

Improving Climate Resilience in Refugee Hosting Districts in Kigoma Region, Tanzania

05 September 2022

Project objective	Protecting, conserving and restoring natural landscapes, while building community resilience and adaptive capacity
Location	Nduta and Nyarugusu refugee camps and refugee hosting districts (Kibondo and Kasulu) in Kigoma Region, United Republic of Tanzania
Project Duration	3 years (January 2023 – December 2025)
Total Budget	EUR 4 million



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List of abbreviations:

ACRONYM	Meaning
CBFM	Community Based Forest Management
CBT	Cash-Based Transfers
CSA	Climate Smart Agriculture
DANIDA	Danish International Development Agency
DRC	Danish Refugee Council
DRS	Department for Refugee Services
FFA	Food Assistance for Assets
FTC	Farm Training Centers
FYDP III	National Five-Year Development Plan (FYDP III)
GBV	Gender Based Violence
GCF	Green Climate Fund
GCR	Global Compact for Refugees
GoT	Government of the United Republic of Tanzania
KJP	UN Kigoma Joint Programme
LGA	Local Government Authority
MoHA	Ministry of Home Affairs
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organization
PSN	Persons with Special Needs
REDD	Reduced Emissions from Deforestation and Forest Degradation
SGBV	Sexual and Gender Based Violence
SIDO	Small Industries Development Organization
TARI	Tanzania Agricultural Research Institute
TCSAA	Tanzania Climate Smart Agriculture Alliance
TFS	Tanzania Forest Service
UNCDF	United Nations Community Development Fund
UNEP	United Nations Environment Programme
UNHCR	United Nation High Commissioner for Refugees
UNSDCF	United Nations Sustainable Development Cooperation Framework
VPO	Vice President's Office
VSLA	Village Loans and Savings Associations
WED	World Environment Day
WFP	World Food Programme
ZADEP	Zanzibar Development Plan

Context

Refugee hosting context.

As of 30th June, 2022, Kigoma region in Northwestern Tanzania hosted 207,816¹ refugees and asylum seekers in two different camps, namely: Nyarugusu and Nduta, in Kasulu and Kibondo districts, respectively. Since November 2017, the government of Tanzania (GoT) and UNHCR have been facilitating voluntary repatriation of Burundian refugees as a durable solution. To date, more than 140,806 individuals have been repatriated back to Burundi from Tanzania. In July 2021, the GoT, supported by UNHCR, embarked on a process of camp closure of Mtendeli while consolidating Nduta camp. As the last refugees were relocated by December 2021, the Mtendeli camp area was handed over to the Kakonko District in February 2022.

Socio-economic profile of host communities and refugees.

In Kigoma region, agriculture is the primary economic activity and accounts for some 80% of the total economic output. Agricultural production in Kigoma is dominated by small-scale, subsistence farmers practicing low-input farming, with average farm sizes ranging between 0.2 and 2 ha. Uptake of agricultural technology in Kigoma is low. Agriculture is the primary livelihood activity in Kasulu district — where Nyarugusu refugee camp is situated — which is a major food-producing area for the region. The main crops produced in the district are maize, cassava, sorghum, cabbage, beans and tomatoes². Farming practices that lead to vegetation degradation contribute to increased soil erosion. In the project target districts (Kibondo and Kasulu), agroforestry is not widely practiced, and few examples of on-farm tree planting are observed, mainly involving banana trees, some small-scale fuelwood plantations on farms, and natural elephant grass (magugu) planted in the areas around the camps. Besides the small-scale agriculture practiced by host communities, agro-pastoral Sukuma people are also present in the area. They pass through the Kigoma region from the north in search of grazing land. Most of the Sukuma people are subsistence farmers and cattle herders. Some agro-pastoralist practices have been perceived to result in environmental degradation such as land clearing for agriculture including in village and national forest reserves and setting fires to trigger regeneration for pasture and getting rid of tsetse flies.

Host communities and especially refugees in the Kigoma region have a limited suite of livelihood options available to them and are vulnerable to climate-related hazards such as drought. Further to this, high levels of malnutrition among members of the communities demonstrate the need for diversified diets. While restrictions are in place on refugee livelihoods, small scale farming activities are also taking place within the camps. Refugees grow crops (mainly vegetables) individually around their homes in the form of kitchen gardens and in buffer zones; or as groups at the farm training centres (FTC) and community gardens. The harvested crops contribute to meeting household food and nutrition needs and complement the food rations provided by the World Food Programme, which currently stand at only 68% of the requirements.

Despite good relations in general, there are some occasional conflicts between host communities and refugees. Some examples include tensions around: benefit sharing on agricultural production on land informally leased to refugees; unsustainable farming around water sources; concerns by host

¹ UNHCR database. <https://data.unhcr.org/en/country/tza>

² Kibondo District Council, 2017, p. 11.

communities in downstream areas related to pollution from bathing and washing by refugees in shared streams and water sources; claims of theft of foodstuff and gender-based violence experienced by refugees during fuelwood collection.

[Where environmental degradation, climate change and displacement intersect.](#)

Climate change has both impacted, and is impacted by, existing land use in Tanzania. Agriculture is mostly rain fed and thus the success of activities in the sector remains highly dependent on weather patterns, especially rainfall. Over the last four decades, Tanzania has been hit by a series of severe droughts and flood events as a result of climate change. The consequences of climate change have been a reduction in agricultural productivity and greater food insecurity (FAO 2014). At the same time, unsustainable land management practices, including continuous cropping (with reductions in fallow and rotations), repetitive tillage and soil nutrient mining, overstocking, overgrazing, frequent rangeland burning, and over-use or clearance of woodlands and forest, are exacerbating the impacts climate change and presenting challenges to adaptation. Over 50% of Tanzania's landmass is considered degraded as a result of deforestation and unsustainable agricultural practices.³

Climate impacts are expected to be felt more strongly in Kigoma in the years to come. The Kigoma region will likely experience higher temperatures and more variable rainfall. Observed historical climate trends for the country already indicate that temperatures are rising, and rainfall is becoming more erratic. The temperature profile is shifting towards more hot days and lower or more erratic rainfall patterns during the main growing seasons is observed, with increased risk for extreme weather events and flooding. By 2050, Kigoma is projected to have temperature increases between 1.6°C - 2.4°C, with the average number of hot days increasing by up to 8 - 15 times. In the same timeframe, Kigoma is expected to experience increased total annual rainfall by up to 9% and hourly peak precipitation intensity that leads to flooding increasing by 18%. These changes are putting at risk crop production, livelihoods and resulting in erosion and land degradation, undermining the capacity of ecosystems to provide services for refugee and host populations residing in this area.

[Tanzania's Nationally Determined Contributions \(NDC\)](#) attributes agricultural expansion, human settlements and population increase, overgrazing, firewood and charcoal production, uncontrolled fires, timber extraction, development of infrastructure/industry, and biofuels extraction amongst others as the major drivers to deforestation and forest degradation. Meanwhile, the underlying causes to these drivers, according to [Tanzania National REDD Strategy](#), are policy failures and rapid population growth and rural poverty. Tanzania is highly vulnerable to adverse impacts of climate change and therefore needs to put in place adaptation actions in order to safeguard development gains and achieve development targets.

Underlying factors of environmental degradation and deforestation in Kigoma include uncontrolled expansion of agricultural activities and/or settlements in the forest, grazing and improper livestock keeping in the forest, charcoal making, uncontrolled forest fires, and pit-sawing and pole cutting. There is a high demand for charcoal for both domestic and commercial purposes and illegal charcoal

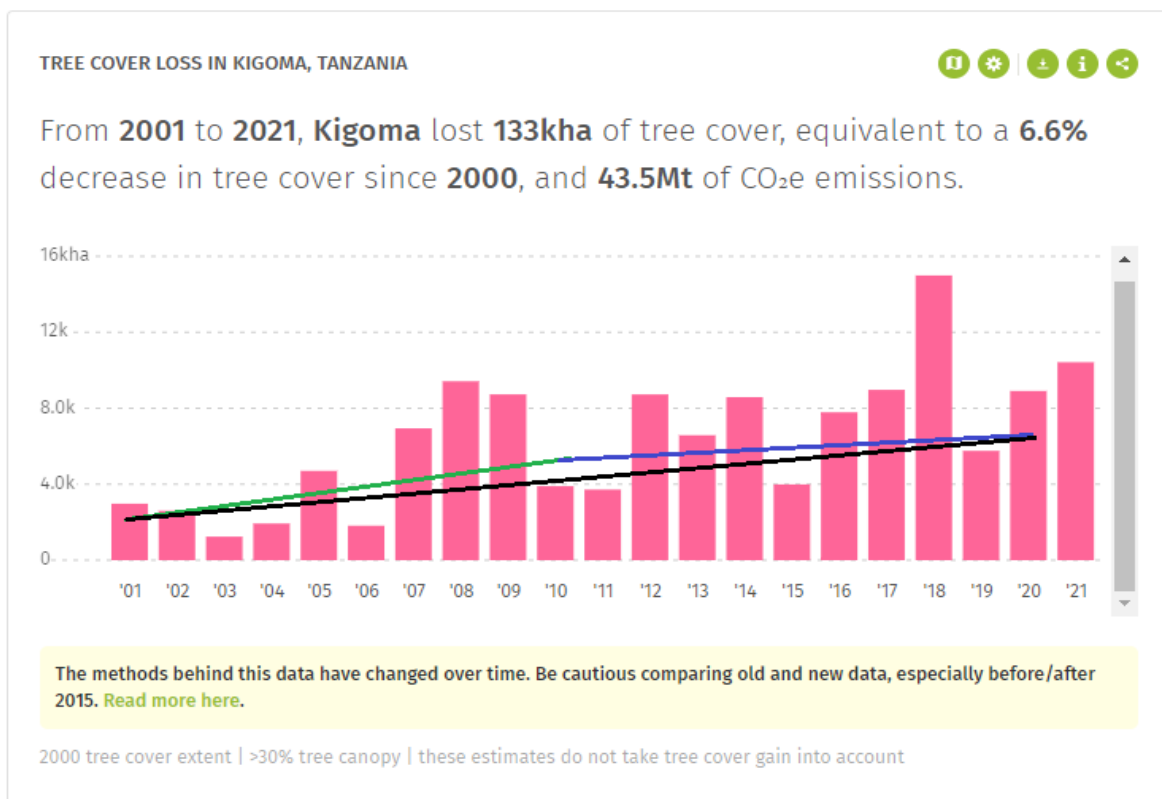
³ Office of the Vice President, Division of Environment. 2018. Land Degradation Neutrality Target Setting Programme Report.

making contributes substantially to deforestation and forest degradation⁴. The local demand for fuelwood is exacerbated by the presence of a relatively large refugee population, as wood fuel is the main source of energy for cooking in both the refugee and host communities. The result of these pressures on the forest cover is a degraded landscape with low soil stability, reduced soil nutrient availability, and reduced soil moisture. This makes the landscape more susceptible to the impacts of climate change and less able to support agricultural and other livelihood activities, less able to retain water resources required for these livelihoods and more susceptible to flooding.

Deforestation in Kigoma is a major environmental challenge. Over the years, the woodland coverage in refugee hosting areas has also progressively declined with deforestation linked to fuelwood collection being of particular concern.

According to [Global Forest Watch](#), Kigoma lost 347ha of humid primary forest from 2002 to 2021, making up 0.27% of its total tree cover loss in the same time period. Meanwhile – during the same period – Kigoma lost 133kha of tree cover, equivalent to a 6.6% decrease in tree cover since 2000, and 43.5Mt of CO₂e emissions; total area of humid primary forest in Kigoma decreased by 2.2% in this time.

There is an overall increase in deforestation rates from 2001–2010 (green trend line) but the tendency of deforestation was lower during the period 2010–2021 (blue trend line). However, the overall trend (black trend line) is still showing an overall increase in deforestation.



The general increase in deforestation, with some spikes observed such as in 2018, is a result of increased demand for agricultural land and wood resources (especially wood fuel) which are the main

⁴ Lusambo LP, Lupala ZJ, Midtgaard F, Ngaga YM, Kessy JF, et al., 2016. Increased Biomass for Carbon Stock in Participatory Forest Managed Miombo Woodlands of Tanzania. *J Ecosys Ecograph* 6: 182.

causes of deforestation in the area. Between 2008 and 2020, Kigoma recorded an 800 percent increase in livestock numbers entering the region from other areas. Annex 2 provides some more analysis of deforestation rates in and around refugee camps and within host communities.

The Government of Tanzania through the Tanzania Forest Service Agency (TFS) has increased efforts to protect and conserve natural forests through the prohibition of illegal activities including grazing, charcoal burning, and tree cutting. The Nature Conservancy in collaboration with the GoT through Tanzania National Parks Authority (TANAPA), has been implementing Forest Management activities with the aim of reducing illegal forest activities such as harvesting of timbers, agricultural expansion, and forest fires. These efforts could be linked to the decline rate of forest loss in Kigoma region over the last ten years. In addition, the GoT is collaborating with other stakeholders through Joint Forest Management to delegate forest protection responsibilities to other stakeholders. For example, natural forests in the communities/ villages are managed under the Community Based Forest Management approach which means natural forests in local communities receive some sort of forest protection which is contributing to the decrease in the tendency of deforestation.

In Kigoma, humanitarian operations directly interact with the environment and its natural resources. In doing so, environment and natural resources become under increasing pressure as humanitarian operations and services rely on nature-based resources including trees for construction timbers and fuelwood demands for cooking and heating power; water for various usages; and soil for shelters construction. This contributes to various environmental risks such as deforestation which can cause desertification; land degradation; soil erosion; biodiversity loss; water resources depletion and pollution; local air quality pollution; and land-use change among others. The Malagarasi-Muyovozi RAMSAR is a habitat of great biodiversity in the vicinity of the project area. Ramsar Site, in order of their approximate dominance is composed of: miombo woodland and forest (65%), wooded grasslands (17%), floodplain grasslands (9%), permanent swamps (3.2%), bushland (2.8%). The remaining 3% was made up of cultivation and open water. Permanent swamps cover about 130,000 – 160,000 hectares in the Ramsar Site while papyrus stands make up not more than 50% of this (covering about 48,000 – 90,000 hectares). These figures are substantially lower in recent years because of degradation⁵.

While energy use patterns in Kigoma are similar for both refugees and host communities⁶, both rely on woodfuel, encompassing both firewood and charcoal, as their main source of cooking fuel, the population density in the camps has intensified the scarcity of woodfuel, contributing to over-exploitation of nearby forest resources. This has been noted to be a source of conflict between the host communities and the refugees. Refugee presence has had and continues to have an impact on deforestation in the region as fuelwood demand by refugees outweighs reforestation efforts and current tree planning initiatives by UNHCR and partners.

Current Government policies in Tanzania limit opportunities for refugee livelihoods, leaving refugees, and women in particular, highly dependent on humanitarian assistance and vulnerable to a variety of

⁵ <https://rsis.ramsar.org/ris/1024>; https://www.researchgate.net/profile/Paul-Erftemeijer/publication/277157446_Status_of_Vegetation_Disturbances_and_Threats_to_Habitats_in_the_Malagarasi-Muyovozi_Ramsar_Site_Tanzania

⁶ According to the 2017/18 Household Budget Survey, 57.2% of the households in Kigoma rely on firewood as their main energy source for cooking, while 35.7% primarily use charcoal.

protection risks. One of the major risks refugee women and girls are exposed to is Gender Based Violence (GBV). Women and girls are generally responsible for collecting firewood and there has been a significant number of GBV-related incidents both during firewood collection outside the camps or while children are left unattended at home. At present over 90% of households across the two refugee camps in the Kigoma Region use firewood for cooking which they collect from the forests within and around the refugee camps. In addition, refugees have limited livelihood opportunities which reduces their purchasing power and means they do not have resources to purchase alternative fuel for cooking. UNHCR and humanitarian partners provide biomass briquettes and fuelwood to selected Persons with Special Needs (PSN) in the camps.

1. Rationale.

The Government of Tanzania has been increasingly sensitive to the environment and climate agenda and has been taking steps to address current and future challenges. During the recent World Environment Day celebrations in early May 2022, the government unveiled its Ten-Year Strategic Environmental Conservation Plan and instructions have been given to sectorial ministries and local government authorities (LGAs) to incorporate environmental conservation plans in their respective budgets. In addition, each District is expected to reach the target of planting 1.5 million trees per year. The Government, both at national and local levels, has also repeatedly and publicly expressed their particular concern about environmental degradation in refugee hosting areas. These concerns relate particularly to deforestation as a result of collection of firewood to meet cooking energy needs. During a visit of the High Commissioner to Tanzania in February 2019, he indicated the UNHCR's commitment to address environmental issues in refugee hosting areas, particularly through pursuing financing through the Green Climate Fund (GCF).

UNHCR has regularly emphasized its commitment to advancing the objectives of the Global Compact on Refugees, which include expanding the support to host communities and has stepped up its engagement in addressing environmental and energy challenges in the refugee hosting areas. While Tanzania has a generally restrictive approach towards refugee management, there appears to be a recent easing on the restrictions on refugee livelihoods and skills development. Following a high-level dialogue that took place between UNHCR and the Government in March 2022, a workplan was drawn up between the Government and UNHCR which permits the establishment of kitchen gardens in the camps and makes allowances for small scale livelihood activities. As a co-benefit, this project is expected to positively contribute to policy dialogues focused on opening up space for refugee participation in livelihoods activities.

As outlined above, Kigoma region faces a range of drivers of environment degradation, which are expected to be exacerbated by the impacts of climate change in the years to come. There is need to restore and build resilient ecosystems and build the adaptive capacity of communities. Rural populations, women particularly, lack technological support and skills, which leads to reduced productivity, low rates of storage and preservation of crops, and loss of harvests. Although agricultural practices are adaptive to short-term changes in climate (given business-as-usual climate variability), future adaptation to climate change over the longer term is limited. Other critical barriers to climate adaptation at a household level include: inadequate awareness and knowledge of climate change and

its impact on livelihoods; inadequate access to information and knowledge to better manage increased climate variability and recurrent climate shocks; mismanagement of (common-pool) natural resources and lack of awareness of unsustainable practices that results in widespread land/environmental degradation; poor adaptation options and practices that would reduce vulnerability and strengthen preparedness to climate-related hazards; non-diversified, low-output livelihoods, which increase vulnerability to climate impacts. Given the complexity and interconnectivity of the challenges, this project puts forward an integrated landscape approach which is expected to invest in several interconnected interventions that collectively will address these barriers and create a lasting impact.

2. Lessons learned informing the project design and implementation.

Development oriented projects that bring benefits to refugee hosting areas contribute to the recognition that refugees can contribute to the broader development of host communities, therefore ensuring greater political and local acceptance of refugees. In particular, projects that specifically address key government priorities, in this case environmental degradation in refugee hosting areas, have been observed to positively influence the discourse on refugee issues and management.

Working through the Kigoma Joint Programme has strengthened relationships between the UN and local government authorities and has improved coordination and complementarity. The joint programme framework and the detailed workplans of the KJP provide a great entry point to leverage and complement other UN agencies' investments. With several actors currently supporting or planning to support government's efforts in tackling environment and energy challenges in Kigoma, coordination is a key success factor. This is also important in terms of collaboration with the Local Government Authorities (LGAs) who need to retain a clear overview and perspective of what activities are ongoing in their areas. Engaging Local Government Authorities in all stages of the project, including planning, implementation and M&E, builds local capacities, enhances ownership and ensures sustainability of the investments, beyond the project duration.

The landscape approach has been identified as a powerful tool to address challenges in the rural space. Rural areas are undergoing transformative changes as natural resources such as forests, water, land, and biodiversity face increasing pressure and the ecosystem services they provide continue to degrade.⁷ A landscape approach aims to reconcile competing objectives for allocating and managing land to achieve a social, economic and environmental success. It carries massive potential to help achieve this balance in areas where use of land – for agriculture, livestock, and other forms of production – competes with environmental and biodiversity goals. The World Bank, in its [2019 Tanzania Country Environmental Analysis](#), identifies the landscape approach as one of the pathways to sustainability for Tanzania. The interventions as part of this project align with this approach and seek to holistically address environmental and climatic challenges, while building community resilience and promoting prosperity and peaceful coexistence between communities. The challenges that is often foreseen in using the landscape approach when different local governments are involved

⁷ The World Bank Group Tanzania 2019 Country Environmental Analysis: Environmental Trends and Threats, and Pathways to Improved Sustainability, also identifies the landscape approach as one of the pathways to sustainability for Tanzania.

will be addressed using the coordination structure of the Kigoma Joint Programme (KJP) – an area-based programme that brings together 16 different UN agencies. Lessons learned from the KJP phase one will be leveraged to ease potential coordination challenges.

There is an urgent need to strengthen local capacities and systems to manage common-pool resources and to support forestry interventions. The extent of degradation in Kigoma, as well as decreasing returns from woodland resources, demonstrate that common-pool resources (forested land) are not being efficiently managed. Interviews with farmers who consulted by UNEP for the feasibility study for a prospective Green Climate Fund project showed a general lack of awareness of the benefits of planting fodder trees, and an underappreciation of their value in supporting animal husbandry. However, several tree planting initiatives in the project area have been well received by both host communities and refugees as well as by government and beneficiaries showed interest in receiving more seedlings following initial disbursements. Tree survival rates have been observed to be less than optimal and this is a concern of the local authorities. Investing on solid post planting maintenance and technical support to capitalize on tree planting, both in the host communities and in the refugee camps, has been identified as a key success factor for tree survival rates and this aspect has been included in the project design.

Women play a central role in addressing inequalities in terms of both policies and day-to-day practices and thus contribute to resilient communities. The inclusion, meaningful participation and leadership of women's voices in climate research, adaptation and mitigation efforts is pivotal. Women's leadership and decision-making can strengthen preparedness and response in the context of disaster displacement. However, in many communities, cultural norms and time-intensive household care duties often impede women's abilities to participate in community consultations and decision-making processes about sustainable management initiatives. This means that when it comes to natural resources and ecosystem management, women's needs, priorities and knowledge are often ignored or overlooked, impacting their empowerment and agency and undermining the effectiveness of sustainable management solutions. In addition, challenges related to sourcing of fuelwood have an immediate impact on women and child protection as this exposes them to GBV risks. The project will make specific efforts to promote and mainstream gender consideration in environmental management and restoration interventions and to ensure women are reached with targeted activities that strengthen their resilience and adaptive capacity. Environmental awareness raising will also address the issue of gender roles, GBV and women inclusion in natural resource management. The project will also set specific targets for women to be reached under different activities as well as providing targeted support to women groups, particularly for the women groups undertaking charcoal production and mushroom growing activities, which specifically targets women.

Annex 3 provide an overview of other recent or ongoing related and complementary projects being implemented in Kigoma, including some of the key lessons learned of relevance to this project.

3. Alignment and coordination.

National policies

The project directly contributes to the advancement of the Government of Tanzania's policies and priorities. The proposal is in support of the Ten-Year [Strategic Environmental Conservation Plan](#), which intends to address challenges emanating from uncontrolled livestock migration, expansion of agricultural activities, degradation of water sources and wetlands as well as excessive use of firewood and charcoal. In October 2021, the government of Tanzania launched its new [National Environmental Policy](#), replacing the previous policy from 1997. The 2021 policy reinforces interventions including implementation of integrated land use planning; conservation of water sources; increased land under protection; increased use of alternative energy; and community participation in tree planting and conservation of water sources. In addition, the new policy considers environmental challenges that were not addressed in the previous policy such as climate change. The new policy will be implemented through the Implementation strategy for the National Environmental Policy for the Period 2022-2032. In relation to climate change the strategy highlights the need to develop and implement programmes to enhance national capacity on climate change adaptation and mitigation; raise public awareness on climate change issues; and promote development and transfer of green affordable technologies.

In addition to the National Environmental Policy there are several sectoral policies that guide environmental management and climate change adaptation and mitigation including at community level. These includes polices on land use planning, forestry and agriculture. The National Agriculture Policy of 2013 aims among others at fighting land degradation, favouring organic agriculture and the production of biofuel crop production, and more broadly to take adequate measures to improve adaptation to climate change effects. Specific measure include: awareness on sustainable environmental conservation and environmental friendly crop husbandry practices; activities that enhance the carbon storage capacity such as conservation agriculture and agro-forestry; and efficient use of renewable natural resources.

Since the [Village Act \(1999\)](#) in combination with the [Forest Act \(2002\)](#), land-use plans for excessive deforestation are addressed locally, and the [Land Planning Use Act \(2007\)](#) extended legal ownership of the woods to the village level. This means that for the village forests, the land will remain under the control of the Village Assembly, as foreseen under Tanzania's Forest Policy, and such plantations can be declared CBFM forests, with 100 percent of income arising from them reverting to the community.

Frameworks and programmes

[UNSDCF](#). The new [UN Sustainable Development Cooperation Framework \(2022/23 – 2027/28\)](#) which was officially launched in May 2022, is the most important planning and implementation instrument for all UN agencies in the country. It outlines a coherent plan of action and enables a coordinated UN response to contribute more efficiently and effectively to achieve the [2030 Agenda for Sustainable Development](#) and the national development goals of the third [National Five-Year Development Plan \(FYDP III\)](#) and the [2021-2026 Zanzibar Development Plan \(ZADEP\)](#). The UNSDCF outlines 4 strategic priority areas: People, Prosperity, Planet and Enabling Environment. The project will contribute directly to the third strategic priority Planet, which is concerned with supporting a greener, more sustainable development path, which includes better access to clean energy and technology to fuel

growth, enabling more sustainable management of Tanzania's wealth of natural resources. It will also involve working with government and communities to mitigate against climate change and reduce disaster risks.

Kigoma Joint Programme. Given the long presence of refugees, limited economic development and relative remoteness of the region, the UN established the UN Kigoma Joint Programme (KJP) in 2017. The KJP is an area-based, cross-sectoral programme to improve human security and development in the region of Kigoma. The KJP brings together a broad selection of UN agencies, including UNHCR, UNCDF, FAO and WFP. The second phase of the KJP, which will become operation from July 2022, follows the strategic orientation of the Tanzania UNSDCF and will therefore have an outcome area dedicated to "Planet." Through this outcome area the various UN agencies will jointly plan and coordinate their activities in close collaboration with local government authorities. The proposed project will be imbedded in the KJP framework.

UNHCR Strategic Framework for Climate Action. UNHCR has been stepping up its ambition to meet the humanitarian and protection challenges that are amplified by the climate emergency, and to mitigate and prepare for those to come. Guided by the Strategic Framework for Climate Action, UNHCR aims to better protect and strengthen the resilience of displaced and stateless people in the face of climate change, and to reduce our own environmental footprint around the world.

The proposed project is fully in line with the [UNHCR Strategic Framework for Climate Action](#), specifically objective 2.2: Enhance the resilience of displaced people and host communities to climate-related and other environmental risks.

WFP Climate Change Policy. The project provides a platform for applying the key elements of the WFP corporate policy on climate change with a focus on the goal of supporting the most vulnerable people, communities and governments in managing and reducing climate-related risks to food security and nutrition and adapting to climate change. WFP Environmental and Social Sustainability Framework. The proposed project will also be fully in line with the WFP Environmental Policy (2017) and the Environmental and Social Sustainability Framework (2021) both which recognizes that healthy natural ecosystems and sustainable use of natural resources are key to addressing hunger among the food insecure communities.

Complementary projects.

The Belgian project will be implemented alongside and in complementary with various other initiatives and programmers. In this way the resources will be most efficiently applied while leveraging other investments from other sources in the project areas.

Green Climate Fund. To respond to increasing climate threats in Kigoma region, the Government of Tanzania Vice President's Office (VPO), Ministry of Home Affairs through its Refugee Services Department (RSD), UNHCR and UNEP Programme have partnered to develop a proposal for a set of interventions that would support resilience in this region. The project aims to support adaptation through an integrated landscape ecosystem-based adaptation approach that enhances support functions of the ecosystem, supports livelihoods, and mitigates flood impacts in affected communities. UNEP serves as the Accredited Entity having oversight functions. The total project budget is US\$ 23,618,646 of which US\$ 19,007,353 is a GCF grant over 5 years and US\$ 4,611,292 is a co-financing contribution from UNHCR for the first three year of the project focusing on NRM and livelihoods

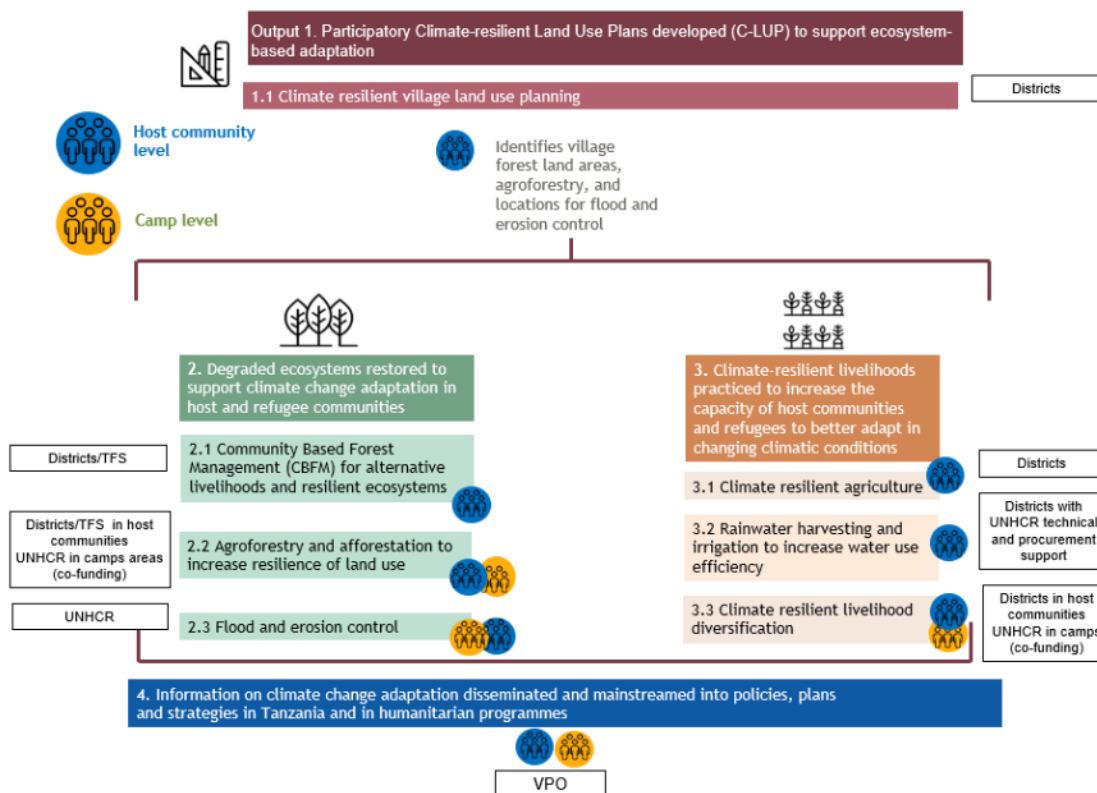
interventions in the refugee camps. Once approved, the project will be implemented by the Vice President's Office (VPO) and UNHCR as executing entities in collaboration with Ministry of Home Affairs, Local Government Authorities, Tanzania Forest Service, key government agencies and NGOs working in the region. The project will be presented to the GCF Board of Directors for approval by the end of 2022 with implementation expected to start from mid-2023.

The proposed GCF project has three technical outputs and 1 normative output.⁸

1. Participatory land use planning – development of participatory climate-resilient land use plans that allocate land by consensus for all other activities
2. Land use and forestry interventions - forestry activities aimed at forest recovery and afforestation that can establish an increased sustainable supply of wood, taking the pressure of the native forests and protecting streams and watersheds, hydrological regulation and carbon storage.
3. Resilient agriculture and livelihood diversification – activities to increase the capacity of host communities and refugees to better adapt in changing climatic conditions through improved agricultural technologies and climate smart livelihoods that directly improve forest management, these include crop improvement, beekeeping, mushroom farming and better management for non-timber forest products like wild mushrooms.
4. A fourth output focuses on supporting knowledge management and policy frameworks.

The figure below prepared by UNEP presents the project coherence and targeting.

⁸ The implementation of the outputs will follow a logical sequencing. Year 1 will focus heavily on participatory land use planning, which will subsequently inform the planning and implementation of the forestry, water and livelihoods activities under outputs 2 and 3. The normative and knowledge activities under output 4 are foreseen to take place towards the end of the project in years 4 and 5 to capture lessons learned. The project will be implemented in the Districts in Kigoma, namely Kasulu District, Kibondo District and Kakokonko Districts.



This proposed project seeks to expand and complement activities proposed by the GCF project, particularly related to: Output 2: Degraded ecosystems restored to support climate change adaptation in host and refugee communities, specifically activities of agroforestry and village land afforestation. The project will also complement activities under the GCF output 3. Climate-resilient livelihoods practiced to increase the capacity of host communities and refugees to better adapt in changing climatic conditions, specifically activities aimed to strengthen the capacity of farmers, district officials and agricultural extension workers in climate-resilient agriculture and alternative NRM based livelihoods. The GCF project seeks to support some 11,000 people with more resilient livelihoods, including climate smart agriculture, while bringing 30,000 ha under community-based forest management, 10,000 ha under agroforestry and 2,000 ha under afforestation.⁹

The GCF project activities of output 4 on supporting knowledge management and mainstreaming climate considerations into policies and planning processes, will be leveraged to also document and share experiences of this project. UNHCR will be contributing to these efforts as part of the GCF project by working with the VPO and UNEP and therefore lessons learned from this project can easily be captured and capitalized on as part of the GCF knowledge management and mainstreaming process.

Danish Refugee Council (DRC). DRC is currently implementing a project financed by DANIDA aimed at improving access to alternative energy sources and promoting environmental conservation in refugee camps and host communities in Kigoma Region, Tanzania. The key activities of this project are:

⁹ The 10,000 ha agroforestry is calculated to be ~35% of the total farmed area within a 10km radius of the two camps and former Mtendeli area and afforested woodlots across 2,000 ha ~1.5% of the total marginal land area within the GCF project boundaries.

enhance access to alternative energy sources for cooking; increase forest protection; and support capacity building on environment and forest management in refugee hosting areas. The project will run until December 2023. As an UNHCR Implementing Partner, UNHCR collaborates closely with DRC and current and planned energy and environment activities are closely coordinated, including related to targeting of beneficiaries.

UNHCR Energy and Environment portfolio and supplementary finance for 2022. Cognizant of the persistent and acute need to address issues of environmental degradation and to propose sustainable solutions, UNHCR has mobilized some supplementary funds (USD 1 million) to step up its engagement in this area in the short term. This complements UNHCR's regular activities on energy and environment, including provision of cooking fuel to Persons with Specific Needs in the refugee camps, biomass briquette production and environmental monitoring in and around the camps. Activities to be funded through the supplementary UNHCR financing address the closely intertwined sectors of energy and environment. These include climate change mitigation related activities, or more concretely energy related activities, which are not eligible for GCF financing. Part of the finance will be used for environmental restoration activities in the former camp area of Mtendeli in Kakonko District. UNHCR is currently in the process of finalizing Project Partnership Agreements with the office of the Regional Administrative Secretary, Tanzania Forest Service and SIDO to support the implementation of the supplementary funding.

WFP-KOICA project. Building on the lessons and successes of the KJP I project Agriculture pillar, WFP will implement a four-year project (2022-2026) to strengthen smallholder agricultural value chains, promote gender equality and build social cohesion in refugee hosting communities. This project will target 20,000 smallholder farmers supported under KJP I, and will focus on the bean value chain with the aim of contributing to food for refugees through direct sourcing from smallholder farmers, forums for dialogue between refugees and host communities, and strengthening the resilience of host through improved productivity and marketing of beans. Project beneficiaries will benefit from social behavior change communication messages and events that will be organized in the effort to create a peaceful environment between refugees and host communities.

Enabel. In addition to specific environment interventions in Kigoma, the proposed project complements and adds value to the Enabel bilateral development portfolio as outlined in the Country Strategy for Tanzania (2023-2027). The new strategy of Enabel focuses on strengthening the position of young people and especially girls and young women. The overall objective is to ensure that "Young people, especially young women, are empowered to thrive in a protective and gender-equal environment, to acquire education and skills, and to pursue decent work opportunities in Kigoma Region". The proposed project will also build on the previous projects implemented by Enabel, particularly the Sustainable Agriculture in the Kigoma Region Project (SAKIRP) and the NRM-LED project, which among other supported village land use planning and village forest planning and management.

4. Theory of Change.

The theory of change for this project follows the logic that: IF investments in forestry and vegetation, landscape restoration and management, and local capacities are in place, THEN healthy landscapes

are more resilient to floods, droughts and high temperatures and the exposure to climate change risks of host and refugee communities is reduced, BECAUSE vegetation cover, soil health, water retention and biodiversity is improved and communities' farming practices and adaptive capacities are strengthened

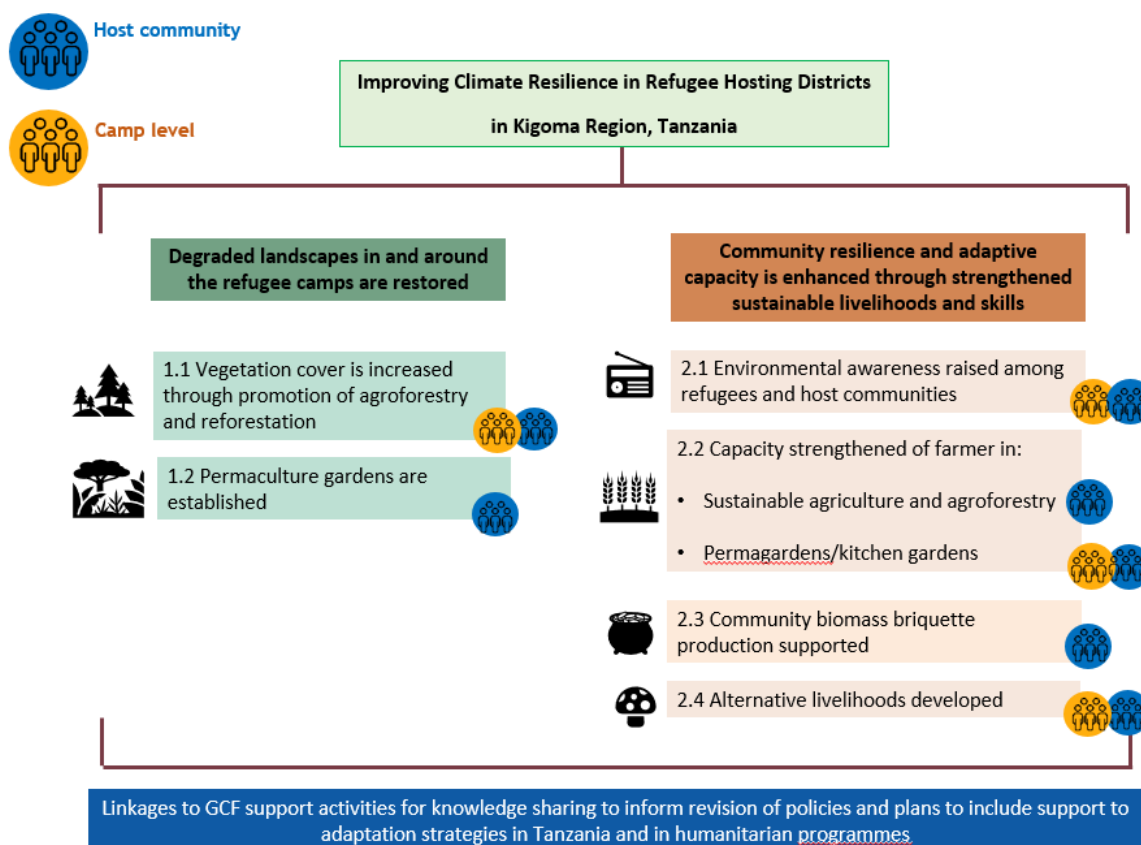
The project proposes a holistic landscape approach that combines interventions that increase vegetation cover (output 1.1), reduce soil run off, improve water retention and soil restoration (output 1.2) combined with the promotion of sustainable agriculture practices and diversification (outputs 2.2 and 2.4) and promotion of use of agriculture by-products to produce alternative cooking fuel (output 2.3) to mitigate negative environmental impacts. In this way, not only is household resilience and food security and nutrition improved, but also soil health and biodiversity is increased as previously degraded landscapes are restored to provide their various ecosystem services.

5. Project description.

The proposed project proposes a landscape approach, with a specific focus on protecting, conserving and restoring degraded ecosystems, while protecting biodiversity and building community resilience and adaptive capacity. The project has two distinct outcomes and 6 outputs. The outputs proposed under this project are mutually reinforcing and when implemented together are expected to contribute to the achievement of the outcomes of enhanced community adaptive capacity and more climate resilient landscapes. The two project outcomes are:

- Degraded landscapes in and around the refugee camps are restored
- Community resilience and adaptive capacity is enhanced through strengthened sustainable livelihoods and skills

Activities will cover both host communities and refugees, the figure below presents the various outputs indicating target beneficiaries. A further detailed description of the activities and implementation modalities can be found in the below section.



Outcome 1: Degraded landscapes in and around the refugee camps are restored.

Output 1.1 vegetation cover is increased through promotion of agroforestry and reforestation.

The principal objective of this intervention is to increase the number of tree cover across the project landscape. This includes agroforestry and reforestation of (village) forest land to increase resilience of land use and protect and promote biodiversity. The activity will complement and scale up similar interventions foreseen by the GCF and DRC projects. In total the project will support the 4,000 acres to be brought under sustainable agroforestry and will see another 4,000 acres of forest land to be restored.

The deliberate integration of trees, cover crops and shrubs in crop and livestock production systems offers a means of increasing climate and livelihood resilience. Agroforestry systems at farm level brings a range of benefits related to enhanced crop productivity (increasing soil organic matter; infiltration and water storage; improving soil physical properties and biological activity; and enhancing nutrient supplies through nitrogen fixation and reduced leaching and soil erosion). Moreover, benefits from agroforestry systems at landscape scale provide important ecosystem services including spring, stream and watershed protection and hydrological regulation, biodiversity conservation and carbon storage. Agroforestry systems are also suitable for providing fodder for domestic animals such as goats, provided the appropriate fodder trees and grass are planted. Planting trees along contours also help prevent soil loss through reduced run-off during heavy rain. And, of course, provision of fuelwood (estimated at 2t/ha/yr) contributes to reducing the demand for indigenous sources of fuelwood and

substituting it with planted species. Farmers may also choose to plant some of their trees separately (rather than intercropped) as a dedicated source of fuelwood.

Through the project seedlings will be raised and planted through which 4,000 acres will be brought under sustainable agroforestry. Tree seedlings will be available to farmers for planting on their own plots. In addition, specific woodlots will be considered for agroforestry use to diversity approaches and opportunities for learning and future potential for replication. The management of the woodlots will be under the village environment committees with support from TFS and the districts.

This activity also foresees active restoration (reforestation) of deforested (village) forest reserves and degraded landscapes, selected sites in the refugee camps and in the buffer zones around the camps. A total of 4,000 acres is expected to be restored. In the host communities, activities will include targeted active restoration of degraded forest areas and sites to be selected for community-led restoration and rehabilitation as foreseen under output 1.2. With regards to the camps, most of the forest cover loss occurred during camp establishment. Tree cutting is prohibited within the camp boundaries, most of the recent deforestation is observed in the buffer zones around the camps. Nevertheless, some degraded areas within the camp will also be targeted for restoration.

Small-scale community nurseries, growing around 40-50,000 seedlings per year, are already a feature in the project area outside the camps, and it is proposed that equivalent nurseries are established and/or supported in 20 sites in the project area in order to provide the number of seedlings required. The project will establish new nurseries in year 1 and will continue to support production of seedlings in a few selected existing nurseries.¹⁰ Some of these community nurseries will be upgraded to central nurseries (with wider scope of work) and used for training purposes where surrounding communities show interest in taking up tree planting ventures as income generation activities.



Using the existing structures and capitalizing on existing skills of village agents who manage the nurseries and support post planting, is expected to contribute to a more the effective raising of seedling, planting support and post planting management. In the camps there are existing nursery sites and 2 of these, one in each camp, will be made operational under this project. These nurseries are managed by a small number of part-time refugee incentive workers.

The exact mix of seedlings to be raised will be decided in consultation with the Tanzania Forest Service (TFS) but is expected to consist of a mix of indigenous, naturalised and fast growing quality species including (grafted) fruit, fodder, fuelwood, commercial and timber (indigenous Kaya, Cordia,

¹⁰ Under the Danida funded DRC project, 14 nurseries are currently being operated in the host communities in Kibondo and Kasulu. It is proposed that the project will utilize the existing structures and skills build under the DANIDA project to continue the effective production of seedlings with a view to also mature these nurseries to become self-sustainable with support from TFS.

zanthoxylum.. and exotic: Pinus caribaea, cloned drought resistant eucalyptus where appropriate) will be included where feasible.

Due consideration will be given to post-planting care and maintenance activities and community incentive schemes will be applied to support agroforestry and reforestation and strengthen adaptive capacities of households. Experience from similar project implemented in Kigoma has shown that communities and individual farmers have a great interest in receiving seedlings. Other incentives, such as including provision of cover crops used in stabilizing and regenerating soil will also be considered.

The project will, where possible, promote local (in-kind) contribution from farmers in the establishment and management of tree nurseries to ensure ownership and sustainability. Capacity strengthening through training will instill sense of ownership and emphasize the value of the project, which will assist in better management of the nurseries.

Implementation: This activity will be implemented by UNHCR in collaboration with its implementing partner and foresees the direct collaboration with government entities, particularly the Tanzania Forest Service (TFS). For the nurseries, seed, basic equipment (watering cans, polypots) and technical support will be provided through the implementing partner. Community members, selected through a consultative process, taking into account gender balancing considerations, will be engaged as village agents and will be trained to operate the nurseries, support planting. For the post planting maintenance activities in the host community village agents will be engaged who will work with the recipients of the seedlings to ensure good survival rates. Tree survival rates (after the 1st and 2nd year after planting) will be adopted as indicator of survival. A similar approach will be applied in the camps where the nurseries will be managed by UNHCR's implementing partner with support from refugee incentive workers, who will also be engaged to support planting and post planting maintenance.

TFS working together with Village Councils, will be active partners in implementing this activity. TFS, working together with UNHCR's technical staff, will particularly support the species selection for establishing nurseries and will advise on sites for agroforestry and reforestation. MoHA, specifically through its environmental officers in the camps, will be consulted and engaged to agree on the locations for reforestation in the camps and in the buffer zones.

Output 1.2 Community-led landscape restoration and rehabilitation.

The aim of this intervention is to introduce community-led watershed management practices in selected sites to restore degraded natural ecosystems, including improving soil health and biodiversity, while meeting human needs.

Landscape restoration seeks to integrate the natural environment into farm design. By doing so, stormwater that usually erodes and washes away fertile topsoil is captured into long ditches on contours that traverse the farm, infiltrating water into the soil for long term hydration. Landscape restoration focusses on trapping water and nutrients inside the soil so that it builds soil fertility while preventing storm water accumulating into flash floods that cause landslides. Techniques to be applied include contour planting of nitrogen fixing



trees and bushes such as gliricidia, lucerne and vertiver grass for stabilizing/reinforcing the contour/tie ridges, animal feed, sustaining soil fertility, firewood provision, among others. Furthermore, the project will construct cut-off ridges, tie ridges, berms and swales and other simple water harvesting earthwork techniques that are laid perpendicular to land slope, designed to direct excess water out of the fields and/intercept rainwater running down the slope and infiltrate this water in a localized area. Interventions will be planned based on the specific requirements of each site using a watershed approach based on a survey of the upstream catchment in selected villages and consultations with communities and local government. Based on these surveys, a combination of techniques, including terracing, tie ridges, gullies, swales, berms and dikes will be constructed to reduce the rapid run-off of rainfall along hillsides and maximize water retention to improve levels of aquifer and improve soil moisture and nutrient content to support agricultural productivity.

To address concerns of water scarcity, community irrigation techniques like check dams will also be considered to support the climate smart agriculture activities and permagardens closer to the homesteads. Training of communities in climate smart agriculture techniques, anticipatory action, risk transfer through weather index insurance, nutrition, resilient building and permagardens, including provision of inputs are provided under output 2.2. For the for the planting of trees, for example as part of contour planting, seedlings from the nurseries established and managed under output 1.1 will be used.

Landscape rehabilitation has been successfully piloted in Kibondo District by DRC and are foreseen to be replicated under this project in an estimated 10 sites/landscapes to be selected in consultation with local authorities and communities targeting sites that have experienced a certain level of degradation and are flood prone (though steep hills are not suitable). The final selection of sites will be done during the project start-up phase in consultation with government and communities. For the landscape restoration, including also selected community irrigation interventions, community cash for work is foreseen for the works at the top of the catchment area, while households are expected to contribute labour to the interventions close to the home steads.

Implementation: The intervention, which is only taking place in the host communities, will be executed by WFP using the FFA approach, working with selected implementing partner(s). The activity will be implemented in close collaboration with district authorities who will support the final site selection

following consultations and using the village land use plans as a basis for decision making. WFP technical experts will work alongside, government district staff and community members to identify the best suitable interventions, based on field surveys, and ensure their maintenance. WFP resilience and livelihood programming is based on stakeholder consultations including communities who play part in selection of key resilience priorities and development of a workplan based on community resilience needs. With WFP's vast experience in engagement with partners and promotion of better programming through the [Three-Pronged Approach \(3PA\)](#), an innovative programming approach that aims to strengthen the design, planning and implementation of programmes in resilience building.

WFP, in collaboration with its implementing partners and the government's district technical staff, will provide technical support and periodic supervision and monitoring to ensure technical standards are maintained. The local communities will be mobilized to form groups that will be engaged in the implementation of the project activities through WFP's Food Assistance for Assets (FFA) initiative that addresses immediate food needs through cash transfers., while at the same time promoting the building or rehabilitation of assets that will improve long-term food security and resilience. The groups will elect community leaders that will be in charge of coordination and provide oversight during the project implementation. WFP will use its experience in delivering cash transfers to provide incentives to participants involved. Cash based transfers (CBT) will be used to empower people to meet their essential needs in line with national policy frameworks and programmes, such as standards outlined in TASAF Public Works guidelines. WFP will work with partners including local government to ensure transparent beneficiary selection and community mobilization. WFP will use a Financial Service Provider to transfer the cash assistance directly to project participants.

Outcome 2: Community resilience and adaptive capacity is enhanced through strengthened sustainable livelihoods and skills.

In order to increase the capacity of host communities and refugees to better adapt in changing climatic conditions, this project will support climate-resilient livelihoods by promoting the adoption of climate resilient agricultural technologies, management practices and resilient diversification activities that are directly linked to forest management, land use and agricultural resilience.

To ensure and expand upon opportunities for scale-up, technologies that are being promoted under this outcome to support climate smart agriculture, agroforestry, permagardens, kitchen gardens, mushroom production, briquette making) the project will provide training and provide start-ups, while working closely with government entities to strengthen their ability to facilitate and replicate these interventions.

Output 2.1 Environmental awareness level raised among refugees and host communities

There is a need to step up community awareness raising on the need to protect, restore and conserve the environment and its natural resources. The messaging will be designed to resonate with the communities' main priorities and concerns, making a direct linkage between sound environmental management and household resilience and food security. The awareness will also include information on the reforestation and agroforestry activities under the project (activity 1.1). Besides community awareness events, messages will also be transmitted through regular community live radio

programme – a tested approach which has proven effective. To enhance social interaction and recognizing that most tensions between host communities and refugees emanate from conflicts over natural resources, the project will facilitate community events that encompass both refugees and host communities, including mass tree planting events in villages, in the buffer zone, around schools etc. Specific efforts will be made to target and include the Sukuma communities living in the project area.

Implementation: The activities in the host communities will be implemented in collaboration with UNHCR's implementing partner, who will engage the village, ward and district environmental management committees, who play an important role in environmental awareness raising and monitoring and protection. In the camps, UNHCR and its implementing partner will work with MoHA but also with other stakeholders with environment action in their operations.

Output 2.2: Capacity strengthened of farmers in host communities in agro-forestry and climate smart agriculture

Activities under this output complement the tree planting activities under output 1.1 and the landscape restoration and rehabilitation and water management activities under output 1.2, by promoting host community farmers' adoption of climate-resilient agricultural technologies and management practices, including agroforestry. Farmers targeted under these activities are primarily those who live downstream in the catchment areas/landscapes to be rehabilitated under output 1.2. Specific efforts will also be made to build farmer's water conservation and management skills, including for those farmers who will benefit from the community irrigation schemes to be constructed as part of output 1.2

The project will support the building of capacity of 5,000 farmers, on climate-resilient agricultural practices like residue retention, zero and reduced tillage, crop rotation, green manure cover crops, mulching for retaining soil moisture, application of vermicompost, controlled traffic and raised beds, integrating the use of traditional knowledge (indigenous technical knowledge). Other key subjects which ultimately build the resilience of communities include anticipatory action, post-harvest management, poultry and other income-generating projects, post-harvest handling, market linkages, financial literacy, nutrition, risk transfer among others. The training will be co-designed, by adapting existing materials and in collaboration with the farmers, district officials and extension services. Specific training modules will be available for farmers who are engaging in agroforestry, and technical support will be provided to farmers growing trees for fruits, fodder and fuelwood. A training manual on best practices including Agroforestry, Climate Smart Agriculture, etc., will be adapted and or strengthened as a training tool to guide Lead Farmers. Specific efforts will be made to ensure that at least 50% of the people receiving training are women.

Trainings will also be provided on permagardens in the rehabilitated landscapes, targeting those households who would benefit from improved water management and retentions which would allow for growing of more diverse and nutritious foods close to their homesteads. Support to kitchen gardens is also foreseen targeting 3,000 refugees with a view to improve resilience and promote food diversity and their nutritional status. As with the climate smart agriculture and agroforestry trainings, the permagarden and kitchen garden trainings will ensure reaching at least 50% women.

Implementation: The agriculture capacity development activities for host communities will be implemented by WFP, in collaboration with a competitively selected implementing partner. The trainings and capacity development activities will be implemented in conjunction with district officials and extension services, who directly engage with local farmers to promote climate-smart agriculture (CSA) practices. TFS will support the training of farmers in agroforestry practices.

A coordination mechanism will also be established to ensure complementarity with the farmers to be trained under the GCF project and with the WFP-KOICA project to ensure complementarities in development of training materials and delivery of trainings. WFP will also offer a platform for awareness raising in training sessions for good agronomic practices, access to financial services and post-harvest loss reduction. The farmers supported by this project will also benefit from WFP-KOICA's activities aimed at creating market opportunities for their bean crop. Where agroforestry is practiced and beans are identified as a potential crop to be intercropped with agroforestry tree species, the WFP-KOICA project will support the production and marketing of the bean crop to benefit beneficiaries of this project. A selection of agro-forestry trees - that are highly nitrogen fixing - will be adopted to increase the overall amount of nitrogen fixed including from the legumes (beans/soybeans). WFP will liaise with Enabel and Tanzania Agricultural Research Institute (TARI) to establish which legumes are adapted to Kigoma and are highly nutritious, high value to support food and economic security of households.

UNHCR will lead the implementation of the kitchen garden training and support in the refugee camps working with its implementation partners and MoHA to ensure targeting and design of the kitchen gardens are in line with government guidance and expectations.

Output 2.3 Community biomass briquette production supported.

The Tanzanian government at both local and national levels considers energy solutions to be one of its main priority challenges. To address energy challenges in Kigoma several initiatives are ongoing to develop and promote alternatives to fuelwood and charcoal for cooking. One alternative energy source being actively promoted in the camps and surrounding areas is biomass charcoal briquettes. This project seeks to capitalize on existing experiences and planned assessments to scale up some of the successful approaches in promoting the use of biomass briquettes, namely the community production approach. Under this intervention, community groups in the host communities will be



trained on local production of charcoal kilns and carbonization of char powder. Households will receive a home production kit and training to produce biomass briquettes at household level. The activity will build on already ongoing initiatives to train host community members, especially women and youth groups, on producing char using agriculture waste produced by their own farms. The intervention will specifically target households from the host community that have been supported through activities under outputs 1.1 and 2.1.

Implementation: The activities in the host communities will be implemented by UNHCR in collaboration with Small Industries Development Organization (SIDO), will be responsible for procurement of the equipment and will provide trainings to the beneficiaries in the host communities. UNHCR and SIDO will work in close collaboration with the Local Government authorities and the local community groups who are already trained.

Output 2.4: Alternative livelihoods developed among host communities and refugees.

The primary objective of the livelihood diversification activities is to strengthen food security and nutrition in the event of extreme climate events (for example, dry spells or floods) that would reduce crop yields, provide alternative income as a safety net in case of yield loss and sustain the implementation of climate resilient agricultural practices. In the camps the production of mushrooms will contribute to their food and nutrition status, particularly in view of the reduced food rations.



The project will specifically support mushroom production in the project area, expanding similar activities planned under the GCF project. Community consultations among host communities and refugee undertaken in the context of the GCF project preparations showed the great interest among both communities, and especially women, in engaging in mushroom production. For this activity beneficiaries from the host communities will be drawn from existing Village Savings and Loans Associations

(VSLAs), which have been strengthened with support from UNSDCF as part of the KJP. By linking this activity to the VSLAs, sustainability of the activity beyond the project duration is foreseen, as after the initial set-up, spawns will be procured through the VSLAs. The activity will specifically target vulnerable people and will at a minimum include 70% women.

The trainings will be delivered in the Multi-Purpose Community Centers (MPCCs)¹¹ and in the host communities as required. The MPCC are training facilities established during KJP I, located at the border of the camp which are accessible to both refugees and host communities. For refugees these are skills that would be of use to them as well in case of repatriation to Burundi and Congo. The establishment of the mushroom production facilities includes identifying an existing room, house or building in which the temperature, moisture and sanitary conditions can be controlled.¹² For the substrates, locally available organic materials, mostly agricultural residues such as elephant grass, maize peeling, can be used for mushroom cultivation. Substrate preparation will be done prior to mushroom inoculation, and this will be done with use of local material. Inoculation should be done using outdoor methods with low-nitrogen and carbon-rich woodchips or straw. Farmer groups can be encouraged to provide agricultural waste to facilities located in the refugee camps, thus enabling the

¹¹ The MPCCs have been established during the first phase of the KJP and have built skills of substantial numbers of refugees and host communities in a range of different subjects.

¹² Similar projects in the country have used shelters that are made from locally available and low-costs materials (for example, banana leaves, bamboo, wheat, or bricks). A timber structure should be built to accommodate inoculated substrate and spawns, usually put into bags or trays.

creation of stronger relationships between the two communities. Leveraging on the networks of the project partners, there will be timely sourcing of inoculum – which is occasionally challenging – using support from UNHCR’s supply chain/procurement expertise.

Implementation. The activity will be implemented by UNHCR in conjunction with its selected implementing partner. Beneficiary selection and locations for the production facilities in the host communities will be determined in consultation with the District authorities and the communities, based on the village land use plans. In the refugee camps, the sites for the production facilities will be selected on consultation with MoHA and beneficiaries will be selected through community consultations. The establishment of the mushroom production facilities will be carried out with in-kind contributions, in the form of labour for the establishment of the facilities, from the communities and refugees who will participate in the activity.

6. Project implementation.

Targeting and beneficiaries.

The project will ensure geographic and technical complementarity to GCF project interventions. The GCF project will specifically target 20 villages in the Districts of Kasulu, Kibondo and Kakonko in close proximity to the refugee camps which are yet to prepare or complete their village land use plans. It is foreseen that this project will specifically target villages that have already prepared their village land use plans focusing on the two districts which currently host a refugee camps: Kibondo (Nduta) and Kasulu (Nyarugusu). This would allow building on the gains made by the NRM-LED project which supported the preparation of the village land use plans. It would also act as an incentive for local communities to engage in land use planning as this may attract further investments and support. The following parameters will also be considered for the selection of project activity sites and beneficiaries.

- A final list of sites/landscapes to be supported with restoration and rehabilitation activities will be prepared in conjunction with the LGAs and communities and in consultation with the GCF project team (specifically UNEP and VPO) based on field visits and consultations as part of the project start up. Land surveys will be undertaken to design community water harvesting earthwork and/or irrigation constructions. An initial list of villages with land use plans in the proximity of the 2 camps was drawn up in consultation with district authorities and is reflected in annex 1.
- For the tree nurseries in the host communities, the project intends to apply a mix of establishing new community nurseries and providing follow-up support to some existing nurseries to graduate them to self-sufficiency. The selection for the sites nurseries to be established will be done with in consultation with TFS, LGAs and communities as part of the field visits and consultation, considering the selected landscape for restoration and keeping in mind the locations of the already existing nurseries and the recommendation of the TFS to establish at least 2 larger/central nurseries in each of the districts including for training/capacity development purposes.
- Regarding the selection of farmers targeted for capacity development/training activities on climate smart agriculture and agroforestry as part of output 2.2, farmers will be selected who are in the downstream catchment area of the landscapes to be restored and rehabilitated.

As an additional consideration, the WFP-KOICA project will target 20,000 smallholder farmers from Kibondo, Kakonko and Kasulu districts, and the selection of communities for this project will be aligned and complementary.

- Targeting of beneficiaries of the community biomass production equipment and training, will also consider the farmers who are receiving climate smart/agroforestry trainings.
- For the agriculture and kitchen garden trainings, the project targets to reach 2000 and 3,000 beneficiaries respectively and of which least 50% women. For the mushroom production activities, the target is to reach 300 people of which at least 70% are women.

Direct beneficiaries of the project will include: i) farmers receiving tree seedlings for agroforestry; ii) host communities who benefit from conserved and protected landscapes and water catchments iii) farmers receiving training on climate smart agriculture practices/agroforestry; iv) host community and refugee households receiving training on kitchen gardens; v) Recipients of community biomass briquette production equipment; vi) community groups trained and supported with mushroom production facilities; vii) host communities and refugees who benefit from restored environments through reforestation and better community awareness. As the project follows an integrated landscape approach there may be some overlap in the direct beneficiaries targeted under the various outputs, as the activities are linked and mutually reinforcing to achieve maximum impact.

Furthermore, LGAs, including district authorities, TFS and SIDO, are also considered to benefit from the project as they will be better equipped and more empowered to fulfill their responsibilities, even beyond the scope and duration of the project.

Implementation arrangements.

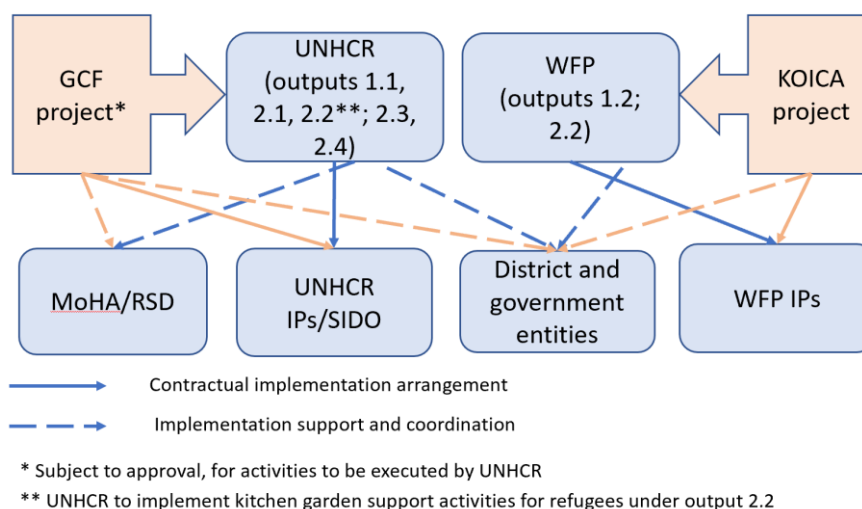
The project will be implemented by UNHCR together with WFP. UNHCR and its implementing partner(s) will lead the implementation of outputs 1.1; 2.1; 2.3 and 2.4. UNHCR will work with one or more competitively selected implementing partner, following UNHCR's partner selection process.¹³ The implementation of output 2.3 is expected to be done in conjunction with SIDO with whom UNHCR has an established partnership with SIDO under the UNHCR supplementary funding for energy & environment.

WFP will lead the implementation of outputs 1.2 and 2.2, with the exception of the kitchen garden activities which will be implemented by UNHCR. WFP will work with its competitively selected implementing partner and for output 2.2 ensuring direct linkages with activities targeting farmers to build skills and access markets as part of the KOICA project. This approach is believed to create maximum impact as farmers are reached with a wide range of support activities ranging from environment management, sustainable agriculture practices, as part of this project, and skills development, post harvest and marketing support, under the KOICA project.

Recognizing the central role of regional and district authorities in addressing environmental issues, UNHCR specifically seeks to closely collaborate with LGAs in the implementation and proposes activities that include host communities and affected areas outside the refugee camp boundaries. Project activities in the host communities will therefore be implemented in close conjunction with

¹³ UNHR partners selection process for NGOs for 2023/24 will start in September 2022.

regional and district government authorities. At the District level UNHCR, WFP and its implementing partner will engage District officials, such as the District Executive Director and other officials responsible for sectors such as environment, forestry and agriculture. For all forestry related activities, the project will closely consult and coordinate with TFS. For the activities in the camps, UNHCR and the selected implementing partner will work with the Ministry of Home Affairs, specifically the Refugee Service Department through its environmental officers. UNHCR provides technical support to all environment and energy activity implemented in the camps.



UNHCR and WFP will also seek to consult other technical partners as needed, to support the development of capacity development approaches and learning materials of specific training activities, which may include FAO¹⁴, TARI and ICRAF¹⁵. As one of the executing entities of the prospective GCF project, alongside the Vice President’s Office, and given the complementarity of the two projects, UNHCR will engage UNEP, VPO and the National Environmental Management Council, specifically related to knowledge dissemination and informing policy dialogues for mainstreaming landscape planning coupled with building adaptive capacity into national plans and programmes.

Coordination

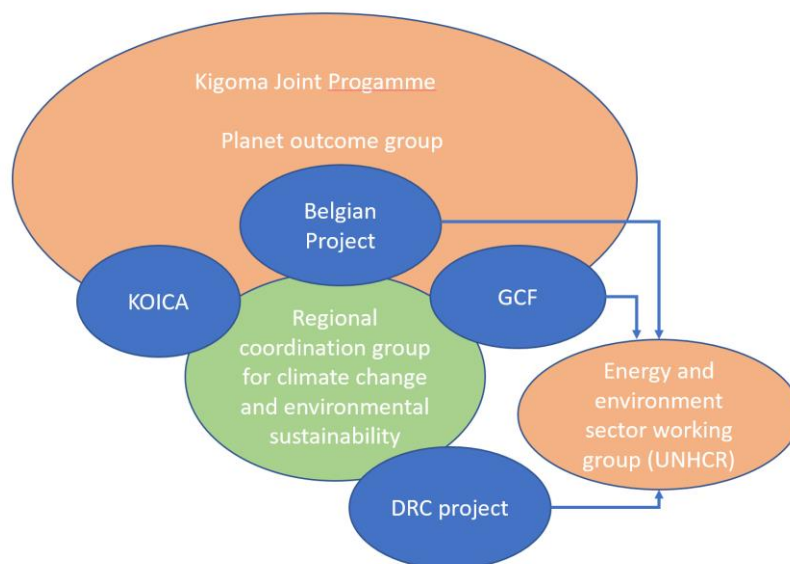
UNHCR and WFP will organize bimonthly coordination meetings to track progress, align targeting and adaptive manage challenges as they may occur. The project will also support a regional coordination group for climate change and environmental sustainability, which will bring together a wider range of stakeholders, including as part of the prospective GCF project. The need for better coordination among the various actors and projects was raised during a consultative meeting in preparation of this project.

¹⁴ FAO has worked with the Tanzania Ministry of Agriculture in preparation and facilitating the use of [The National Climate Smart Agriculture Guideline](#) together with its [User Guide and Training of trainers Manual](#) which have been used to guide agriculture resilient practices and technologies application in the country.

¹⁵ ICRAF has been active in supporting development of Climate Smart Programme for Tanzania (2015-2025) and the associated Climate Smart Agriculture (CSA) guideline to increase productivity and climate resilience in the agriculture sector. ICRAF is also among the founding members of the Tanzania Climate Smart Agriculture Alliance (TCSAA), a national platform for coordination and promotion of climate-smart agriculture in national programs in Tanzania.

It is furthermore envisaged that the project will be embedded in the KJP framework, which will contribute to better coordination with UN agencies and a range of other local stakeholders. By linking the implementation of the project directly to the KJP framework, opportunities will be created to discuss and exchange with regional and district level authorities. Concretely this means, that the project activities and targets will be included in the KJP results framework and work plans and as such will be discussed with and approved by the regional authorities. Therefore, as part of this arrangement, the Regional Administrative Secretary's office will be consulted and kept abreast of the project implementation and progress.

In addition, UNHCR facilitates an energy and environment sector working group operational at the field level, whereby actors, including international and local NGO partners and government coordinate their activities related to energy and environment particularly in the camps and in some in the surrounding host communities. The working group, which is mostly operational in nature, also provides a platform to collectively address different implementation challenges encountered at the field level. The project activities will be coordinated with this working group as well.



Sustainability.

Applying a holistic approach, by linking the restoration activities to livelihoods interventions to build community resilience is expected to contribute to the success and sustainability of the project. The landscape restoration activities, including the permaculture, will be designed using local materials and capacities and will actively involve district government officials. The project sites will serve as a model that can relatively easily be replicated, at minimal costs, in other sites in the region and beyond. Planning and implementing the project activities based on to the existing village land use plans, will also create a further incentive for sustainability as the interventions will be in line with the existing community plans and environmental management structures.

The project will engage with regional and district authorities and other government entities present in the project area to ensure continued support to the target beneficiaries even after the project phases out. By ensuring LGA engagement and building local government capacities in planning for and applying an integrated landscape approach, the investments made by the project will be maintained

and eventually scaled up to other areas. Through the project, LGAs will be supported to strengthen their local planning processes so that successful landscape approaches, combined with adaptive community capacities can be adequately planned for in their District and Regional plans and budgets.

Restoration of degraded areas and environmental rehabilitation is gaining traction in Kigoma. The demand of tree growing in the districts affected by humanitarian operations is very high for foreseeable future. The tree nurseries to be established and supported as part of the project have potential to be self-sustainable, as they will continue to be main sources of tree seedlings to the current and future community-based tree planting initiatives both for commercial and general environmental restoration and/or conservation purposes. Also the engagement of TFS is foreseen to ensure sustainability of the nurseries as institutional capacities are being build combined with supporting greater community awareness and local capacities for tree raising and agroforestry.

For the alternative livelihoods, the mushroom production, selecting beneficiaries in the host communities that are part of village savings and loans groups is expected see the activity being continued as future purchase of inputs and investments can be channeled through the VSLAs. VSLAs in Kigoma are well developed and have received extensive support from partners such as UNCDF.

The project will capitalize on the planned knowledge management, policy dialogue and mainstreaming activities of the GCF project (output 4 of the GCF project). Lessons learned and experiences from the project will be captured and integrated in knowledge products and national knowledge management processes that will inform future programming and planning by both the government and partners working in humanitarian settings. It is expected that this will contribute to good practices being institutionalized and scaled up (for more details see section 7 on project knowledge management).

Risk management.

UNHCR Tanzania develops a yearly risk register to support risk identification and treatment. The Risk Register includes specific proactive and reactive treatment measures to ensure that UNHCR can proactively mitigate them and, in the event they materialize, that UNHCR has the ability to react and address them. Several contextual, technical and operational risks have been identified for the proposed project. These are in line with the risks identified under the GCF project.¹⁶

Risk	Probability/Impact	Mitigation measures
Organizational risks		
Coordination between projects and potential overlap	Low/Low	Consistent use of the strong coordination mechanism in refugee setting as well as establishment of a strong district level coordination platform. The project is embedded in the Kigoma Joint Programme framework and will therefore male use of the outcome group coordination mechanism of the Kigoma Joint Programme

¹⁶ The GCF project is being proposed as Category B or moderate risk according to the GCF project classification. This is because the project has potential limited adverse environmental and/or social risks and impacts that are few, generally site-specific, largely reversible, and readily addressed through mitigation measures.

Risk	Probability/Impact	Mitigation measures
Weak ability implementing partners (NGOs and local governments)	Medium/Medium	Strategic capacity building of partners including district technical line departments to support in monitoring and oversight.
Contextual risks		
Political risk that may compromise the benefits of the projects that should accrue to the refugees.	Medium/Medium	UNHCR continuously engages the government about safeguarding refugee rights and is strongly advocating, with support from its partners, for refugees' ability to undertake small-scale livelihood activities. UNHCR will refer to the implementation the recently signed workplan with the government, which makes provisions to allow for vocational training and small-scale livelihood activities. UNHCR will apply adaptative management in case certain provision come in place that would prevent refugees from participating in certain activities, this could include slightly redesigning the project activities or transferring some of the activities to the host communities.
Risk of security concerns/conflicts between host communities and refugees in relation to project delivery	Low/Medium	Existing mechanisms to manage conflict include peaceful co-existence meetings that are known to work in resolving issues between refugees and host communities. The project will organize joint community environmental initiatives that will strengthen community dialogue and provide a venue to address any tension that may exist in relation to project delivery or more broadly to use of shared natural resources in the project area.
Economic feasibility of proposed technologies.	Medium/ Low	The project will learn from previous projects and adopt accordingly during project implementation.
Demographic growth offsetting the achievements.	Low/Low	Over the project period, demographic growth is expected to be insignificant compared to the overall achievements.
The benefits received by host communities in the project areas create a source of tension with those outside of the project area.	Low/Medium	The design and scope of the project is such that benefits can be transferred outside of the project area. The landscape approach solutions proposed can relatively easily be replicated beyond the project area when proven successful as local skills will be built for both communities and LGAs.

Risk	Probability/Impact	Mitigation measures
Risk that there is low adoption of livelihood activities or that these interventions are not economically sustainable.	High/low	The project will explicitly seek for links and collaboration with other initiatives that further support livelihoods and broader economic development, which will enhance the sustainability/success of the livelihoods activities. This includes the market support for beans production under the WFP-KOICA project. By linking alternative livelihood activities, i.e. mushroom production, to VSLAs in the host communities, the uptake and financial sustainability is expected to be enhanced.
Environmental risk		
Unpredictable weather patterns. This risk of poor rainfall distribution, drought and or floods in the project areas	Medium/High	Routine reliance on weather information from meteorological department and early warning systems. Use of technologies / inputs that are weather resistant e.g. drought tolerant crops, disease resistant seeds etc.

7. Knowledge management.

The project foresees a workshop for District and regional officials and other relevant stakeholders in year three to capture lessons learned and to strengthen LGAs abilities to better integrate successful approaches into their planning processes. Key stakeholders of the GCF project, including UNEP, the Vice President's Office and the National Environmental Management Council, will be invited to this workshop, which will facilitate the integration of knowledge and lessons learned during the project into the normative output 4 of the GCF project.

The project will strive to link with the future Adaptation Knowledge Management System (AKMS) hosted by VPO. This is a knowledge sharing platform developed under ongoing GEF UNEP project EBARR (Ecosystem-based adaptation for rural resilience). The platform is expected to be officially launched before the end of the year and it aims to be a national reference platform for matters pertaining to adaptation. This will be a key knowledge sharing platform to leverage knowledge and lessons generated by this project.

8. Monitoring and evaluation, reporting.

The day-to-day technical and financial monitoring of the implementation of this project will be a continuous process. The implementing partner(s) to be engaged by UNHCR WFP will provide bi-annual reports, progress and financial reports that outline to progress of implementation and will be reporting on identified log frame indicators. In addition, UNHCR and WFP sector staff (dedicated development, livelihoods, energy and environment officers based in the field offices in Kigoma region) will undertake regular field monitoring visits and be responsible to monitor the performance against outcome/results indicators. This includes support to TFS, Districts and working with nursery village

agents, in collaboration with the implementing partners, to monitoring the planting of trees using various tools, including surveys, field visits and GPS. As required, monitoring missions can be organized for the Belgian Embassy in Dar Es Salaam or officials from Brussels to assess progress of the project.

UNHCR be responsible to provide consolidated yearly progress reports, narrative and financial, which incorporates the information from WFP. These progress reports will provide an accurate account of implementation of the action, difficulties encountered, changes introduced, lessons learned as well as the degree of achievement of its results (results and outcomes) as measured by corresponding indicators, using as reference the indicative logframe matrix. The final report, narrative and financial, will cover the entire period of the action implementation. In addition, UNHCR and WFP Tanzania annual country reports (narrative and financial) will made available on demand.

9. Communication and visibility.

The overall goal of the communication and visibility activities will be to convey the positive results of the partnership between Belgium, UNHCR, WFP and other partners by communicating the results and the impact of the project actions on the beneficiaries to multiple audiences. The activities also seek to reinforce the project's education and awareness campaign elements, including the uptake, upscaling, and out scaling of good practices. It will ensure that communication emanating from this project responds effectively and efficiently to all stakeholders' needs. Some of the activities will include;

- Display of UNHCR, WFP and Belgian identity (logos) on goods and equipment, and banners
- Acknowledgment of funding and results/ impact of the project through Media Outreach, Human Interest Stories
- Promotion of project results during international days (World Environment Day, United Nations Climate Change Conferences, World Refugee Day etc.)
- Multimedia storytelling through audio-visual products, including use of drones to visualize the changes in the landscapes.

An overview of communication activities and public exposure including prepared in conjunction with other partners and through the KJP, will be made available upon request.

10. Results Framework.

<p>Impact contributes to UNSDCF/KJP Outcome 3: By 2027, people in the United Republic of Tanzania/Kigoma, especially the most vulnerable, contribute to and benefit from more inclusive and gender-responsive management of natural resources, climate change resilience, disaster risk reduction and increased use of efficient renewable energy.</p> <p>Output. 3.4: MDA and LGA service delivery systems capacity increased for efficient and effective natural resources management, climate change resilience, disaster risk reduction, access to and use of efficient renewable energy by women, PWDs, youth and other vulnerable groups/in Kigoma.</p> <p>Indicator 3.4.2 Number of people, including those in humanitarian settings, whose climate resilience and adaptive capacity has been strengthened. (Disaggregated by refugees, host community and capacity)</p>							
Results chain		Activity	Indicator	Baseline	Target	Means of Verification	Assumptions
Outcome level	Degraded landscapes in and around the refugee camps are restored.		Acres of land brought under agroforestry.	0	4,000	Partner reports, field verifications.	Agroforestry: 200-210 trees/per acre.
			Acres of reforested (village) forest land	0	4,000		Reforestation: 550 trees/per acre
	Community resilience and adaptive capacity is enhanced through strengthened sustainable livelihoods and skills.		# of people whose climate resilience and adaptive capacity has been strengthened.	0	66,500	Partners reports.	Assumes 1,000 household per landscape site will benefit from a mix of project interventions, + 3,000 refugees with kitchen gardens + 300 with alternative livelihoods. Average household size assumed of 5 people. Excludes indirect beneficiaries benefitting

							from improved ecosystem services and awareness raising etc.
OUTCOME 1: Degraded landscapes in and around the refugee camps are restored.							
Output level	1.1. Vegetation cover is increased through promotion of agroforestry and reforestation.	Raising tree seedlings.	# of trees raised.	0	3,020,000	Partner reports, field verifications	The total number of nurseries will include 1 nursery in each of the camps and 2 larger/central nurseries in each of the targets districts.
		Establishment/strengthening of tree nurseries.	# of nurseries operational.	0	22		
	1.2. Community-led landscape restoration and rehabilitation activities undertaken in 20 sites in host communities.	Development of landscape sites.	<ul style="list-style-type: none"> # of community-led landscapes restored and resilient # community assets created (water harvesting earthwork and/or irrigation constructions), rehabilitated or upgraded, through FFA. 	0 0	10 (tbc) 20 (tbc)	Partner reports, field verifications	Final number and locations to be selected in consultation with district authorities & GCF project team. # Community asset creation to be confirmed following consultations/land surveys.
OUTCOME 2: Community resilience and adaptive capacity is enhanced through strengthened sustainable livelihoods and skills.							
Output level	2.1. Environmental awareness level raised among	Organization of environmental awareness campaign.	% (proportion) of targeted population with increased awareness of	0	75%	Partner reports, Survey reports	Surveys to be conducted by UNHCR's implementing partner

	refugees and host communities.		environmental protection and management				
		Organization of environmental awareness campaign.	# of awareness campaign sessions conducted.	0	36		
		Organization of community environmental events.	# of community environmental events	0	6		
	2.2. Capacity strengthened of farmers in host communities in agro-forestry and climate smart agriculture.	Training of farmers on climate smart agriculture.	% (proportion) of farmers adopting at least 2 climate-resilient agricultural practices.	0	75%	Partner reports, Training reports. Surveys	Surveys to be conducted by WFP's implementing partner
		Training of farmers on climate smart agriculture.	# of farmers trained on climate-smart agriculture.	0	5,000 (50% women)		
Training and support for perma gardens and kitchen garden inputs.		# of people trained in and supported with perma gardens	0	2,000 (50% women)			
		# of people trained in and supported with kitchen gardens.	0	3,000 (50% women)			
2.3. Community biomass briquette production supported.	Production of biomass briquettes at household level.	# of household who are producing biomass briquettes.	0	3,000	Partner reports, Training reports.		
2.4. Alternative livelihoods	Training and capacity building on mushroom production.	# of people trained and with means to	0	300 (70% women)	Partner reports,		

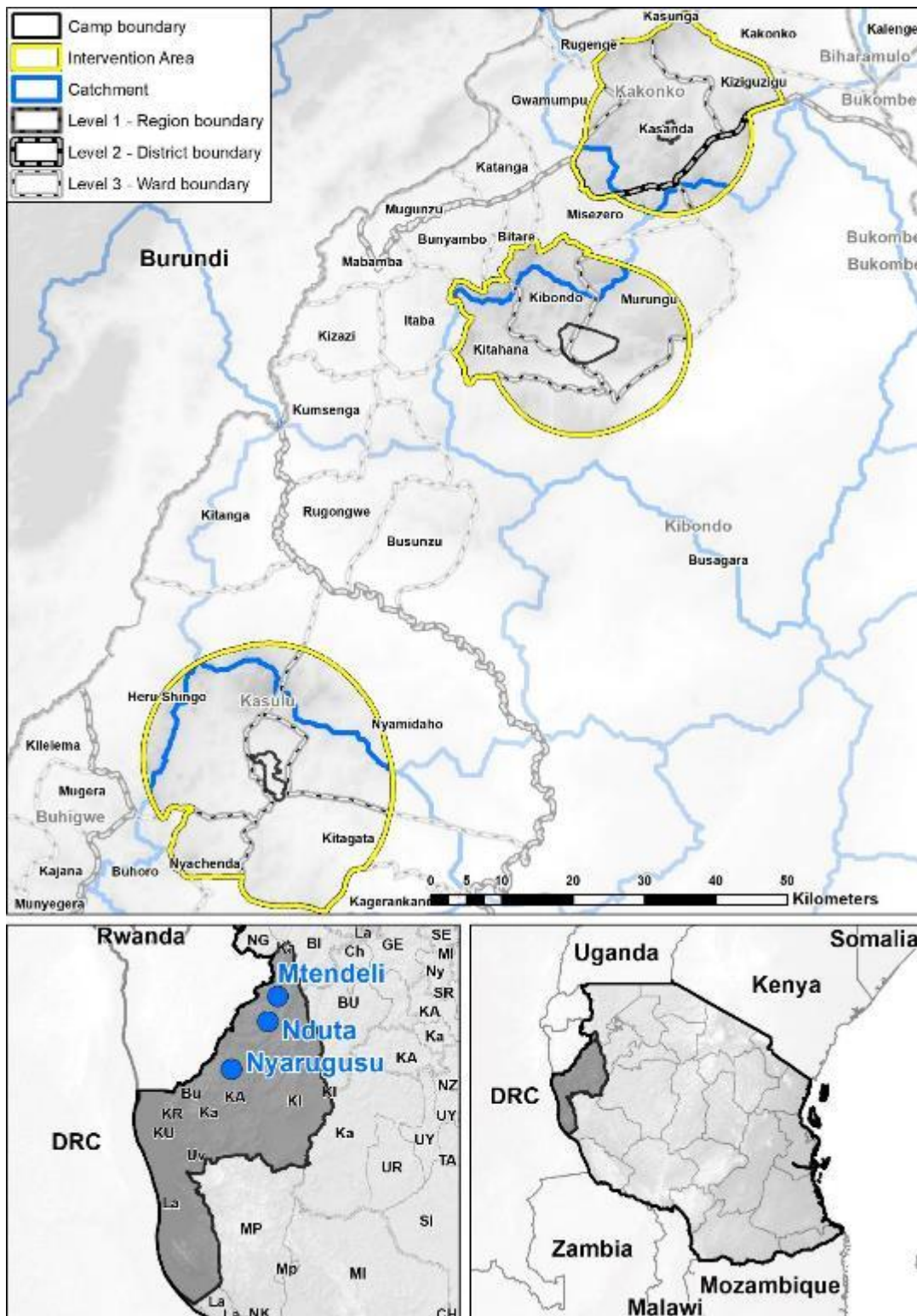
	developed among host communities and refugees.		undertake mushroom production.			Training reports.	
		Setting-up of mushroom production facilities.	# of mushroom production facilities set up.	0	30		

11. Budget.

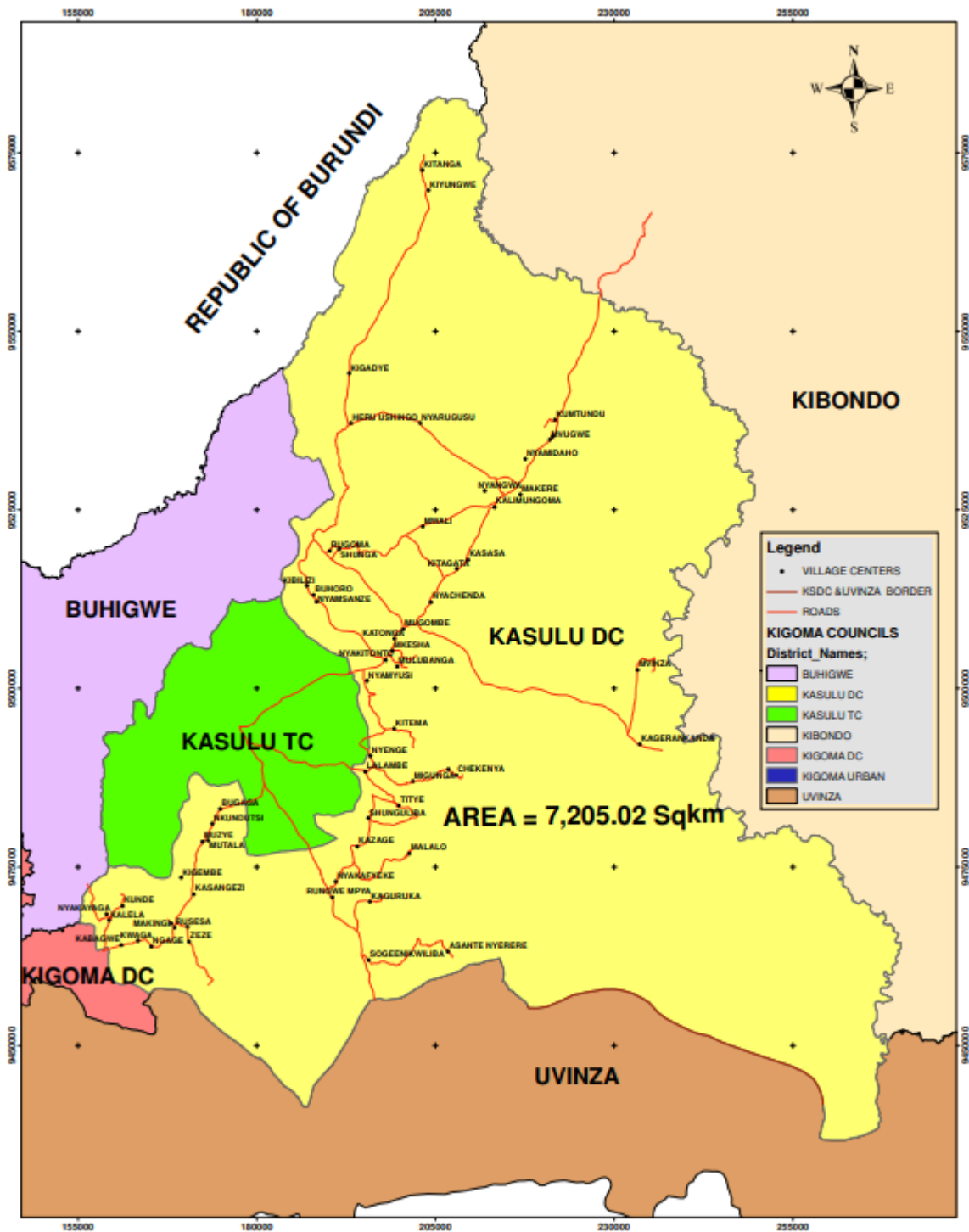
Budget assumes the USD/EUR exchange rate to be at par (August 2022). The results framework will be updated accordingly in case of further design/budget changes and in accordance with the donor.

Outcome	Output	Total Cost (EUR)
1 Degraded landscapes restored	1.1 Vegetation cover increased	1,588,925
	1.2 Community-led landscape restoration and rehabilitation	966,773
2 Adaptive capacities strengthened	2.1 Environmental awareness raised	58,626
	2.2 Farmer capacity strengthened on climate smart agriculture and livelihoods techniques	425,000
	2.3 Community biomass briquette production increased	82,475
	2.4 Alternative livelihoods strengthened	170,638
	Total Operational activities	3,292,437
Project management	Project management (including M&E, knowledge management and communication)	463,432
	Indirect support costs 6,5%	244,131
	Total Project costs	4,000,000

Annex 1 Project area and possible target villages



KASULU DISTRICT ADMINISTRATIVE MAP



1:240,000 Sources; 1. NBS;TZ Districts & Wards-2012,
2.Village Surveys 2007.

DRAWN BY ABUDIUS BONIPHACE
LAND SURVEYOR

KASULU and KIBONDO DISTRICT COUNCIL UPDATED LIST - VLUPs¹⁷

District	Ward	Village	Land Use Plan (Yes, No, Incomplete)	Population
Kasulu	1. Kitagata	1.1 Kitagata	No	6,377
		1.2 Kasasa	No	7,873
	2. Nyamidaho	2.1. Mvugwe	Yes	13,320
		2.2. Kumkambati	Yes	4,115
		2.3. Kuntundu	Yes	4,600
		2.4. Nyamidaho	No	10,056
		3. Nyachenda	3.1. Mwali	No
		3.2. Nyachenda	Yes	9,056
		4. Herushingo	4.1. Herushingo	Yes
	4.2. Kigadye		Yes	6,941
	4.3. Nyarugusu		No	5,051
Kibondo	5. Kitahana	5.1 Rusohoko	Yes	4,557
		5.2 Malolegwa	Yes	3,199
		5.3 Kibingo	No	6,062
	6. Busagara	6.1 Kigendeka	Yes	5,969
		6.2 Kifura	No	11,381
	7. Kibondo	7.1 Nengo	Yes	tbc
		7.2 Biturana	No	10,078
	8. Murungu	8.1 Kumbanga	Yes	2,124
		8.2 Kumhasha	Yes	5,214

Note: Even in villages where a land use plan is in place, there may be need to reconfirm with the communities as zoning was not done and/or changes in land use may have occurred.

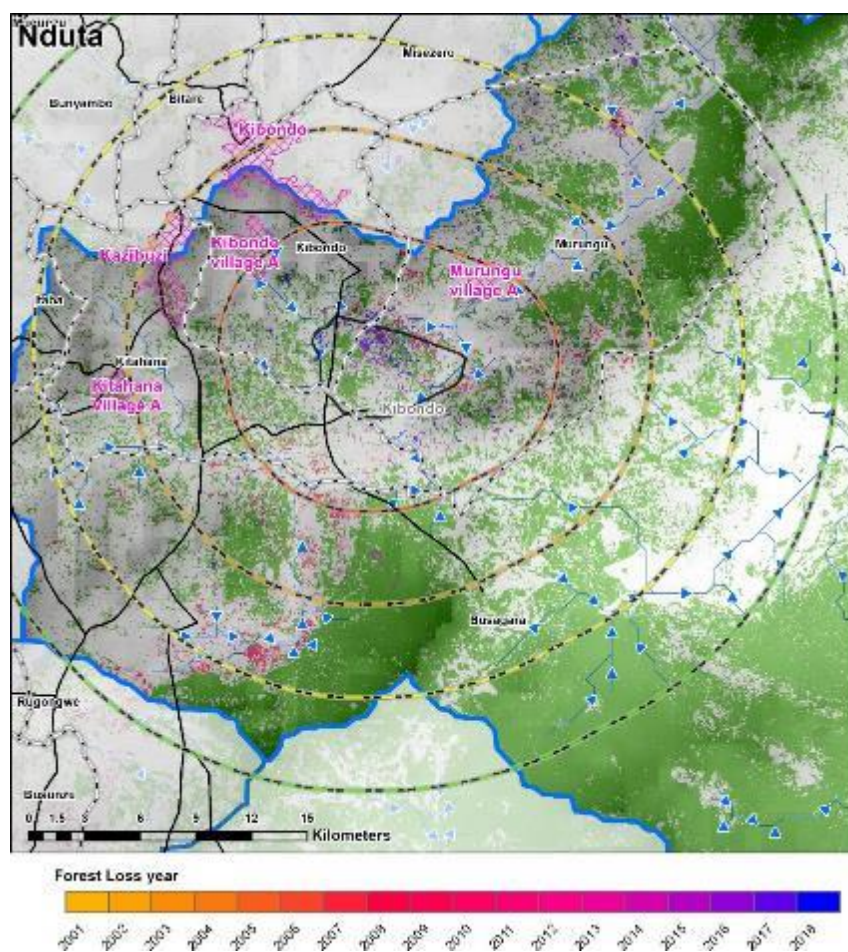
¹⁷ Information collected by UNHCR from the District Executive Directors of Kasulu and Kibondo in June 2022.

Annex 2 Deforestation in and around the refugee camps

The below analysis has been prepared as part of the GCF feasibility study.

Despite their regenerative potential, the forests in the project area are clearly heavily degraded. The extent of deforestation within the areas surrounding the camps has also been confirmed by remote sensing analysis conducted within a 25 km radius of each refugee camp and other recent studies in the Kigoma region.^{18,19,20}

The establishment of Nduta camp has had a recent (from 2016 onwards) impact on local forest cover. Trees within the camp itself, particularly in the northern areas, have been lost as well as within 5 km to the east of the camp. To the south west but further away from the camp (+10 km) there is tree loss. There are smaller pockets of tree losses in the area and could potentially be as a result of communities cutting down trees for fuel wood or seeking areas for agricultural expansion.

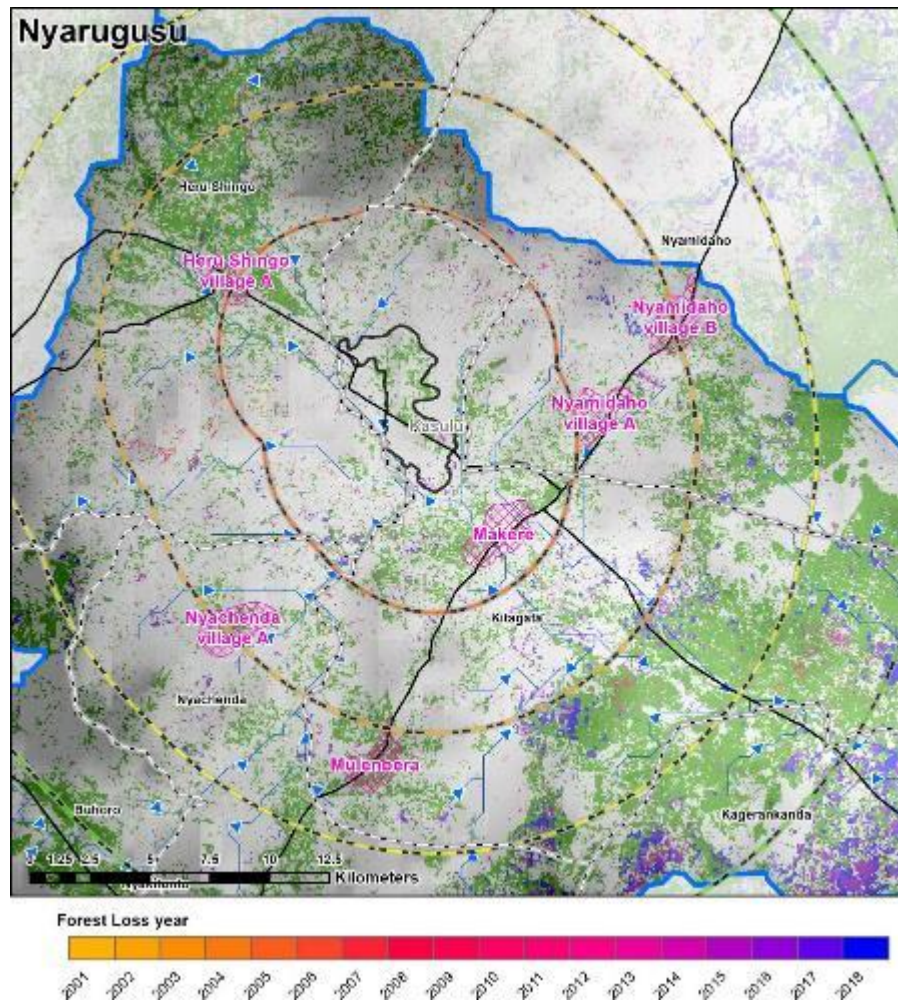


¹⁸ FAO & UNHCR (2018). Managing forests in displacement settings: guidance on the use of planted and natural forests to supply forest products and build resilience in displaced and host communities, by A. Gianvenuti, A. Guéret and C. Sabogal.

¹⁹ Lusambo LP, Lupala ZJ, Midtgaard F, Ngaga YM, Kessy JF, et al., 2016. Increased Biomass for Carbon Stock in Participatory Forest Managed Miombo Woodlands of Tanzania. J Ecosys Ecograph 6: 182.

²⁰ Makunga and Misana (2017). The Extent and Drivers of Deforestation and Forest Degradation in Masito-Ugalla Ecosystem, Kigoma Region, Tanzania. Open Journal of Forestry, 2017, 7, 285–305

There has been little tree cover loss in and close to Nyarugusu camp (**Fout! Verwijzingsbron niet gevonden.**) since 2001. Being a long-established camp, much of the influx land transformation would have already occurred. There are smaller pockets of tree losses in the area close to some of host communities which could potentially be as a result of communities cutting down trees for fuel wood or seeking areas for agricultural expansion. There are however major recent losses in the Malagarasi-Muyovozi RAMSAR.



The forested area within 4 km of the camps, the so-called buffer zone, is considerable, yet the rate of forest loss post-2015 is comparable to that of pre-2015. The implication of this is that the increase in the refugee population post-2015 exerted a limited impact on the surrounding forests beyond the camp boundary. This is further supported by the comparison of the rate of deforestation surrounding the camps to that of the average rate in each district (**Fout! Verwijzingsbron niet gevonden.**). The areas surrounding the camps experienced a greater deforestation rate than the district averages pre-2015 but converged closer to that of the district averages post-2015. This indicates that where increased deforestation is observed relative to the baseline rate, this increase is still less than is occurring on average in the district. Furthermore, there are wards in each district that experience a greater rate of deforestation than that of the areas surrounding the refugee camps.

Table: Woody cover and deforestation rate between 2012 and 2018 for each ward surrounding the Nduta and Nyarugusu refugee camps in Kigoma and within 4 km of the camp boundaries²¹.

Ward	Woody cover (ha)			Deforestation rate (%/yr)	
	2012	2015	2018	2012–2015	2015–2018
Kibondo District					
Busagara	5122.3	5105.4	5102.0	0.11%	0.02%
Kibondo	5716.3	5594.9	5435.4	0.71%	0.95%
Kitahana	4792.4	4775.6	4742.5	0.12%	0.23%
Murungu	6182.4	6122.7	5854.6	0.32%	1.46%
Total	21813.5	21598.5	21134.4	0.33%	0.72%
<4 km of Nduta Camp	4868.0	4787.3	4652.4	0.55%	0.94%
Kasulu District					
Heru Shingo	14551.7	14458.0	14402.5	0.21%	0.13%
Kitagata	8866.6	8826.6	8779.4	0.15%	0.18%
Nyachenda	4097.1	4088.9	4079.3	0.07%	0.08%
Nyamidaho	7778.3	7701.0	7492.8	0.33%	0.90%
Total	35293.6	35074.4	34754.0	0.21%	0.30%
<4 km of Nyarugusu Camp	3865.9	3846.7	3833.2	0.17%	0.12%

²¹ Hansen/UMD/Google/USGS/NASA, "Global Forest Change 2000–2018. Version 1.6.

Annex 3 Lessons learned from previous / on-going Natural Resources Management (NRM) and energy projects in Kigoma.

ORGANISATION / PROJECT.	PROJECT PERIOD	ACTIVITIES IMPLEMENTED / PLANNED	LESSONS LEARNED
Kigoma Joint Programme (KJP) 1. WFP theme-lead Climate Smart Agriculture project	2020–2022 (KJP–I)	FAO is promoting climate smart agricultural practises in target districts, through FFS modality. WFP supports post-harvest activities and marketing	<ul style="list-style-type: none"> • Evaluation of the current programme shows that the holistic/value chain approach has been successful with different UN agencies providing support based on their comparative advantages • The benefits of capacity building on CSA, financial literacy, market linkages and post-harvest handling has seen in participating communities. These include increased productivity and production, increased demand for CSA service and products such as hermetic bags, improved seeds and increased profits from strategic decisions such as delayed selling of products which are stored well.
2. UNCDF-led component of Village Loans and Savings Associations (VSLAS) under Youth and Women’s Economic Empowerment projects.	2020–2022 (KJP–I)	UNCDF is supporting savings groups and access to agricultural and livelihood inputs in Kibondo, Kasulu and Kakonko. Developing digital platform for disaggregation of data.	<ul style="list-style-type: none"> • Large amount of savings mobilised, and loans offered – with huge potential to leverage upon to support procurement of mushroom inputs upon project phase out. • Women participation in VSLAs is extensive and can contribute to women economic empowerment if these are used/strengthened to develop alternative and off-farm livelihood activities
UNHCR: 1. Forestry and natural Resources programme	Ongoing	UNHCR regular forestry and natural resources managements supports tree planting, environmental awareness raising and small interventions support flood and erosion control. Limited funding has meant recent interventions have been quite modest.	<ul style="list-style-type: none"> • Tree planting in host community performs better if trees are planted in one community managed woodlots in combination with planting tree in individual plots • For better performance of trees planted in both refugee camps and host communities, enough budget should be put aside to implement post-planting activities at least for 3 years before planted trees become independent. • There is high demand for planting of trees in host community. The main challenge is funds availability

ORGANISATION / PROJECT.	PROJECT PERIOD	ACTIVITIES IMPLEMENTED / PLANNED	LESSONS LEARNED
			<p>which is limiting the ability to plant more trees in the host community.</p> <ul style="list-style-type: none"> Local governments both host community and district authorities when involved early in planning and implementing projects for natural resources management, there is good outcome of natural resources management due to improved ownership and governance in the local communities.
<p>3. Access to energy programme.</p>	<p>Ongoing</p>	<p>UNHCR's other programming is facilitating access to alternative energy and promoting energy efficiency for refugee and host communities to help offset fuelwood consumption. Limited funding has meant recent interventions have been quite modest.</p>	<ul style="list-style-type: none"> Securing char powder can be a hustle for refugees inside camps. Selection of crops (carbon-rich) permissible in refugee camps could supplement sources of raw materials for char. <p>Biomass briquette production and subsequent input demand inside the camps can support the creation of a market for char production in the host communities</p>
<p>ENABEL: 1. Sustainable Agriculture Kigoma Regional Project (SAKIRP).</p>	<p>2016– 2021</p>	<p>SAKIRP provided support to beans and cassava farmers and value chains through Farmer Field School (FFS) approach implementation modalities.</p>	<ul style="list-style-type: none"> FFS approach continued to demonstrate a formidable technology transfer approach. Beans is a widely consumed staple has enormous economic value in the region.
<p>2. Natural Resources Management for Local Economic Development in Kigoma Region (NRM-LED)</p>	<p>2014– 2021</p>	<p>NRM-LED supported participatory Village Land Use Planning for sustainable NRM, CBFM in Kibondo, Kakonko and Kasulu; and providing institutional support to districts on natural resource governance and landscape coordination. The project is also supported establishment and governance of CBFM</p>	<ul style="list-style-type: none"> Village LUPs are often overtaken by development and population growth and therefore must be reviewed more periodically (as might be necessary) and adapted accordingly to emerging needs. Stakeholder engagement on various levels, including across different government entities is important to ensure actual meaningful planning and enforcement of the village plans and by laws.

ORGANISATION / PROJECT.	PROJECT PERIOD	ACTIVITIES IMPLEMENTED / PLANNED	LESSONS LEARNED
<p>Danish Refugee Council (DANIDA funded): 1. Improving access to alternative energy sources and promoting environmental conservation in refugee camps and host communities in Kigoma Region, Tanzania.</p>	<p>March 2021- Dec 2022</p>	<p>The project targets both refugees and host communities and seeks to: increase access to alternative energy sources for cooking; enhance forest protection; and undertake capacity building on environment and forest management with a focus on on raising community awareness on environmental conservation through community platforms and forums to share learnings on tree planting, good agricultural practices, climate change adaptation strategies and so forth.</p>	<ul style="list-style-type: none"> • Lesson learned on the tree planting activities include the enthusiasm and interest of farmers in agroforestry. When community members are allowed to choose tree species of their own, they tend to prioritize trees with timber value and therefore are motivated to plant trees for commercial reasons. While there is high demand for tree planting in the host communities, fund availability is the main caveat affecting massive tree planting in the communities • Other lessons, including in the refugee context, relate to the need to invest in post planting support and skills. The most critical phase is in the year after planting and support efforts in building community skills is needed. • Lessons learned on the energy components indicate that briquette making has considerable potential for scaling up given its applicability and ease to use by the communities and availability of raw for charring in the refugee hosting community • Application of Cash for Work modality in the production of char powder as raw materials for bio-briquettes production can be a source of income generating opportunity contributing to building local economies of HC members. • Engagement of the host community members in the production of char powder as raw materials for bio-briquettes production in the refugee camps contributed to the peaceful co-existence of refugee and HC populations. • The centralized production of a bio-briquette initiative created awareness and interest among community

ORGANISATION / PROJECT.	PROJECT PERIOD	ACTIVITIES IMPLEMENTED / PLANNED	LESSONS LEARNED
			<p>members and the government on bio-briquette use. This highlights the need for scalability of the action.</p> <ul style="list-style-type: none"> • Maximum engagement of key stakeholders including government counterparts, other implementing partners, and community members is crucial for thorough implementation of the project activities and for ensuring sustainability.
<p>GIZ: 1. Renewable Energy Service and Products as an Opportunity in National and Displaced Markets (RESPOND) through SNV.</p>	<p>2018–2020/21</p>	<p>Activities included promoting results-driven and market driven approaches in woodlot afforestation (aligned with REDES0), fuel efficient cookstoves, alternative lighting solutions, and promoting energy efficiency in host communities and (to a lesser extent) refugee camps in Kasulu and Kibondo.</p>	<ul style="list-style-type: none"> • Renewable energy initiatives could contribute to women empowerment. • Huge cash can be generated from alternative livelihoods. Approximately, \$1,513,031 has been generated from sustainable alternative livelihoods adopted by target communities. • The LCWT project has reached 127,769 individuals. Upscaling of such an approach could reach substantial numbers
<p>Jane Goodall Institute (USAID funded): 1. Landscape Conservation in Western Tanzania</p>	<p>2018–2023</p>	<p>JGI is implementing land use planning (LUP) and supporting effective natural resource management, including in the Old Refugee Settlement of Mishamo.</p>	<ul style="list-style-type: none"> • Through creation of village land forest reserves (VLFRs) and alternative income generating activities such as butterfly farming, fish farming and agroforestry, communities were able to generate new sources of revenue while protecting their forests. • Community engagement and support to sustainable livelihoods in tandem with environmental protection is applied to ensure ownership and sustainability • Forest clearance went down by 88 per cent and communities became more actively involved in preserving the forest.