fully of partial financed by the project, in all aspects of project management (coordination, finance, procurement, HR, communication, risks, time, M&E and scope). He/she will be responsible for the operational and results monitoring of the project, to ensure efficiency, effectiveness and positive outcomes of the project.

He/she will give high priority to the capacity development of his direct counterparts and other key actors.

The project manager will have the responsibility to facilitate to the technical dialogue and coordination between ministries and stakeholders in charge of the management of the supply and the demand for woody energy biomass, by representing BTC as co-chair of the TWG Forestry and of the TWG Biomass, at least for the first year of the project, with the direct support of the BTC development cooperation expert in forest management.

Counterparts:

The direct counterparts of the Project Manager are:

- The SPIU Coordinator within the Rwanda Natural Resources Authority (RNRA), for the administrative and financial aspects of the project.
- The SPIU Forest Program Manager within the Rwanda Natural Resources Authority (RNRA), for the technical aspects of the project.

He/she will work directly with and in support of the project team that will be composed by the staff of the project, as well as the staff of the SPIU and DFNC under RNRA and of the target districts.

Reporting line:

He/she will work for BTC, under direct supervision of the Resident Representative of BTC in Kigali.

Main activities:

Overall project coordination and project team management:

- Ensure that all project activities are well coordinated for the achievement of the results and the specific objective,
- coordinate and supervise the implementation of project activities in accordance with the approved work plans,
- Attend and prepare the Steering Committee meetings on a regular basis and follow-up timely and adequate implementation of the PSC decisions,
- Ensure the preparation of the operations plans and any reports to be submitted to the Steering Committee for approval and information,
- Liaise with other projects within the SPIU to ensure lessons exchanges throughout project implementation
- Provide updates to project stakeholders including the Belgian Embassy and BTC at TWGs and SWG platforms.
- Report quarterly to BTC representative or more frequently if needed and ensure the annual result reporting,

Scope and quality (M&E) management:

- Ensure the development and implementation of the project monitoring plan.

- Provide strategic guidance and advice in relation to the achievement of the project specific objective and results,
- Ensure strategic and operational planning, monitoring and controlling, and continuous improvement
- Provide technical inputs into the preparation of terms of reference for the various studies and capacity building activities subcontracted and support the implementing agency to ensure their adequate implementation.
- Ensure coherence and coordination of project strategies and activities

Administration, HR and financial management:

- Ensure for the preparation of financial and procurement planning and budgeted work plans,
- Ensure a correct, smooth and efficient organization of the financial administration;
- Ensure all instructions received from the representation or BTC headquarters are correctly applied and followed and that the requests are met within the deadline.
- Ensure the update of the Administrative and Financial Manual, and ensure the communication of new procedures to all admin/fin staff involved.
- Support the procurement and contract management processes
- Ensure timely production of FIT statements; provide guidance and supervision to the accountant who produces the FIT statements.
- Follow up and update of budget; Compare budget and planning with actual expenses; provide monthly overview of budget balance to co-management and technical teams in collaboration with RAFI
- Ensure overall management of bank and cash accounts, making cash calls on basis of the financial planning.
- Preparing and assisting internal and/or external financial audit mission

Communication management

- Ensure proper and effective communication inside and outside the project, in collaboration with technical teams and BTC communication experts.

Risk management

- Manage project risks, by updating the risk follow-up table and ensuring that risk mitigation actions are properly implemented

Facilitation

- Co-chair the TWG Biomass and the TWG Forestry, in line with the TOR of those technical working groups, ensure to be advised by relevant experts and gain in-depth knowledge on relevant issues for the TWGs.

Required experience:

- A minimum of 5 years' experience in the management of international development cooperation interventions;
- A minimum of 3 years' experience in related technical the fields of expertise of the project

Required technical knowledge:

- A University degree in Agriculture, Forestry, Business Administration, Management, Development studies, or related disciplines
- Proven experience in Project Cycle Management Systems and Result Oriented Management
- Experience in Monitoring and evaluation of projects;

- Experience with high level public institutions is an advantage
- Very good hands-on knowledge of excel and word is a must. Other programs (Database, accounting programs) a strong advantage;
- Proficient in English and in French,
- Mature, good communicator and team player;
- Able to work sometimes under stressful conditions

7.3.3 National Technical Assistant Project Forest Specialist (NPFS)

Description of the function

In order to support Districts in the design and practical implementation of forest management plans, the project will appoint a National Project Forest Specialist (NPFS) in each of the distinct geographic areas of implementation:

- 1 for Rwamagana District in Eastern Province for 39 months, based in Rwamagana;
- 1 for the three Districts of Kigali (Nyarugenge, Kicukiro and Gasabo) for 24 months, based in Kigali
- 1 for the three northern PAREF.be2 Districts (Rulindo, Gakenke and Gicumbi), for 39 month, based in Gakenke.

Under the supervision of the SPIU Forest Progam Manager and of the Project Manager, under the technical coordination and with the technical support of the ITA, the NPFSs will counterpart the District Forest and Natural Resources Officer (DFNRO) and District Environment Officer (DEO) to support design of DFMP and implementation of forest management approaches in the on-going work of the District(s).

Role and tasks

The **NPFS of Rwamagana** will:

1. Ensure good communication and relationship with local key stakeholders, ensuring the basement for an efficient participative approach in the design and implementation of DFMPs;
2. Assist in district data collection (socio-economic data, register of actors, etc.) requested for the design of new DFMP;
3. Assist in facilitation and supervision/control of field activity relating public forest cadastre (including conflict case resolution) and public forest QQA;
4. Contribute in establishment of technical framework (tender/contract templates, technical guidelines/procedures, etc.) allowing implementation of PPP and PFM, and support RNRA/DFNC and District in the tendering and contracting processes for concession of public FMUs to PFOs;
5. Assist in implementation of PFM in public forest by supporting establishment and monitoring of MoU between PFO and FMGs;
6. Support establishment and monitoring of MoU between farmers and District/RNRA for planting and management of roadside plantation;
7. Identify potential champions and assist small private forest owners in establishment of FOA/FMU, in QQA of their own forest, in the design of related SFMP and in organization/supervision of conversion of their old/poor forests (according to SFMP);
8. Assist in identification, technical supervision and control of all forest management/planting activities supported by the project;

9. Provide technical guidance and technical support for all forest management or agroforestry activities implemented by the District through resources from government and or from other partners
10. Assist and provide technical guidance to the forest operator in charge of Agroforestry development through support/training of existing FFS groups.
11. In support of expert that will be recruited, contribute to the preparation of proposal for financing forest management according to designed DFMP;
12. Support District in implementation of the FMES (field data collection);
13. Ensure that gender is mainstreamed in all project activities, assist in training/awareness activities;
14. Facilitate/ensure the organization and delivering of training/awareness sessions to be ensured in the context of project activities;
15. Support District in the preparation of District-based work plans and budget
16. Contribute to establishment of project M&E system and ensure periodic reporting to District/Project

For the **NTFS of 3 Kigali Districts**, only tasks 1 to 4, 9, and 11 to 16 should be ensured.

For the **NTFS of 3 northern PAREF.be2 Districts**, tasks 2 and 3 must not be ensured.

Qualifications required:

A minimum of:

- a Master's degree or equivalent in forestry, agroforestry, natural resources management or environmental sciences, with a least 5 years' relevant work experience;
- or a bachelor's degree or equivalent in forestry, agroforestry, natural resources management or environmental sciences, with a least 8 years' relevant work experience;

Relevant work experience in one or more of the following fields: forest planting and management, agroforestry/forest extension;

Experience in coordination of project field activities, community mobilisation, participatory approaches and gender mainstreaming would be advantageous, as well mastering of GIS and Excel software.

Good communication skills with written and spoken fluency in Kinyarwanda, English and French essential.

A motorcycle driving licence (or the ability to learn and pass a test) is essential.

7.4 Points to consider when drafting ToR for framework contract for consultancy on Gender Equality and Women's Empowerment (GEWE)

Introduction

This Framework contract will provide the support necessary for the Project to apply a twin-track approach to GEWE. This twin-track approach encompasses both specific measures to address discrimination and inequalities in the forestry sector, and a gender mainstreaming[26] approach in order to consciously integrate a gender perspective into analysis, procedures and policies during throughout project implementation. 'Mainstreaming' goes beyond increasing women's participation in programmes and activities. It aims at making women's and men's personal experiences a key element in development programmes and policies.

The Consultancy Team will deliver outputs at two levels: 1) GEWE through specific and targeted interventions (interventions with the primary aim of promoting gender equality) and 2) GEWE in all other project activities as a cross-cutting issue.

Component 1: Gender mainstreaming at all project stages

The Consultancy Team proposes and discusses an action plan, integrating GEWE at key moment during project implementation. This action plan should cover following issues:

- Measures for gender sensitive Human Resource policy for staff members;
- Input for integrating GEWE in all training activities of project (see GEWE Score card for Trainings);
- Input for integrating GEWE in the comprehensive baseline of the project and other key moments of M&E;
- Assure the update of the Gender budget Scan in collaboration with project management;
- Specifying and providing indicators (sex/gender disaggregated) and data collection tools for monitoring and assessing the progress (in line with the logframe);
- Ensuring the programme communicates promptly and adequately on project activities related to GEWE;
- Provide proposals for integrating GEWE issues in ToR, contracts, tendering;
- Provide input for a gender sensitive internal regulation for programme;
- Provide input for integrating GEWE in programme operations and procedures;
- Provide any technical assistance requested by the programme (Direction and staff);
- Assisting backstopping mission on GEWE;

[26] The United Nations ECOSOC defines gender mainstreaming: "…the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic, and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality"

Component 2: Specific and targeted interventions

Phase 1 – Awareness-raising sessions

On the basis of an **awareness-raising needs assessment** (see EU Resource Package for methodology) the Consultancy Team develops an awareness raising and training plan at the start of the programme. The plan will be discussed with Project Management and integrated in the annual activity planning.

During this first phase the project team and staff members of the partner institutions at different administrative levels will participate in awareness raising sessions and understanding of the basic concepts (gender, gender equality, women's empowerment) and the historical background in Rwandan context on GEWE.

Target group: all staff members of the programme team, including staff members of the partner institutions at different administrative level;

Resource persons: Gender Monitoring Office and district gender focal points

Outputs:

Awareness needs assessment: The report, based on a participatory needs assessment, will be discussed with the Project Management and provides a basis for further action.

Assessment Report on the shared knowledge during the awareness sessions. The report will include recommendations for further action.

Phase 2 – Training sessions

The awareness-raising sessions will be followed by a participative assessment of training needs (to be conducted at the end of one of the awareness-raising sessions for reasons of efficiency). The conclusions of the training needs assessment and a proposition for a training plan will be discussed with the Project Management. A maximum of 6 training modules will be delivered by the Consultancy Team, addressing the project staff and staff members of partner institutions at different administrative levels. The training modules are practical and oriented towards strengthening skills and capacities for applying GEWE tools and methodologies in forestry. The modules concern, for example, the following questions: How to apply gender sensitive indicators? How to conduct participatory meetings with communities? How to conduct gender sensitive monitoring and evaluation? How to conduct a gender analysis and/or a socio-economic analysis focusing on GEWE? How to collect and analyse sex/gender differentiated data and information? How to integrate gender in contracts, ToR? How to integrate GEWE in DFMP revision and development processes?

In combination with the previous awareness-raising sessions, these training modules will enable staff to conduct awareness-raising sessions at community level (taking into account specific needs as timing, attendance, location) and ensure the participation of women and men in the revision processes of the DFMPs/SFMPs. Special attention will also be given to the gender focal points at District level. One of the Modules specifically addresses their training needs to enable them to be directly involved and to influence forest activities.

This phase also includes the development of gender specific and gender sensitive training materials, including tools (e.g. gender-disaggregated data collection tools). These modules will also strengthen GEWE capacities of staff to enable constructive contacts and meetings with communities (on related but more sensitive topics such as Violence Against Women and succession law).

Each training module will be assessed by the participants. The final assessment report, to be drafted by the Consultancy Team, will formulate conclusions and, if pertinent, suggestions for further actions and or training. An additional budget of 10% is available for an additional training module.

Target group: all staff members of the programme team, staff members of the partner institutions and gender focal points at District level;

Resource persons: Gender Monitoring Office, organizations focusing on “engaging-women”

Outputs:

Training needs assessment: The report, based on a participatory needs assessment, will be discussed with the programme Direction and provides a basis for further action.

Assessment Report on the acquired knowledge during the training modules. The report will include recommendations for further action if needed (a supplementary budget of 10% of the initial amount is to be provided by the programme).

Phase 3 – Integration of GEWE in DFMPs/SFMPs

On the basis of the previous phases (awareness-raising and training), staff concerned with the elaboration of the DFMPs/SFMPs will be enabled to integrate GEWE issues in the DFMPs/SFMPs. The Consultancy Team will develop on the basis of existing material (see table at 6.2 and other previous analysis and recommendations made by the BTC gender Expert and the Consultants) specific checklists for quality assurance. They will coach the actors involved in the preparation of the DFMPs/SFMPs in the field. The Consultancy Team will propose a calendar for joint field visits and discuss these with the Project Management. These joint field missions will provide an entry point for further autonomous action of the staff involved. If needed, staff can call upon additional joint field trips, however these field trips should be limited. For reasons of efficiency, staff members can jointly organize coaching sessions during field trips. A total of 25 field trips are to be planned, covering key moments in preparing/implementing the DFMPs. A distinction should be made for coaching sessions during preparation (12), focusing on analysis and decision-making during planning processes in order to integrate women’s needs and interest (voice and participation of women) and coaching sessions during implementation (12), focusing on specific activities of the implementation of DFMPs/SFMPs.

The modalities of these coaching sessions during field trips will be proposed by the Consultancy Team and discussed with Project Management. The Consultancy team will also provide the tools and methodology to be applied during these coaching sessions on field trips. In order to enable the District authority to monitor progress of the coaching sessions and of the integration of GEWE in the implementation of DFMPs/SFMPs, the Consultancy Team will develop a Dashboard with indicators. The Dashboard will integrate GEWE into forestry sector accountability structures at District level (provide an explicit reference to gender in performance contracts of DFNRO/GFPs).

Target group: all staff involved in the preparation and implementation of DFMPs/SFMPs;

Resource persons: mainstream forestry administration at District level, gender focal point at District level

Outputs:

Coaching Road map: The Road Map includes a timetable for each of the Districts, the participants and the tools and methodology to be applied. The Road Map will be discussed with the programme Direction and provides a basis for further action.

Dashboard for monitoring the progress during implementation of DFMPs/SFMPs. The Dashboard will not exceed 1 page / District and focuses on results. It enables the measurement of progress, from a gender based perspective. The draft model will be discussed with the staff and approved by the District authority. The Dashboard provides a tool to be used by accountable staff responsible for monitoring the GEWE integration in DFMPs/SFMPs implementation.

Phase 4 –Integration of GEWE in FMUs & FMUs

The Consultation Team will provide support for the integration of GEWE into the FMUs. This requires specific attention targeting mainly women entrepreneurs and women's organizations. However in order to mainstream the approaches, the Consultancy Team should ensure to involve men in an appropriate manner.

This phase has four components. First the Consultancy Team will develop and conduct a brief sensitization campaign in collaboration with the Gender Monitoring Office and the gender focal points at District level. The campaign focuses on promoting women's participation in bidding for PuFMUs private operator tenders. Secondly the Consultancy team will propose and discuss (with the Project Management) incentives for women entrepreneurs and women's cooperatives to manage forests as private actors. Thirdly the Consultancy Team will provide operational tools to promote GEWE in tendering procedures (see table at 6.2 for input). Finally the Consultancy Team will provide additional training and advice where needed. For this purpose the Consultancy Team will be available for training/coaching sessions of administrative and programme staff involved in tendering procedures.

Target group: all staff involved in the tendering procedures, women entrepreneurs and women's organizations;

Resource persons: Gender Monitoring Office, mainstream forestry administration at District level, gender focal point at District level

Outputs:

Sensitization Campaign: The Consultancy Team will draft and discuss together with the gender focal points at District level and with help from the Gender Monitoring Office, a sensitization campaign on promoting women's participation in taking up a managing role in PuFMPs.

Road Map for training/coaching: The Consultancy Team elaborates in function of the needs and on the basis of discussions with the Programme Direction a Road map for the additional training and coaching sessions for staff involved in tendering procedures.

Phase 5 – Integration of GEWE in PrFMUs

The programme will focus on changing mind-sets of community members regarding women's involvement in forest management. This component addresses three items, the drafting of a sensitization workshop, the elaboration of a timetable for community consultation meetings and the proposal of incentives for women to join FMU.

First the Consultancy Team will schedule a workshop, inviting women entrepreneurs as role models and female leaders at community level.

Secondly the Consultancy Team will provide technical assistance to schedule community consultation meetings to raise GEWE issues related to female leadership and forest management and to identify entry points for promoting this. If relevant, the Consultancy team will develop teaching material and empower female community leaders to mobilize other women in their direct environment.

Thirdly the Consultancy Team will propose a list of measures to promote, mobilize and enable women to get involved in forest management units. This includes the drafting of specific tool and/or teaching material to be used to encourage women (e.g. elaborating a charter for women participating in FMU). For all teaching material and or tools, assistance can be provided by staff of the Gender monitoring office.

Target group: women in communities, female leaders, women's organizations;

Outputs:

Sensitization workshop: The Consultancy Team will draft and discuss with the programme Direction

the Workshop agenda. On the basis of a participative assessment of the 3 days' workshop, the Consultancy Team will draw a final report.

List of positive actions: The Consultancy Team elaborates proposal containing a list of positive actions, measures to be taken by the District staff, to motivate women to join PrFMU. These measures will be taken into account by the District authority and provides an input for accountability structures.

Phase 6 – Providing technical framing for actions regarding FFS

Another specific technical input requested by the programme on GEWE concerns the Farmer Field Schools. Rwanda has specific expertise in integrating GEWE in FFS. Technical assistance will build on this experience and comprise 3 elements: 1) advice on integrating GEWE issues into consultations between RNRA and RAB, 2) improve GEWE methodology addressing FFS and 3) provide teaching material (guidelines, manuals, tools, checklists) to ensure that GEWE (and related issues such as VAW) is taken into account during collaboration with FFS. A strong focus will be put on the engagement of men in these processes of GEWE.

Target group: participants of FFS;

Resource persons: Gender focal point at District level and District staff connected with FFS