GEF-7 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: MEDIUM-SIZE PROJECT TWO-STEPS
TYPE OF TRUST FUND: GEF TRUST FUND

PART I: PROJECT INFORMATION

Project Title: Lake Naivasha Basin Ecosystem Based Management			
Country(ies):	Kenya	GEF Project ID:	10589
GEF Agency(ies):	WWF-US (select) (select)	GEF Agency Project ID:	G0027
Project Executing Entity(s):	NETFUND	Submission Date:	4 January 2023 22 February 2023 April 6, 2023
GEF Focal Area (s):	Biodiversity, land degradation	Expected Implementation Start	1 July 2023
		Expected Completion Date	30 June 2027
Name of Parent Program		Parent Program ID:	

A. FOCAL/NON-FOCAL AREA ELEMENTS

PROGRAMMING DIRECTIONS	Focal Area Outcomes	Trust Fund	(in $)	
			GEF Project Financing	Confirmed Co-financing
BD 1-1	Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	GEFTF	520,861	4,000,000
LD 1-1	Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)	GEFTF	1,264,561	6,525,689
	Total project costs		1,785,422	10,525,689

B. PROJECT DESCRIPTION SUMMARY

Project Objective: To restore forest ecosystems and reduce land degradation in the LNB catchment for increased protection of Lake Naivasha's water resources, biodiversity, and associated ecosystem services to support the local and national economy.

Project Components	Component Type	Project Outcomes	Project Outputs	Trust Fund	(in $)	
					GEF Project Financing	Co-financing
1. Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin (LNB)	Technical Assistance	1.1. Harmonized inter-sectoral and multi-stakeholder planning and management across LNB and County plans for integrated, inclusive and sustainable land management in LNB	1.1.1 Participatory review and update of the Lake Naivasha Basin Integrated Management Plan (LNBIMP) 2023-2033 1.1.2 Annual position papers on priority areas of action (as identified in the LNBIMP) to be integrated into the County Development Plans prepared and submitted to County Governments 1.1.3 LNB multi-stakeholder Platform meetings coordinated by Imarisha for coordinating the implementation of the LNBIMP and knowledge and best practice exchange	GEFTF	190,483	810,000

2. Market and financial mechanisms for implementation of the LNBIMP	Technical assistance	2.1. Improved access to finance for implementation of restoration and improved land management activities in LNB	2.1.1. Sustainable finance and resource mobilization strategy for the LNBIMP 2.1.2. Restructured and operationalized PES system 2.1.3. Linkages to micro-finance institutions and other financial service providers, including the PES scheme	GEFTF	295,170	2,134,105
		2.2. Improved access to markets for sustainable agricultural produce	2.2.1. Market outlets for sustainably produced horticulture products from the LNB secured			
3. Improved land management in upper Lake Naivasha Basin	Investment	3.1. Improved capacity of LNB smallholder farmers for the transition towards sustainable and biodiversity-friendly agricultural practices	3.1.1. Agricultural training manual and curriculum targeting smallholder farmers developed with key state agencies and stakeholders 3.1.2. Roll out of gender-inclusive curriculum training to 2,700 LNB smallholder farmers through ward agricultural officers (group facilitators) and field days with demonstrations for technical backstopping 3.1.3. Tools and materials for implementation of sustainable, biodiversity-friendly agricultural practices (e.g., certified seeds, compost/mulching tools, etc.)	GEFTF	962,165	6,028,589
		3.2. Priority forest land management and restoration interventions implemented in the Lake Naivasha upper catchment area for enhanced water and biodiversity protection	3.2.1. Lake riparian area Code of Conduct for LNB stakeholders 3.2.2. Awareness program on Lake Naivasha Riparian Code of Conduct 3.2.3. Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta) updated 3.2.4. Protection and restoration activities on key degradation areas implemented (in particular passive restoration through demarcation and natural regeneration)			
4. Knowledge Management and Monitoring and Evaluation	Technical Assistance	4.1. Effective Knowledge Management and communications	4.1.1. Basin-wide communication strategy developed and implemented to support	GEFTF	176,302	500,000

		ensured to support long-term support for Lake Naivasha Basin with potential for upscaling and replication	sustainable land management and biodiversity-friendly agricultural practices in LNB 4.1.2. Project knowledge products adequately developed and disseminated with LNB stakeholders and potentially wider audience			
		4.2. Effective M&E ensured to inform effective adaptive project management	4.2.1. Project M&E plan implemented and project progress reports completed 4.2.2. Annual reflection workshops to track progress against workplan and results framework indicator targets for effective project management			
			Subtotal	(select)	1,624,120	9,472,694
			Project Management Cost (PMC)	(select)	161,302	1,052,995
			Total Project Cost		1,785,422	10,525,689

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ( )

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Investment Mobilized	Amount ($)
Civil Society Organization	WWF Kenya	In-kind	Recurrent	100,000
Civil Society Organization	Rhino Ark Kenya	In-kind	Recurent	35,267
Civil Society Organization	Rhino Ark Kenya	Grant	Investment mobilized	343,322
Recipient Country Government	NETFUND	In-kind	Recurrent	640,215
Recipient Country Government	NETFUND	Grant	Investment mobilized	178,533
Recipient Country Government	Ewaso Ng'iro South Development Authority (ENSDA)	In-kind	Recurrent	1,470,000
Recipient Country Government	Ewaso Ng'iro South Development Authority (ENSDA)	Grant	Investment mobilized	3,750,000
Recipient Country Government	County Government of Nyandarua	In-kind	Recurrent	1,499,105
Recipient Country Government	Kenya Forest Services (KFS)	Grant	Investment mobilized	2,100,000

GEF Agency	WWF US	In-kind	Recurrent	234,247
Recipient Country Government	Imarisha Naivasha	In-kind	Recurrent	75,000
Recipient Country Government	Imarisha Naivasha	Grant	Investment mobilized	100,000
Total Co-financing				10,525,689

Investment mobilized includes:

- Rhino Ark: construction of 10 km of electric fence between Wanjohi and Shamata; establishment of an eco-tourism enterprise (tour guides to visit the Aberdare forest and park); establish Model tree nursery at Geta Forest Station; and replant and maintain 20 ha of degraded area at Sophia, Geta Forest Station.
- NETFUND: Cash contribution from Government of Kenya (10% of GEF budget) allocated to support PMC costs as follows - project staff costs for a period of 6 month (US$ 59,148 US$); vehicle maintance and operation (US$ 31,500); full-time project driver (US$ 21,000); office rent and operational costs (US$ 42,000); office furniture and equipment (US$ 4,885); and communications and promotion (US$ 20,000)
- ENSDA: Development Grant from Government of Kenya
- Imarisha Naivasha: Development Grant from Government of Kenya

Total confirmed co-financing is lower than at PIF stage. However, an estimated $6,500,000 of an AfDB loan is being invested in the same geography through KFS as part of the Green Zones Development Support Project Phase II. This project is currently not counted for as baseline co-financing, pending confirmation by the donor regarding its attribution in this regard.

TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)	Total (c)=a+b
WWF-US	GEFTF	Kenya	Biodiversity	BD STAR Allocation	520,861	46,878	567,739
WWF-US	GEFTF	Kenya	Land Degradation	LD STAR Allocation	1,264,561	113,810	1,378,371
Total GEF Resources					1,785,422	160,688	1,946,110

D. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? No

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF Trust Fund).

E. PROJECT'S TARGET CONTRIBUTIONS TO GEF 7 CORE INDICATORS

Update the relevant sub-indicator values for this project using the methodologies indicated in the Core Indicator Worksheet provided in Annex F and aggregating them in the table below. Progress in programming against these targets is updated at mid-term evaluation and at terminal evaluation. Achieved targets will be be aggregated and reported any time during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCCF.

Project Core Indicators		Expected at CEO Endorsement
1	**Terrestrial protected areas** created or under improved management for conservation and sustainable use (Hectares)	
2	**Marine protected areas** created or under improved management for conservation and sustainable use (Hectares)	

3	Area of **land restored (**Hectares)	1,600 ha
4	Area of **landscapes under improved practices** (excluding protected areas)(Hectares)	37,086 ha
5	Area of **marine habitat under improved practices** (excluding protected areas) (Hectares)	
	Total area under improved management (Hectares)	
6	**Greenhouse Gas Emissions Mitigated** (metric tons of CO2e)	1,413,610 tCO2e
7	**Number of shared water ecosystems** (fresh or marine) under new or improved cooperative management	
8	Globally over-exploited **marine fisheries** moved to more sustainable levels (metric tons)	
9	**Reduction**, disposal/destruction, phase out, **elimination** and avoidance of **chemicals of global concern** and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	
10	Reduction, avoidance of emissions of **POPs to air** from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of **direct beneficiaries disaggregated by gender** as co-benefit of GEF investment	3,200 (40% women)

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided.

Core Indicator 3: Area of land restored – 1,600 ha.

Under Component 3, the proposed project will contribute to the restoration of 1,600 ha of forest land through supporting priority restoration activities. In this regard, the project will reinforce efforts under the Green Zones Development Project, the BMZ-funded Forest Landscape Restoration project, the Lake Naivasha Basin Reforestation Project and Rhino Arc (see baseline), through supporting the restoration of 200 ha of forests at Sofia Beat (Geta Forest Station) in addition to two sites in South Kinangop, of 16 and 23 ha respectively.

Core Indicator 4: Area of landscapes under improved management – 37,086 ha.

The proposed project will contribute to the improved management and protection of 35,086 ha of forest land, through updating the existing Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta), as well as through providing resources and training to CFAs to implement priority measures for the implementation of these plans. In addition, the project will bring 2,000 ha of productive land under improved practices (sub-indicator 4.3: area of land under sustainable land management in production systems), through a combination of training, financial and market incentives, as well as direct support to farmer groups.

Core indicator 6: Greenhouse gas emissions mitigated - 1,413,610 t

FAO's EX-Ante Carbon balance Tool (ExAct) was used to estimate mitigated carbon emissions from the proposed project interventions. The Ex-Act tool is a land-based carbon accounting tool designed to estimate carbon stock changes, including Green House Gas (GHG) emissions and emission reductions for project interventions during the capitalization and implementation of a project. For this project, the EX-ACT tool was used to calculate the emissions emitted and mitigated for a 20-year period, assuming the project will be implemented for 3 years and capitalization of the project results will last 17 years.

Within the Lake Naivasha Basin, the project will restore 1,600 hectares of forested land, improve the management of 35,086 ha hectares of land (which includes an actual forest cover of 7,660 ha) for biodiversity and establish sustainable land use practices for 2,000 hectares of production systems. Restoring the 1,600 hectares of tropical montane forest

will mitigate an estimated net amount of 555,232 tCO2-e. Management improvements such as eliminating forest degradation and uncontrolled fires will mitigate approximately 685,554 metric tons of carbon emissions. The third category of project interventions that will alter carbon stocks in the project area is the change in management and land use of approximately 2,000 hectares of production systems. A planned transition from traditional cropland to alley-cropping on 900 hectares will mitigate 50,170 metric tons of carbon emissions and establishing silvoarable plantations on 400 degraded hectares will mitigate 49,027 metric tons of carbon emissions. Lastly, improving practices on 700 hectares of traditional cropland such as reducing tillage, utilizing higher carbon input without organic amendments, and utilizing manure will results in a total of 73,628 metric tons of carbon emissions mitigated. Given a 20-year project implementation and capitalization period, this project could result in 1,413,610 tons of carbon emissions mitigated.

Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of the GEF investment –3,200
The proposed project will directly benefit approximately 2,700 smallholder farmers in the middle and upper catchments of the LNB. The project will also benefit approximately 320 representatives of LNB stakeholder organizations and communities involved in the planning processes under component 1. Finally, an estimated 180 individuals will benefit from support to the implementation of land management and restoration measures under component 3. The project aims for an ambitious target of at least 40% of beneficiaries to be women, considering that women are currently poorly represented in farmer support work. Women and youth would be engaged to contribute to identifying sustainable agricultural practices that will support them in safeguarding natural resources and promoting their economic development and livelihoods.

PROJECT TAXONOMY

Please update the table below for the taxonomic information provided at PIF stage. Use the GEF Taxonomy Worksheet provided in Annex G to find the most relevant keywords/topics/themes that best describe the project.

Level 1	Level 2	Level 3	Level 4
Influencing Models	Convene multi-stakeholder alliances		(multiple selection)
	Strengthen institutional capacity and decision-making		
Stakeholders	*Private sector*	Financial intermediaries and market facilitators	(multiple selection)
		Individuals/entrepreneurs	
	Beneficiaries		
	Local communities		
	Civil society	Community-based organization	
		Non-governmental organization	
	Type of engagement	Information dissemination	
		Partnership	
		Consultation	
		Participation	
	Communications	Awareness raising	
		Behavior change	
Capacity, Knowledge and Research	Capacity Development	(multiple selection)	(multiple selection)
	Knowledge generation and exchange		
	Learning	Adaptive management	
	Knowledge and Learning	Knowledge Management	

		Capacity Development	
	Stakeholder Engagement Plan		
Gender Equality	Gender mainstreaming	Beneficiaries	(multiple selection)
		Women groups	
		Sex-disaggregated indicators	
		Gender-sensitive indicators	
	Gender results areas	Participation and leadership	
		Capacity development	
		Awareness raising	
		Knowledge generation	
		Access to benefits and services	
Focal Area/Theme	Biodiversity	Mainstreaming	Agriculture and agrobiodiversity
		Biomes	Rivers
			Lakes
			Tropical dry forest
	Forests	Forest and Landscape Restoration	
	Land degradation	Sustainable Land Management	Restoration and rehabilitation of degraded lands
			Ecosystem Approach
			Integrated and cross-sectoral approach
			Community-based NRM
			Sustainable Livelihoods
			Income-generating activities
			Sustainable agriculture
			Improved soil and water management techniques

PART II: PROJECT JUSTIFICATION

DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF

In comparison to the original PIF, the project has changed on a number of fronts:

1. Output 1.1.2 has been changed from supporting the development of the County Development Plans, to mainstreaming of priority intervention areas in the Annual County Development Plans, this because the County Development Plans have since been developed, so the project's main entry point for influencing developments in the basin would come through influencing the Annual Development Plans through the development of position papers (consultative process to be led by and papers submitted to County Governments by Imarisha on behalf of the stakeholders).
2. Output 1.1.3 on the development and updating of by-laws has been removed as a specific output, as stakeholder consultations during PPG have pointed out that the existence or not of such by-laws are not the

major bottleneck, but rather the need for adequate implementation and institutional structures for the same. This aspect will covered under output 3.2.1 and 3.2.2 (development and roll-out of a code of conduct).

3. The budget for Component 1 has consequently been reduced from the original US$ 313,412, to US$ 190,483. Most of the savings have been allocated to on-the-ground delivery of capacity building, improved farming and restoration activities under Component 3, and to a lesser extent work on financial and market mechanisms under Component 2.

1a. *Project Description*. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description); 2) the baseline scenario and any associated baseline projects; 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project; 4) alignment with GEF focal area and/or Impact Program strategies; 5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 7) innovativeness, sustainability and potential for scaling up.

Global environmental and/or adaptation problems, root causes and barrier

The Lake Naivasha Basin (LNB) is located in the eastern Rift Valley in Kenya and encompasses about 3,400 km^2, including the upper water catchment area in the mountains, the middle water catchment area, and the lower catchment area which feeds into the lake (see Figure 1). The Rift Valley Catchment Zone, of which LNB is part, has been identified as a sub-national priority hotspot for land degradation in Kenya based on data and assessments of the three indicators of Land Degradation Neutrality (LDN)[1,2]: land cover, land productivity, and soil organic carbon[3]. LNB, more specifically, has been highlighted as a specific focal area for restoration in Presidential Executive Order No. 1 of 2020[4]. In response to this, hotspots of land degradation were identified by a Working Group to guide intervention efforts in the implementation of restoration projects (see baseline section)[5]. This means LNB, and the Rift Valley Catchment Zone at large, are high-value priority areas in Kenya for achieving LDN, to "achieve a balance between anticipated land degradation (losses) and planned positive actions (gains), in order to achieve, at least, a position of no net loss of healthy and productive land by 2030"[6]. Kenya's LDN Target Setting Report highlights agroforestry, rehabilitation through sustainable land management practices, among others as corrective measures to not only achieve LDN but also improve livelihoods, biodiversity conservation and resilience to climate change[7].

[1] The concept of Land Degradation Neutrality (LDN) was introduced by the Parties to the United Nations Convention to Combat Desertification (UNCCD) at its 12th Conference of the Parties in 2015. Republic of Kenya, Land Degradation Neutrality Target Setting Final Report, 2020. https://knowledge.unccd.int/sites/default/files/ldn_targets/2020-09/Kenya%20LDN%20TSP%20Final%20Report%20%28English%29.pdf

[2] LDN was defined by the Parties to the UNCCD as "A state whereby the amount and quality of land resources, necessary to support ecosystem functions and services and enhance food security, remains stable or increases within a specified temporal and spatial scales and ecosystems." https://www.unccd.int/actions/achieving-land-degradation-neutrality

[3] Republic of Kenya, Land Degradation Neutrality Target Setting Final Report, 2020. https://knowledge.unccd.int/sites/default/files/ldn_targets/2020-09/Kenya%20LDN%20TSP%20Final%20Report%20%28English%29.pdf

[4] https://www.treasury.go.ke/wp-content/uploads/2021/03/Executive-Order-No.-1-of-2020-Reorganisation-of-Government.pdf

5 Ibid, pg. 33.

6 Ibid, pg. 10.

7 Ibid, pg. 13, 30.

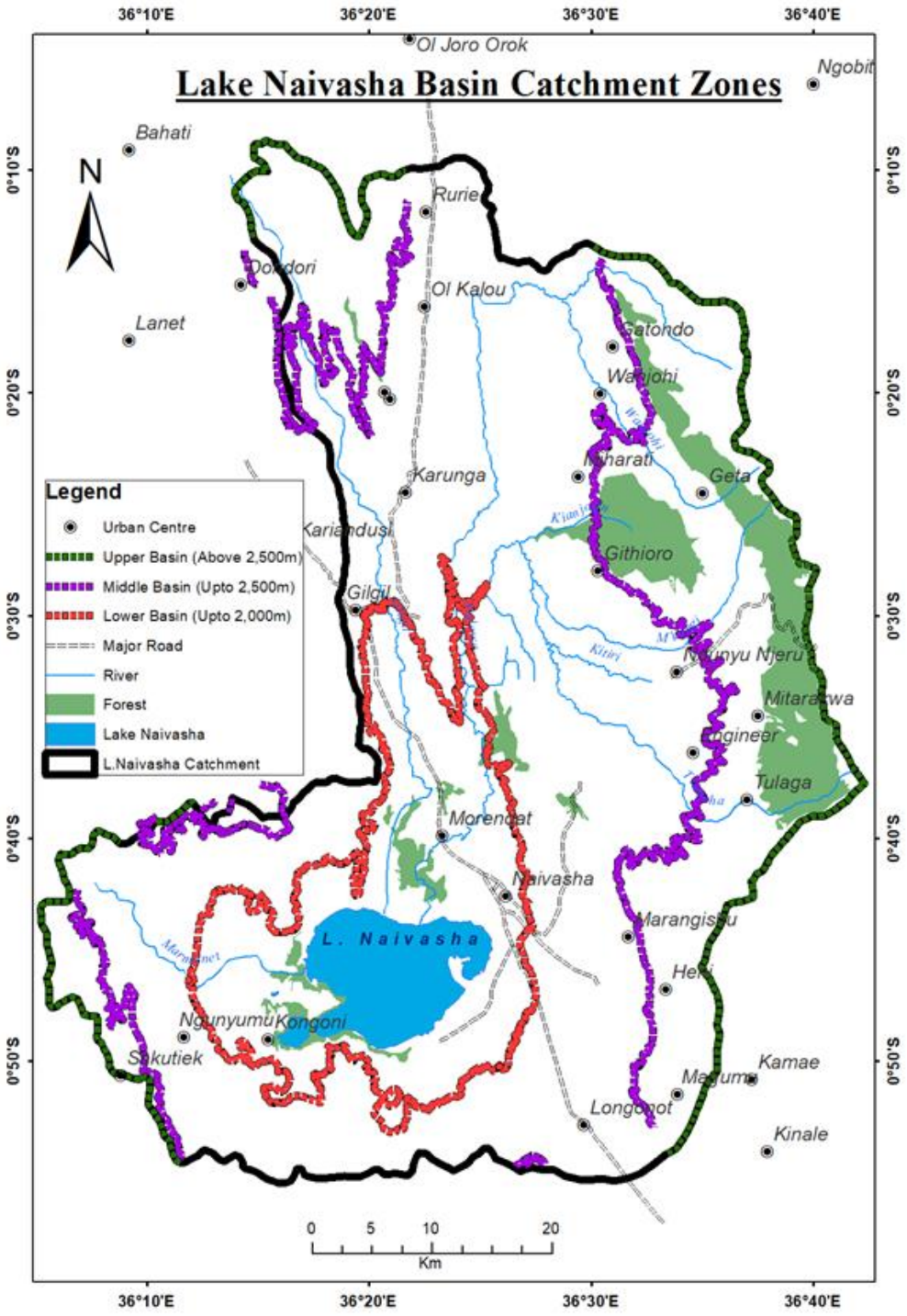


Figure 1. Lake Naivasha Basin Catchment Zones

Error! Reference source not found. presents the different catchment zones in the LNB. Proposed project interventions will mainly take place in the upper catchment in Nyandarua County, with limited activities around Lake Naivasha itself, in Nakuru County, under the jurisdiction of the Naivasha Water Resources Users Association (WRUA). River Kianjogu (Kianjogu WRUA) and River Wanjohi (Wanjohi WRUA) are the main tributaries of River Malewa; the main source of water influx into Lake Naivasha (80% of the water that feeds Lake Naivasha comes from River Malewa). The majority

of the targeted area falls in the Upper zone of the catchment (>2500 m above sea level) while a small percentage falls in the middle zone of the catchment (2000 m-2500 m above sea level).

Lake Naivasha is one of the two freshwater lakes in the Kenyan part of the Rift. The key values provided by Lake Naivasha Basin (LNB) are globally significant biodiversity, and provision of water and fertile soil. In 1995, the LNB was designated as a wetland of international importance. The freshwater supports a rich ecosystem with hundreds of bird species, papyrus fringes filled with hippos, riparian lands where waterbuck, giraffe, zebra and various antelopes graze, dense patches of acacia forest with buffalos, bushbuck and swampy areas where waterfowl breed and feed. Seventy percent (70%) of the rivers that feed LNB originate from the Aberdares Forest. The Aberdares is a tropical forest with over 7,788 plant species, globally significant wildlife such as elephants, black rhino, and mountain bongo, and over 250 species of both endemic and migratory bird species[8]. The forest covers over 250,000 ha and one of the main water towers in Kenya. It forms part of the upper catchments of Tana River, Kenya's largest river as well as Athi, Ewaso Nyiro (North) and Malewa rivers. The forest serves as a catchment for the Sasumua and Ndakaini dams which provide most of the water and energy resources for Kenya's capital, Nairobi (Lambrechts, Woodley, Church, & Gachanja, 2003).

The basin is characterized by fertile soils and freshwater that supports livelihood activities for the communities living in the area. The fertile soils and availability of water support growing of food crops, horticulture farming and floriculture. The lower basin supports one of the most expansive horticultural industries in this part of the world which employs more than 250,000 people[9]. The horticulture industry is among the fastest growing industries in Kenya. In 2016, the flower sector contributed Sh70.8 billion accounting for 70 percent of earnings from the horticultural sector[10]. LNB accounts for more than 50% of the country's cut flower exports. The lake plays a critical role in the groundwater system[11] which supports irrigation around the lake basin. Additionally, the Naivasha area is steadily rising as a conference tourism destination in the country.[12] The availability of many hotels, homestays and campsites at all budgetary levels, as well as the proximity to Nairobi and natural sceneries such as Hells Gate, Mount Longonot, the Aberdares Game Reserve, Lake Nakuru Game Park, and Menengai crater, attract many local and foreign visitors.

The LNB is challenged by land degradation, water pollution and loss of biodiversity resulting in a reduction in the provision of ecosystem services, in particular in the upper part of the catchment (the main focus of this project), which is highly prone to erosion due to steep gradients compounded by poor land use practices. Within this context, the key environmental problem to be addressed by the project is land degradation, water pollution and loss of biodiversity in the LNB, resulting in a reduction in provision of ecosystem services, which is caused by a number factors:

1. Poor agricultural practices by small scale farmers in the upper catchment, most of which is by subsistence farmers or producers for local markets, and are a major threat to the lake. Unsustainable farming practices have led to siltation of streams and rivers in the headwaters and the lake.

2. In addition to poor agricultural practices, overgrazing and illegal logging have caused land degradation and deforestation in the lower, middle and upper catchments, particularly riparian zones around streams in the headwaters and around the Lake itself. Illegal logging, mostly by external saw millers with support from locals, has been driven by the high demand for timber, charcoal and fuelwood, and particularly targets indigenous trees. Clearing of the indigenous bush to pave way for farmlands and the encroachment of forests and riparian land also contribute to loss of land cover. Population growth and shrinking of land sizes have led people to encroach on riparian land by cultivating in the steep slopes especially in the middle and upper catchments.

[8] KWS Abardares National Park: http://www.kws.go.ke/content/aberdare-national-park

[9] Githenji. G.J (2011). Africa in the Context of Investment in Research, Education, Training and Innovation: Challenges and Wayforward. *Journal of Education and Social Sciences*, *Volume* (1), pp. Pages.

[10] Business Daily, 2017: Kenya's horticulture exports https://www.businessdailyafrica.com/datahub/Kenya-s-horticulture-exports/3815418-4121118-o4ygd4/index.html

[11] Ojiambo, Bwire & Poreda, Robert & Lyons, William. (2001). Ground Water/Surface Water Interactions in Lake Naivasha, Kenya, Using δ18O, δD, and 3H/3He Age-Dating. Ground water. 39. 526-33. 10.1111/j.1745-6584.2001.tb02341.x.

[12] https://www.nation.co.ke/lifestyle/dn2/Naivasha--the-new-conference-hub/957860-3157942-t0oj50z/index.html

3. Pollution of water bodies from farmlands, settlements and industries within the catchment is causing significant problems for the health of Lake Naivasha and the livelihoods of people who depend on resources from the lake. In addition, the quality of potable water is also poor due to large amounts of fluoride.

4. Over-abstraction of water resources to support development activities is posing a threat to the lake. Some of the proposed infrastructure development such as an international industrial park and a new dry port will require vast amounts of water which will be drawn from the lake. There is a sharp decline of water flow levels in the main rivers (Gilgil and Malewa) that drain into the lake. The increasing demand for water driven by economic development, a growing population and inadequate monitoring and enforcement of the policy framework that safeguards the ecological system of the lake continue to cause a decline in the capacity of the lake to provide its critical ecosystem services.

5. Urbanization, agricultural expansion, infrastructure development and other types of development causing land use change are a major threat. This is exacerbated by inadequate consideration of biodiversity and soil conservation mitigation measures in County Integrated Development Plans. For instance, geothermal energy development in Hells Gate National Park has driven some species out of the ecosystem. The park hitherto was Kenya's only nationally protected nesting colony of the Endangered Ruppell's Vultures. Wildlife migratory corridors have been blocked between Aberdares and Eburu Forests due to increasing urbanization. National and County governments have development plans in place, particularly large infrastructure projects including plans to develop Hells Gate National Park into an Industrial park, the proposed construction of Malewa Dam, and the construction of an inland port and Standard Gauge Railway (SGR) in the area that without adequate mitigation measures, threaten the biophysical environment.

6. Impacts of climate change continue to threaten the ecological systems of the lake basin since fluctuation in rainfall patterns affects farming and production cycles. There is also natural loss of vegetation due to prolonged drought hence loss of biodiversity. The occurrence of El Niño and flash floods lead to heavy siltation of watercourses and the lake have resulted in disturbance and loss of soil and biodiversity.

The project objective is to restore forest ecosystems and reduce land degradation in the LNB catchment for increased protection of Lake Naivasha's water resources, biodiversity, and associated ecosystem services to support the local and national economy. In this regard, the project will seek to address a number of root causes / barriers towards effective conservation and restoration of the LNB, to know:

1. Lack of collective accountability between sectors of water use upstream and downstream creates competition for resources and prevents adequate conservation measures from being implemented. More specifically, while it is the actions of upstream actors (e.g. farmers and livestock keepers) are the cause of the habitat degradation and loss that is resulting in increased siltation and decreased water retention capacity, consequently affecting downstream water users, there is no mechanism to jointly agree and work on solutions that would avoid such conflicts. This factor is specifically relevant in the context of the existing PES scheme, which is hampered by an absence of more systematic accountability between downstream 'buyers' and upstream 'sellers' .

2. Inadequate institutional coordination: Efforts to protect, conserve and sustainably manage natural resources in LNB have not been effective due to inadequate coordination among stakeholders, both among government entities and among county/national development plans. Conflicts arise due to duplicated mandates over resource protection and management in various agencies, as is the case with regulations on riparian lands and water quality between the National Environment Management Authority (NEMA) and Water Resources Authority (WRA). At the field level, there is a lack of or weak coordination of operations, including in conservation initiatives (carried out by CSOs) and incoherent/unfocused planning between land planning and management authorities. There are various development projects taking place in the LNB, and data and information sharing has been highly inadequate. Despite the efforts by Imarisha Lake Naivasha, there is a limited capacity of the organization to coordinate different actors within the basin effectively and efficiently to achieve maximum impact.

3. Limited financial and market incentives for smallholder farmers. The absence of reliable market opportunities, premium prices, value addition or other forms of financial incentives for conservation-friendly farming limits the uptake of sustainable agricultural practices. Unless there is a clear benefit in terms of either net financial returns or increased marketability, farmers may not be inclined to change their methods. Financial incentives are also lacking for some of the upstream conservation and restoration measures. The existing PES scheme has established a mechanism for allowing downstream users to contribute to upstream management and restoration. However, in its current form, the scheme has its limitations in terms of the amounts of funding that it is able to generate, as well as the specific incentive mechanisms for action by upstream farmers and community groups14.
4. Limited access to finance for inputs (seeds, materials, labour) and investments (e.g., drip irrigation and rainwater harvesting systems) is also an inhibitor preventing the uptake of sustainable agricultural practices. While there are various (micro)credit facilities available (e.g., Equity Bank and the Women Entrepreneurship Fund), farmers are hampered by a lack of information and capacity to access such facilities. This includes skills in developing business plans, preparing funding applications and contract negotiation and management skills (e.g., where it comes to contract farming).
5. Lack of capacity for applying sustainable agriculture at the community level. Most smallholder farmers in the upper basin lack knowledge of sustainable agricultural practices that improve livelihoods and conserve the natural resources upon which they depend. Farmers lack access to, or adoption of, appropriate technologies for sustainable agriculture, such as soil conservation, water harvesting, post-harvest handling and storage technologies. It should be noted that women and men have different needs, capacities and resources in relation to agriculture and conservation of natural resources, related in part to the constraints they face in resource ownership and decision-making powers. Farmers use seeds from previous harvests and uncertified farm inputs and lack resources and know-how. The quality of the produce – owing to poor farming practices and post-harvest handling – prohibits access to reliable and competitive markets such as hotels, chain stores, institutions or export.
6. Related to the previous barrier, the limited capacity of extension services to support farmers in the shift from their current unsustainable agricultural practices to sustainable agri-business production, including appropriate land use practices, is a major impediment, posing not only threats to the environment and its resources but also to food security, nutrition needs and overall poverty levels in the region (Nyandarua County is leading nationally in the percentage of population with stunted growth).
7. Limited finance and capacity for implementing conservation measures as defined in the participatory Sub-Catchment Management Plans (SCMPs) and Participatory Forest Management Plans (PFMPs) by the Water Resource Users Associations (WRUAs) and Community Forest Associations (CFAs) respectively. The associations established have governance structures in place but are not adequately equipped to implement their mandates due to (i) the absence of clearly defined mitigation protocols and methods for the management and restoration of lands; and (ii) inadequate and/or lack of funds for the implementation of such measures.

Baseline scenario

A number of initiatives generate a baseline for this proposed GEF project.

LNB stakeholder engagement and coordination

Imarisha Lake Naivasha is coordinating the implementation of the LNB Integrated Management Plan 2012 – 2022 (LNBIMP), which proposes several interventions to promote environmental conservation, sustainable development and enhance livelihoods of stakeholders within the basin. The LNBIMP is an official Government-validated plan which brings together various institutions and local and regional stakeholders, and Imarisha is a formal Government Institution operating under the Ministry of Environment and Forestry. Currently, Imarisha is implementing projects

that are mainly funded by the Government of Kenya (GoK) on rainwater harvesting as well as the planting of tree seedlings in schools mainly in Ndabibi and Eburu forest. The proposed GEF project will seek to strengthen the role of Imarisha Lake Naivasha to coordinate efforts towards the sustainable management of the LNB.

WWF-Kenya, through the Government of Sweden-funded Leading the Change programme, supports inclusive and participatory management of natural resources, communities control decisions and exercise their responsibility for ensuring that key ecosystems and habitats are sustainably managed. The project seeks to amplify community voices and action in conservation in both LNB and Mara basins. The current phase of this programme ends in 2022, but preparations for a new phase are ongoing. Specific objectives of the project are to i) empower civil society organizations in influencing planning, decision making and good governance of natural resources, and ii) support communities in influencing policy and decision-making processes for improved rights to natural resource management. Currently, the focus of the project has been on empowering and building the capacity of Civil Society Organizations. The proposed project will build on these efforts to enhance the capacity of the Imarisha Lake Naivasha Board to coordinate various actors in the basin as well as create platforms for knowledge and experience sharing within the basin.

Forest Landscape Restoration (FLR)

The WWF 'Forest Landscape Restoration (FLR) in East Africa' project is a five-year project (2020-2024) funded by BMZ Germany. It is anchored on the AFR100 initiative supporting Kenya's Commitments in the Bonn declaration of restoring 5.1M Ha. It aims at reducing land degradation through afforestation in farms, gazetted forests and Riverine restoration, through three major components; supporting Policy processes that will enhance restoration, on ground restoration and improving livelihoods for forest adjacent communities.

WWF-Kenya is furthermore implementing the Lake Naivasha Basin Reforestation Project 2017-2024, that aimed to establish 1,150 hectares of new forest area by 2020. This project is registered under the Gold Standard funded as an insetting project by Coop Switzerland. Leveraging on a multi-stakeholder approach the project engages commercial flower growers and smallholder farmers to not only promote tree growing but also rehabilitate natural vegetation and improve water resource management. Currently, the project has recruited 705 farmers and 183 farmers have already been trained on forest management systems and the requirements of the Gold Standards. The project has so far supported the restoration of 960 ha of land in the basin.

Kenya Forest Services (KFS) through financing from the Africa Development Bank is coordinating the implementation of the Green Zones Development Support Project Phase II. This 50M US$ AfDB-funded project officially started in 2018 and will run until 2025 (although the project has been facing delays in implementation due to COVID). The project covers 15 counties across the country, and includes specific work related to the rehabilitation of forest landscapes and sustainable agriculture in the Nyandarua and Nakuru counties. Specifically, in terms of forest landscape restoration in the LNB, the project aims to restore a total of 1,600 ha of forests through active rehabilitation and bring an additional 10,000 ha of forest land in the LNB (South Kinangop Forest Station) under improved management and protection for natural regeneration. The restoration activities will be accompanied by the establishment of farmer forestry field schools, the establishment of community timber associations, as well as learning activities (exchange visits).

Finally, Rhino Ark is actively supporting restoration work in the project area. Activities in the target area include fencing 10 km of Sophia Beat forest, replanting of 20 ha of Sophia forest, as well as supporting ecotourism - nature trails and hiking in Geta and Kipipiri forest, as well as establishment of a tree nursery in Geta forest station.

The above-mentioned projects and initiatives will form an important basis for the forest landscape protection and restoration activities planned under Component 3 of the proposed project.

Sustainable agriculture

As part of the before-mentioned Green Zones Development Support Project, KFS is supporting specific work related to the development of sustainable agriculture practices in the Nyandarua and Nakuru counties. Specifically, in terms of activities in the LNB, the project aims to promote sustainable horticulture production (mainly potatoes, maize and beans) through agroforestry systems, covering a total of 900 ha of land in Nyandarua County, in addition to 400 ha of

plantation forests. The Green Zones project provides the main baseline project associated with the proposed project and a principal source of co-financing for the on-the ground work under component 3 of the project.

In addition, the Njabini Agricultural Training Centre, whose main role is to facilitate the transfer of technologies through centralized training, demonstrations and carrying out trials, is implementing several initiatives to support farmers within the basin. Currently, the center is undertaking the following activities within the basin: training farmers on livestock, crop and fish farming, access to facilities for stakeholders in the agricultural field, extension services as well as collaborating with local universities on research. The proposed project will build on the activities conducted by the center to support training farmers on sustainable agriculture practices including training modules and demonstration farms.

The County Government of Nakuru, through the Department of Agriculture Livestock and Fisheries, is implementing several initiatives within LNB, including extension services to horticultural farms on the safe use of pesticides as well as soil sampling and testing to inform areas for specific crop production. The County is implementing the National Agriculture Rural Inclusive Growth Programme (NARIGP) funded by World Bank from 2017-2023. The project supports micro-projects which are grants supporting households to enable them to support livestock production e.g., fodder, zero-grazing units, sustainable land management to conserve degraded land areas e.g., planting trees. The project has supported 8 Community Driven Development Committees (CDDCs) to strengthen the ability of community-based institutions to improve their agricultural productivity, food security, nutrition status, and market linkage.

Payment for Ecosystem Services

A Payment for Environmental Services (PES) system has been in place in LNB since 2007, when it was originally introduced by WWF and CARE in Kenya. Under this scheme, downstream water users (the 'buyers') provide financial incentives to upper-catchment land-managers (the 'sellers') for adoption of sustainable land-management systems (contour terraces reinforced with tree seedlings and riparian buffer strips) designed to improve the quality and flow of water in the catchment by (i) reducing erosion, and (ii) increasing on-farm water infiltration to slow the flow of water from farms to waterways. The PES scheme has scaled from 1,200 farmers in 2008 to 3,700 farmers today. Management responsibility has meanwhile been handed over to the local water resource users associations (WRUAs) which collect money (approximately 11,500 USD annually) from the buyers and distribute those funds to upper-catchment farmers. Incentives are provided in-kind, in the form of conservation materials and training, alongside a small financial incentive paid by way of voucher for agri-inputs with a face value of KSH 2,500 (appr. 22.5 USD) per farmer. The buyers of the ecosystem service include: horticulture farms, hoteliers, geothermal and land development groups/large land owners; and Water Service Providers, all represented by the LNB Water Users Association (LANABWRUA). Contributions into the scheme are voluntary.

Monitoring and evaluation conducted by the upstream Water Resource Users' Associations has demonstrated the system's success in providing improved land productivity for farmers. However, in part due to the down-turn in revenues as a result of the COVID crisis, buyers (mainly the flower and tourism industry) have become less forthcoming into paying into the PES scheme in recent times. A recent assessment of the PES scheme[13] highlighted a number of constraints, in particular, the Willingness-to-Pay study conducted as part of the assessment estimated the maximum opportunity for local payments into the scheme to top at USD 30-50,000 annually. In its current form, and even with increased payments, the Naivasha PES project would therefore fall far short of meeting demand from the estimated 180,000 smallholders active in the Lake Naivasha basin.

A key recommendation resulting from the assessment is, therefore, that the PES mechanism needs to be adjusted and alternative funding arrangements (for example revolving credit facilities) established if the mechanism is to cope with demand from upper-catchment smallholders for incentives for improved land management. Direct payments have proven an expensive and unstable form of incentive. A background check with 'sellers' (small-holder farmers) during the stakeholder engagement process confirmed interest into such a revised PES system.

[13] Greenfi (2021). Feasibility Assessment for Scale-Up of the Payments For Environmental Services (PES) Project at Lake Naivasha, report prepared for WWF-Kenya/FSD Africa.

Under component 2, the proposed project will support the review and design of such a revised PES scheme as a basis for sustainable financing for land and water conservation in the LNB.

Water resources management

There are 12 WRUAs and 3 CFAs in Naivasha basin actively participating and taking responsibility with regard to sustainable basin management. In that regard, the WRUAs and CFAs, in close collaboration with the WRA and KFS, have developed respective Sustainable Catchment Management Plans (SCMPs) and Participataory Forest Management Plans (PFMPs) for management of areas within their jurisdictions. However, these have not been effectively implemented due to inadequate funding.

WRA, through the WRUAs, is implementing several initiatives within the basin. For example, the Mkungi Kitiri WRUA, with support from WWF and Water Sector Trust Fund (WSTF), is engaged in the rehabilitation of riparian land. The Mkungi Kitiri WRUA has also engaged 35 farmers in phase two of the Afforestation Project which focuses on planting 42,000 tree seedlings as well as the establishment of tree nurseries with 300,000 seedlings. The group is currently in the process of starting other income-generating activities such as trout fish farming.

The proposed project will build on the current interventions undertaken by Wanjohi and Kianjogu WRUAs, as well as related CFAs within the basin to support them in the implementation of priority interventions in their sub-catchment plans, as part of the overall LNBIMP.

Proposed alternative scenario

The project objective is to restore forest ecosystems and reduce land degradation in the LNB catchment for increased protection of Lake Naivasha's water resources, biodiversity, and associated ecosystem services to support the local and national economy.

The high-level theory of change of the project is that if the LNB community, sectors, and counties are supported to undertake joint responsibility for the management of the basin through participatory planning and multi-stakeholder engagement forums, and if the impacts from smallholder agriculture in the upper catchment on the lake can be reduced through the introduction of improved farmer techniques, accompanied by improved access to finance and markets for sustainable production, and the institutionalization and implementation of landscape restoration and management measures by riparian land users, then the overall threats to the LNB and its associated ecosystem services will be reduced.

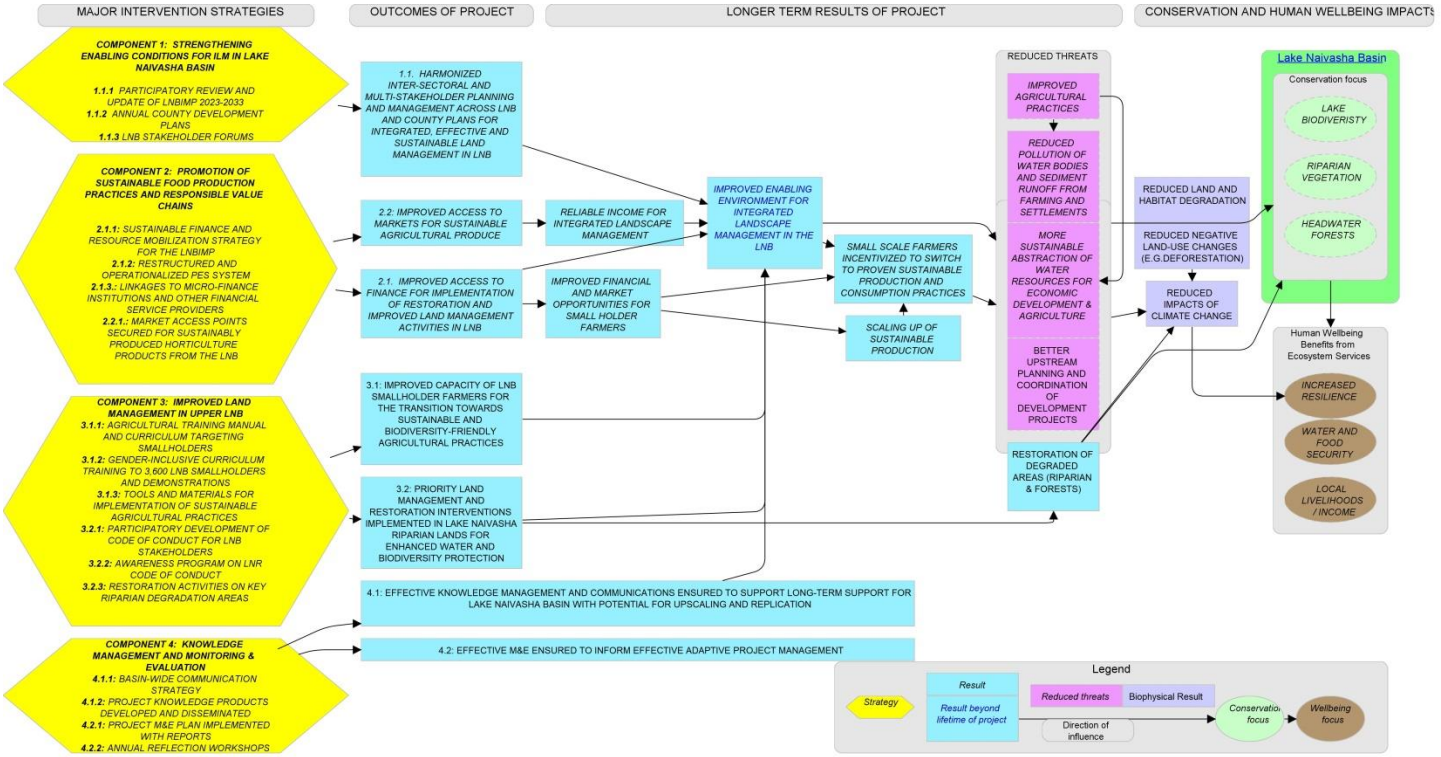


Figure 2. High level project theory of change

Based on the overall theory of change, the project is structured around 4 key components:

- Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin
- Component 2: Market and financial mechanisms for implementation of the LNB Integrated Management Plan
- Component 3: Improved land management in LNB
- Component 4. Knowledge Management and Monitoring and Evaluation

A summary description of each of the project components is presented below.

<u>Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin</u>

Under Component 1, the project will address the barriers related to (i) inadequate coordination and lack of collective accountability across upstream and downstream sectors of water use; and (ii) the poor coordination between institutions responsible for various aspects of conservation and sustainable management of natural resources in the LNB. Coordination of this component will be delegated to Imarisha Lake Naivasha, as the Executing Partner of NETFUND. In this regard, the project will firstly conduct a participatory review and update of the LNBIMP using a multi-sectorial and gender sensitive approach, which will be institutionalized through integration into the Annual County Development Plans. Secondly, Imarisha's capacity for leading and coordinating the implementation of the Plan will be strengthened through the organization of Annual LNB Multi-stakeholder Forums, for enhanced coordination between stakeholders in relation to the implementation of the LNBIMP, as well as knowledge and best practices exchange. Imarisha will furthermore lead on the organization of quarterly meetings of key project stakeholders under a Technical Committee, which will ensure synergies and effective coordination of project activities as well as third-party initiatives. The LNBIMP and other outputs under Component 1 will be the basis for targeted interventions under Component 3, which are geared towards facilitating the implementation of priority activities defined under the LNBIMP.

The anticipated outcomes and outputs under this component include:

Outcome 1.1: Harmonized inter-sectoral and multi-stakeholder planning and management across LNB and County plans for integrated, inclusive and sustainable land management in LNB

The project will support the review of the integrated framework for environmental management and development within LNB entailed in the LNBIMP, the current version of which is set to expire in 2022. This process will be led by Imarisha Lake Naivasha. Part of this review process includes taking stock of progress and lessons learnt in the implementation of the Plan, as well as an analysis of current trends and planned developments in the basin[14]. Imarisha Lake Naivasha will lead a participatory process with LNB stakeholders to review, update and eventually socialize the LNBIMP, including its related Lake Naivasha Riparian Management Plan. Key stakeholders to be engaged in this process include CFAs, WRUAs, small-scale farmer groups, private sector (commercial flower and horticulture growers, tourism operators, and innovators), pastoralist groups, women's rights groups and riparian land owners associations, besides the national and County government agencies in the basin: the Kenya Wildlife Service, Kenya Forest Service, Water Resources Authority, National Environment Authority, Kenya Generation (geothermal power generating company), the Kenya Plant Health Inspectorate and the Department of Education, Children, Gender Affairs, Culture and Social Services. Implementation of the 2023-2032 Plan will be ensured through alignment of the existing County Development Plans within the LNBIMP, as well as by establishing relevant forums for stakeholder engagement and coordination of relevant initiatives within the basin. The project will ensure equal participation of women and men in the consultations and keen towards addressing negative social and gender factors that impact the basin and its resource use.

Output 1.1.1: Participatory review and update of the Lake Naivasha Riparian Management Plan (LMBIMP 2023-2033)

- Consultations with key stakeholders to build support for the Plan and alignment with County Plans and priorities
- Collection of data on key socio-economic trends and developments in the basin (e.g., land-use changes, infrastructure developments, agricultural development, urban and rural development) and their potential threats to the environment (e.g., status of various biota, water resources, forest cover)
- Update the LNBIMP (including its Riparian Plan)
- Socialize the Plan with key Basin stakeholders.

Output 1.1.2: Annual position papers on priority areas of action (as identified in the LNBIMP) to be integrated into the County Development Plans prepared and submitted to County Governments

- Annual participatory review of the status of implementation of the County Integrated Development Plans in terms of priorities identified in the LNBIMP
- Develop position papers on key policy and action areas to be considered for the Annual County Development Plans, and engage with County Governments on the same to ensure alignment with the priorities identified in the LNBIMP

Output 1.1.3: LNB multi-stakeholder Platform meetings coordinated by Imarisha for coordinated implementation of the LNBIMP and knowledge and best practice exchange

- Facilitate Annual LNB Multi-Stakeholder platform meetings including WRUAs, CFAs, farmers' groups, LANABWRUA, Lake Naivasha Riparian Association (LNRA), Lake Naivasha Basin Landscape Association (LANABLA), Imarisha Lake Naivasha, WWF, NETFUND, private sector, etc.
- Facilitate quarterly meetings of the Lake Naivasha Basin Technical Committee to coordinate the effective implementation of the LNBIMP, including the LNB EBM Project
- Dissemination/sharing of information on key environmental issues collected under output 1.1.1 (such as emerging infrastructure developments and potential threats, status of various biota, peer-reviewed articles on Lake Naivasha, lessons on NRM best practices) to key stakeholders including the private sector, academia, communities, development partners, CSOs, media and the governments

[14] To note, one of the threats that the project will consider in the development of the updated LNBIMP is the mega infrastructural development projects that the Government of Kenya (both National and County) have fronted in Lake Naivasha basin.

Component 2: Market and financial mechanisms for implementation of the LNBIMP

Under component 2, the project will address challenges related to the absence of adequate financial incentives and market opportunities for smallholder farmers in the LNB to change to more sustainable farming methods, as well as the absence of adequate finance for implementation of concrete restoration and management actions as defined in the LNBIMP. Coordination of activities under this component will be managed directly by the Project Management Unit (PMU), hosted and overseen by NETFUND. The project will support the development of a sustainable finance and resource mobilization strategy for the LNBIMP. Secondly, the project will support the restructuring and operationalization of the existing PES scheme, based on the recommendations from the recently concluded review, and building on the provisions of the new Water Towers Bill (2022), among others. Finally, the project will support the development and strengthening of market opportunities for sustainable agricultural products, among others through the Naivasha Basin Sustainable Horticulture Farmers group and related Green Shop.

The anticipated outcomes and outputs under this component include:

Outcome 2.1: Improved access to finance for implementation of restoration and improved land management activities in LNB

The project will firstly support the development of a sustainable finance and resource mobilization strategy for the LNBIMP. In this regard, a recent executive order from the President gives priority to restore Lake Naivasha under the Ministry of Environment and Forestry and provides a mandate for the project to mobilize resources. The resource mobilization strategy will go beyond traditional donor and public sector funding, and include, among others, opportunities for leveraging private sector investments, blended finance solutions, carbon finance, etc. The development and implementation of this plan will be led by Imarisha Naivasha, with the support of NETFUND. As a critical part of this strategy, the project will support the restructuring and operationalization of the existing PES scheme, based on the recommendations of the PES review study.[13] In this regard, the project will build on the provisions of the proposed new Water Towers Policy & Bill 2022, expected to be officially adopted and enacted by early 2023, which includes specific provisions to enhance resource mobilization capacity for the conservation of Kenya's water towers, including the Aberdare mountain range in the upper catchment of Lake Naivasha, as well as on the provisions of the Natural Resources (Benefit Sharing) Bill, 2020, which provides for the development of specific benefit-sharing agreements between natural resource users, national and County governments and local communities. More specifically, the project will build on earlier plans for the establishment of a Lake Naivasha Basin PPP Sustainable Development Fund (LNB-3P-SDF), which would be funded by a price premium from Naivasha flowers sold in the EU, water user fees, and other revenues[15]. The PES review will be undertaken by the Lake Naivasha Water Resource Users Association (LANABWRUA), with close oversight provided by NETFUND, and will be developed in close collaboration with private sector actors operating in the basin (principally horticulture producers, hoteliers and conference facilities) as well as financial institutions.

Output 2.1.1: Sustainable finance and resource mobilization strategy for the LNBIMP

- Commission a study into potential mechanisms for ensuring sustainable finance and resource mobilization for implementation of the LNBIMP, including Imarisha.
- Organize a virtual donor and investor conference to attract financial investments into various aspects of the LNBIMP.

Output 2.1.2: Restructured and operationalized PES system

- Participatory review and restructuring of the revised PES operational strategy, including development of new modalities
- Development and roll-out of PES communications strategy and marketing products to attract participation and investments downstream 'buyers' and other investors

[15] Kissinger, Gabrielle. "Case Study: Imarisha Naivasha, Kenya," in Financing Strategies for Integrated Landscape Investment. Seth Shames, ed. Washington, DC: EcoAgriculture Partners, on behalf of the Landscapes for People, Food and Nature Initiative. 2014.

- Linking upstream actors (e.g., smallholder farmers, communities) to the PES scheme, accompanied by the establishment of a PES registration and tracking system
- Opportunity/viability analysis and design for the establishment of a central basin investment fund, under the custodianship of NETFUND, to facilitate the deployment of PES and PES-like approaches in the LNB

Output 2.1.3 Linkages to micro-finance institutions and other financial service providers, including the existing PES scheme

- Creating awareness and linking smallholder farmers to Micro-Financial Institutions (MFI) to access agribusiness financial services, with specific attention to gender-specific needs
- Training farmers on developing business plans, preparing funding applications and contract negotiation and management skills (e.g., where it comes to contract farming), with specific attention for capacity development of women farmers

Outcome 2.2: Improved access to markets for sustainable agricultural produce

To create market incentives for farmers to change to more sustainable production, the project will build on the market access activities conducted through the GOALAN project, and provide support through facilitating a market survey for sustainable produce, develop marketing/promotional products, provide training on contracting and negotiation skills, facilitate meetings and dialogues with potential buyers (shops, retailers, export agents, hotels and conference facilities, catering companies, etc.), as well as building awareness and capacity regarding the KS1758 (Kenya Standards) certification process aimed at increasing the marketability of produce through assurance to buyers of its quality, hygiene and environmental standards. In regard to the latter, a resource person from the Kenya Bureau of Standards will act as a resource person for hands-on support and advice to interested farmers (on average 2 days per ward and per year), while group sensitization will be provided as part of output 3.1.2. All of this will include a gender-sensitive lens to ensure women benefit since they are mostly producing food crops for which the market is more volatile and unorganized. The business case for certification must also be assessed from a gender perspective. The project will furthermore provide support for the continued operationalization of the Green Shop (VashaGreen) for sustainably farmed produce (established through the GOALAN project, now phasing out), in association with the Lake Naivasha Basin Sustainable Horticulture Farmers group. The Green Shop will provide incentives to farmers to transition to more sustainable farming practices by providing secure access to buyers of their produce.

Output 2.2.1: Market outlet points secured for sustainably produced horticulture products from the LNB secured

- Mapping potential markets for selected products within the LNB and beyond, including the potential for product diversification and value addition (e.g., potato chips, fermentation)
- Developing marketing products and supporting marketing events
- Training and capacity building for the Green Horticulture Shop operators (e.g., on financial administration, contract negotiation, marketing and customer relations, aspects of trading and management).
- Facilitate meetings between the Green Shop and potential suppliers (farmers) and buyers (e.g., conference tourism facilities, processors, retail enterprises) geared towards securing reliable markets
- Creating awareness and building capacity regarding the KS1758 (Kenya Standards) certification process aimed at increasing the marketability of produce through assurance to buyers of its quality, hygiene and environmental standards, in a gender responsive way.

<u>Component 3: Improved land management in upper LNB</u>

In Component 3, the project will address three key barriers: (i) the lack of capacity of farmers in the upstream areas of the basin (Nyandarua County) to apply more sustainable agricultural practices and technologies; (ii) the related weaknesses in extension services for supporting farmers to make the transition toward sustainable agricultural practices; and (iii) the lack of capacity for implementation of adequate land and ecosystem conservation and restoration efforts. The PMU (the Sustainable Food Systems Specialist) will directly manage aspects related to the promotion of sustainable agricultural practices (Outcome 3.1), working closely with the County Agricultural Development Departments and Agricultural Extension Officers at County and Ward level. Work under Outcome 3.2

(improved management and restoration) will be delegated to Imarisha Lake Naivasha (outputs 3.2.1 and 3.2.2) and KFS (output 3.2.3) respectively.

The anticipated outcomes and outputs under this component include:

Outcome 3.1: Improved capacity of LNB smallholder farmers for the transition towards sustainable and biodiversity-friendly agricultural practices

This project will support smallholder farmers through training and facilitation to adopt best farming practices that enhance soil and water conservation to increase farm production. Building on the experiences gained from the GOALAN project, the project will promote locally affordable, adoptable and replicable technologies that reduce post-harvest losses, based on the principles of conservation agriculture, including:

- Minimal soil disturbance (through reduced or no-tillage) in order to preserve soil structure, soil fauna and organic matter;
- Permanent soil cover (cover crops, residues and mulches) to protect the soil and contribute to the suppression of weeds;
- Drip irrigation, ideally combined with rainwater harvesting, to minimize water use;
- Grass barriers and contour farming to avoid erosion and sediment runoff;
- Diversified crop rotations, and crop combinations, which promote soil micro-organisms and disrupt plant pests, weeds and diseases;
- Where pesticides are needed, as a last resort, only green and blue label pesticides would be applied.

In this regard, the project will apply a Train-the-Trainers approach, which includes firstly the development of a training manual and curriculum (output 2.1.1), which will involve key institutions (HCD, KEPHIS, Financial institutions, Country Agriculture Department) in the training of 15 Ward Agricultural Officers (output 2.1.2) - 1 officer per ward in the LNB - as Trainers/group facilitators, and subsequently the roll out the training program to 2,700 smallholder farmers by the Ward Agricultural Officers (WAO). Each WAO would train 3 groups of 20 farmers, two seasonal trainings, during two years of the project (4 training cycles in total). In addition, in every ward there would be a model farm, and field days would be carried out in each ward for technical backstopping for smallholders. To provide incentives for farmers to switch to sustainable production practices, the selected smallholders will be provided with basic tools and materials to implement sustainable land management and biodiversity-friendly agricultural practices (e.g., certified seeds, compost/mulching tools) on their land.

Procedures and criteria for the selection of farmers will be developed early in the project implementation process, in a participatory and collaborative way. The selection of model farms and farmers to be supported will take into consideration opportunities for scaling up, the willingness of farmers to facilitate exchanges and sharing of lessons learnt with other farmers, as well as gender balance as key criteria. Additionally, the project will work with a gender expert to ensure that the training content, teaching methods, training materials, trainers, training environment etc. will be gender-sensitive, so that women are able to participate and benefit from the training. A deliberate strategy will be developed that ensures participation of female farmers in the training programmes.

Through these strategic initiatives, the project will complement and enhance the efforts under the GOALAN and Green Zones Development Support Projects (see baseline section), which aim to promote sustainable horticulture production (mainly potatoes, maize and beans). The Green Zones project provides the main baseline project associated with the proposed project and a principal source of co-financing for the on-the ground work under Outcome 3.1 of the project.

Output 3.1.1: Agricultural training manual and curriculum targeting smallholder farmers developed with key state agencies and stakeholders

- Gender and stakeholder conflict sensitive training needs assessment
- Development of gender sensitive training modules (e.g., financial management, sustainable, agro-ecological production, market requirements and product standards)

- Training of LNB ward agricultural officers to act as ToT for the training program as well as related extension services. Gender awareness training will be a topic of this training.

Output 3.1.2: Roll out of curriculum training to 2,700 (gender-balanced) LNB smallholder farmers through ward agricultural officers (group facilitators) and field days with demonstrations for technical backstopping

- Delivery of training program (3 groups of 20 farmers per ward)
- Establish model farms with selected farmers for peer learning
- Field days with demonstration of practices

Output 3.1.3: Tools and materials for implementation of sustainable, biodiversity-friendly agricultural practices (e.g., certified seeds, compost/mulching tools, etc.)

- Support selected farmers with materials for conservation agriculture practices, including provision of soil testing, certified seeds, compost/mulching tools

Outcome 3.2: Priority forest land management and restoration interventions implemented in the Lake Naivasha upper catchment area for enhanced water and biodiversity protection

Under outcome 3.2, the project will first support the development of a Code of Conduct for LNB stakeholders. The Code of Conduct will delineate the roles and obligations for each stakeholder, including government institutions, communities, private sector and other stakeholders (Imarisha Lake Naivasha, etc.) in ensuring ecologically, socially and economically acceptable protection and conservation measures to minimize, stop and reverse land degradation and loss of habitat in the LNB riparian lands. The Code of Conduct will be developed through a participatory process, involving before-mentioned stakeholders, supported by a systematic stakeholder mapping and power analysis. The Code of Conduct will serve as a guidance tool for stakeholders with regard to the provisions of the Riparian Management Plan (part of the LNBIMP), the County Development Plans, as well as applicable laws and regulations (including riparian by-laws). The Code will be socialized through an awareness program coordinated by Imarisha and enforced by ongoing co-financed government efforts. The Code will furthermore serve as a tool for monitoring and enforcement of these plans and regulations by the responsible authorities. In this regard, it should be noted that the project will not support or deploy new rules and regulations as such. However, it will influence the more effective application of existing rules and regulations through the development and roll-out of the Code of Conduct.

At a practical level, the project will support targeted management measures in degraded areas of the riparian zone of the Lake to benefit biodiversity protection. In this regard, the project will enhance and expand the efforts under the Green Zones Development Support Project (see baseline section), which aims to improve protection of 10,000 ha of forest land in South Kinangop Forest Station, in addition to active regeneration work on 1,600 ha of forest land. GEF funding will allow expansion of the area under improved management in the Geta, North Kinangop and South Kinangop Forest Stations to 37,682 ha, in particular through updating of the (expired) PFMPs, and institutionally strengthening and capacitating the CFAs and WRUAs to play their role in the implementation of these Plans. Furthermore, the project will contribute to the restoration of three degraded forest areas: Sofia Beat in Geta Forest Station (200 ha) and two sites in South Kinangop, of 16 and 23 ha respectively. Specific activities will include mapping and temporary fencing of vulnerable areas (to keep away livestock and wildlife), training community scouts to undertake monitoring and surveillance, as well as awareness raising among communities.

Output 3.2.1: Lake riparian area Code of Conduct for LNB stakeholders

- Consultations with LNB stakeholders regarding roles and responsibilities in relation to ecologically, socially and economically acceptable protection and conservation measures to minimize, stop and reverse land degradation and loss of habitat in the LNB riparian lands
- Based on these consultations, develop a clear Code of Conduct for LNB stakeholders
- Validation of the Code of Conduct with LNB stakeholders

Output 3.2.2: Awareness program on Lake Naivasha Riparian Code of Conduct

- Socialization of the LNB Code of Conduct through an awareness raising program

Output 3.2.3: Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta) updated

- Updating the existing Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta),
- Institutionally strengthening and training the CFAs and WRUAs to play their roles in implementing these plans.

Output 3.2.4: Protection and restoration activities on key degradation areas implemented (in particular passive restoration through demarcation, natural regeneration and where necessary temporary fencing)

- Restoration of degraded forest areas through collaboration with Kenya Forest Service (KFS) and the relevant CFAs.

Component 4. Knowledge Management and Monitoring & Evaluation

This component will establish a strategy for knowledge management and sharing of project lessons in LNB as well as from similar experiences elsewhere in Kenya. In particular, the project will focus on sharing experiences and lessons on integrated planning processes, such as the County Development Plans developed in other parts of Kenya, from sustainable farming approaches as well as forest landscape restoration. Stakeholder engagement will be carried out to identify appropriate project knowledge products to be developed (such as brochures, pamphlets) and distributed to LNB users at catchment and local community levels, and potentially a wider audience. The project will also deliver specific knowledge management products on the linkage to farmer support as a model for mobilizing finances to farmers through voluntary payments from downstream users. Beyond LNB stakeholders, these knowledge products will also be geared towards informing interventions under the NETFUND Green Zones Development Project in other target geographies, as well as other GEF projects and Government policies. In this regard, the Government, through the Ministry of Environment, is putting in place a platform for the exchange of lessons and experiences between GEF projects as well as towards relevant Government Institutions. The M&E plan will contribute lessons learned and best practices to inform adaptive management of the project. By making knowledge available to all LNB stakeholders, the project will contribute to the scaling-up and replication of the ecosystem-based management approach and community engagement in sustainable land management and biodiversity, across the key land degradation hotspot catchment zones across Kenya. In particular, through NETFUNDs Green Zones Development Support Project, the lessons learnt from the project will be widely spread to other key geographies in Kenya.

Outcome 4.1: Effective Knowledge Management and communications ensured to support long-term support for Lake Naivasha Basin with potential for upscaling and replication

***Output 4.1.1*:** Basin-wide communication strategy developed and implemented to support sustainable land management and biodiversity-friendly agricultural practices in LNB

- Development of basin-wide communication strategy for the project
- Roll-out of communication events and activities as per the strategy

Output 4.1.2: Project knowledge products adequately developed and disseminated with LNB stakeholders and potentially wider audience

- Development of knowledge products
- Dissemination of knowledge products

Outcome 4.2: *Effective M&E ensured to inform effective adaptive project management*
***Output 4.2.1*:** Project M&E plan implemented and project progress reports completed

- Monitoring and evaluation as per the M&E plan
- Development of semi-annual project progress reports and quarterly financial reports

Output 4.2.2: Annual reflection workshops to track progress against workplan and results framework indicator targets for effective project management

- Organization of annual reflection and planning workshops

- Review and validation of project theory of change
- Drafting or validation of annual work plans

Alignment with GEF focal area and/or Impact Program strategies

The proposed project is aligned with the GEF Focal Areas of Land Degradation and Biodiversity as follows:

- *Objective LD-1-1: Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM).* The project is aligned with the Land Degradation focal area focus on maintaining and improving the flow of agro-ecosystem services through sustainable land management. Project activities promoting sustainable land management and production in Component 3 will help to reduce land degradation in the LNB and thereby contribute to achieving the country's sub-national LDN target for the Rift Valley catchment zone, identified as a land degradation hotspot in the country. In particular, the project will work with local farmers to promote sustainable agricultural practices to reduce the current impacts of fertilizers and run off on the lake, riparian areas, and downstream environment. It will also improve agricultural production practices and post-harvest handling techniques to sustain food production and livelihoods, as well as implement priority actions to strengthen conservation and management of riparian land and associated ecosystem services. Under outcome 3.1, the project aims to bring approximately 37,086 ha of agricultural lands brought under improved management.
- *Objective BD-1-1: Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors.* Aligned with the GEF 7 Biodiversity priorities, the project will support the mainstreaming of biodiversity into relevant regional development planning, firstly the Lake Naivasha Basin Integrated Management Program and the County Development Plans (Component 1), and secondly into the sectoral plans and approaches around agricultural practices and forest landscape management and restoration (Component 3).

Incremental/additional cost reasoning and expected contributions

The project will adopt an ecosystem-based management approach to holistically address the drivers of land degradation and biodiversity loss in the LNB.

Table 1 Overview of incremental values and expected contributions

Baseline	Proposed Alternative	Environmental Benefits
Coordinated approach towards sustainable land, water and natural resource management in LNB		
Imarisha Lake Naivasha is coordinating the implementation of the LNBIMP 2012 – 2022. **Lack of integration of ecosystem management measures in County Development Plans and priorities, as well as By-laws.** **Numerous stakeholder representation groups operate in the LNB, including CFAs, WRUAs, flower firms, hoteliers, development partners, NGOS, and the national and County governments within the basin: Nakuru, Nyandarua, and Narok but are currently not actively coordinating in a systematic way.**	Annual LNB Stakeholders' Forum Develop and socialize an updated LNBIMP. Institutionalization of the LNBIMP through alignment with County Development Plans and priorities. Improved implementation capacity through development of a sustainable finance and resource mobilization strategy for the LNBIMP.	Harmonized inter-sectoral and multi-stakeholder planning and management across LNB and County plans for integrated, inclusive and sustainable land management in LNB leading to improved conservation of the LNB and sustainable flow of the ecosystem services it provides. Under component 1, approximately 320 representatives of LNB stakeholder organizations and communities will participate in and benefit from the planning processes.
Sustainable Agriculture		

Baseline	Proposed Alternative	Environmental Benefits
The Green Horticulture at Lake Naivasha (GOALAN) project is working with Micro, Small and Medium Enterprises (MSMEs) on sustainable consumption and production practices, and income improvement through provision of green jobs in the LNB upper and middle catchments. **The Agricultural Training Centre is supporting basin farmers through training and extension services.** **Nakuru County Government (Department of Agriculture, Livestock and Fisheries) is implementing extension services to horticultural farms on safe pesticide use and testing for specific crop productions.** **National Agricultural Rural Inclusive Growth Programme gives grants to households to support livestock production.** **Basic market access activities conducted through the GOALAN project, including a markets survey, training on contracting and negotiation skills for small-holder farmers, dialogues undertaken with potential buyers, establishment of a Green Shop as well as the ongoing KS1750 (Kenya Standards) certification process aimed at increasing the marketability of produce through assurance to buyers of its quality, hygiene and environmental standards.**	Expanded number of smallholder farmers trained on sustainable agricultural practices. Enhanced market linkages and outlets for farmers, including an operational Green Shop, for their sustainably produced products. Linkages to financial service providers and schemes to provide financial incentives, including through the existing PES scheme. Support farmers towards the transition to sustainable horticulture production.	In addition to enhancing 2700 smallholder farmers' skills in sustainable production and improving livelihoods through value addition, the project will establish market opportunities and financial incentives for the move towards sustainable production, as well as expand the area of productive land under sustainable agricultural practices in the LNB (2000 ha), enhancing soil and water conservation and contributing to the sub-national LDN goal for the Rift Valley Catchment zone and sustainable maintenance of environmental services of the LNB. The project will complement, in this way, the NETFUND Green Zones project by both structurally addressing capacity building needs, and by expanding the area covered for targeted promotion of sustainable agricultural practices to a total area of 2,000 ha.
Natural Resources Management in LNB		
Leading the Change: Civil Society, Rights and Environment project: participatory community NRM, sustainable management of key ecosystems and habitats, and support in influencing policy and decision-making processes. **Lake Naivasha Basin Reforestation Project aims to establish 1,150 ha of new forest area by 2025, of which 975 ha have so far been achieved.** **The Water Resources Authority, through the WRUA, is engaged in riparian land rehabilitation, reforestation and income-generating activities.**	Code of Conduct for LNB stakeholders established, delineating roles for each stakeholder, including government (through the Water Resources Authority), other stakeholders (Imarisha Lake Naivasha, etc.) and communities, in ensuring ecologically, socially and economically acceptable protection and conservation measures. Participatory Forest Management Plans updated and priority restoration and conservation activities undertaken in the LNB riparian zones.	By working with communities, authorities and CSOs to adopt environmental protection and conservation measures, as well as by supporting the protection and rehabilitation of forests lands, the project will improve riparian lands and forests in the middle and upper catchment in LNB, crucial for globally significant biodiversity and ecosystem services. In this regard, GEF funding will complement planned work under the NETFUND Green Zones project, which aims to improve protection of 6,660 ha of forest land in South Kinangop Forest

Baseline	Proposed Alternative	Environmental Benefits
		Station, out of which regeneration work on 1,600 ha of forest land. GEF funding will allow expansion of the area under improved management in Geta (21,614 ha) and North Kinangop (6,812 ha) Forest Stations, which are critical to the conservation of the LNB, bringing the total area of forest land under improved to a total of 35,086 ha. An estimated 180 individuals will benefit from support to the implementation of land management and restoration measures under component 3. Moreover, the GEF funds will contribute to a range of strategic interventions that will provide sustainability to this work, by providing a management framework (the LNBIMP and related County Development Plans), a clear Code of Conduct for stakeholders, Participatory Forest Management Plans and by establishing financing and market mechanisms for longer-term sustainability of results.

Global environmental benefits (GEFTF)

Overall, the project will contribute to:

- Reduced land degradation in the LNB which contributes to Kenya's goal of achieving Land Degradation Neutrality in the Rift Valley Catchment Zone by 2030 compared to 2015.
- Increased protection of riparian land that supports globally significant biodiversity (including aquatic and bird species and relict wildlife species: buffalo, hippo, giraffe, zebra and several small ruminants).
- Maintenance of ecosystem services and ecosystem health (particularly through reducing pollution to the Lake in the form of pesticide and fertilizer) within and from LNB, to preserve health and status of RAMSAR wetland of International Importance and Important Bird Area.
- Conservation and restoration of forests in the middle and upper catchment, the lungs of the Basin which provide sources of water that support diverse habitats, species, livelihoods and economic sectors.

As such, the proposed project will contribute to four GEF Core Indicators: i) area of land restored; ii) area of landscapes under improved practices; (iii) greenhouse gas emissions mitigated; and iv) number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment.

Table 2 Overview of project delivery against GEF Core Indicators

Project Core Indicators		Expected at CEO Endorsement
1	**Terrestrial protected areas** created or under improved management for conservation and sustainable use (Hectares)	

Project Core Indicators		Expected at CEO Endorsement
2	**Marine protected areas** created or under improved management for conservation and sustainable use (Hectares)	
3	Area of **land restored (**Hectares)	1,600 ha
4	Area of **landscapes under improved practices** (excluding protected areas)(Hectares)	37,086 ha
5	Area of **marine habitat under improved practices** (excluding protected areas) (Hectares)	
6	**Greenhouse Gas Emissions Mitigated** (metric tons of CO2e)	1,413,610 tCO2e
7	**Number of shared water ecosystems** (fresh or marine) under new or improved cooperative management	
8	Globally over-exploited **marine fisheries** moved to more sustainable levels (metric tons)	
9	**Reduction**, disposal/destruction, phase out, **elimination** and avoidance of **chemicals of global concern** and their waste in the environment and in processes, materials and products (metric tons of toxic chemicals reduced)	
10	Reduction, avoidance of emissions of **POPs to air** from point and non-point sources (grams of toxic equivalent gTEQ)	
11	Number of **direct beneficiaries disaggregated by gender** as co-benefit of GEF investment	3,200 (40% women)

Core Indicator 3: Area of land restored – 1,600 ha.

Under Component 3, the proposed project will contribute to the restoration of 1,600ha of forest land through supporting priority restoration activities. In this regard, the project will reinforce efforts under the Green Zones Development Project, the BMZ-funded Forest Landscape Restoration project, the Lake Naivasha Basin Reforestation Project and Rhino Arc (see baseline), through supporting the restoration of 200 ha of forests at Sofia Beat (Geta Forest Station) in addition to two sites in South Kinangop, of 16 and 23 ha respectively.

Core Indicator 4: Area of landscapes under improved management – 37,086 ha.

The proposed project will contribute to the improved management and protection of 35,086 ha of forest land, through updating the existing Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta), as well as through providing resources and training to CFAs to implement priority measures for the implementation of these plans. In addition, the project will bring 2,000 ha of productive land under improved practices (sub-indicator 4.3: area of land under sustainable land management in production systems), through a combination of training, financial and market incentives, as well as direct support to farmer groups.

Core indicator 6: Greenhouse gas emissions mitigated - *1,413,610 t*

FAO's EX-Ante Carbon balance Tool (ExAct) was used to estimate mitigated carbon emissions from the proposed project interventions. The Ex-Act tool is a land-based carbon accounting tool designed to estimate carbon stock changes, including Green House Gas (GHG) emissions and emission reductions for project interventions during the capitalization and implementation of a project. For this project, the EX-ACT tool was used to calculate the emissions emitted and mitigated for a 20-year period, assuming the project will be implemented for 3 years and capitalization of the project results will last 17 years.

Within the Lake Naivasha Basin, the project will restore 1,600 hectares of forested land, improve the management of 35,086 ha hectares of land (which includes an actual forest cover of 7,660 ha) for biodiversity and establish sustainable land use practices for 2,000 hectares of production systems. Restoring the 1,600 hectares of tropical montane forest will mitigate an estimated net amount of 555,232 tCO2-e. Management improvements such as eliminating forest degradation and uncontrolled fires will mitigate approximately 685,554 metric tons of carbon emissions. The third category of project interventions that will alter carbon stocks in the project area is the change in management and land use of approximately 2,000 hectares of production systems. A planned transition from traditional cropland to alley-cropping on 900 hectares will mitigate 50,170 metric tons of carbon emissions and establishing silvoarable plantations on 400 degraded hectares will mitigate 49,027 metric tons of carbon emissions. Lastly, improving practices on 700 hectares of traditional cropland such as reducing tillage, utilizing higher carbon input without organic amendments, and utilizing manure will results in a total of 73,628 metric tons of carbon emissions mitigated. Given a 20-year project implementation and capitalization period, this project could result in 1,413,610 tons of carbon emissions mitigated.

Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of the GEF investment – 3,200
The proposed project will directly benefit approximately 2,700 smallholder farmers in the middle and upper catchments of the LNB. The project will also benefit approximately 320 representatives of LNB stakeholder organizations and communities involved in the planning processes under component 1. Finally, an estimated 180 individuals will benefit from support to the implementation of land management and restoration measures under component 3. The project aims for an ambitious target of at least 40% of beneficiaries to be women, considering that women are currently poorly represented in farmer support work. Women and youth would be engaged to contribute to identifying sustainable agricultural practices that will support them in safeguarding natural resources and promoting their economic development and livelihoods.

Innovativeness, sustainability and potential for scaling up.

Innovation
The project will provide a model for protection and sustainable management of LNB; home to exceptional biodiversity and an economic backbone of the Kenyan economy, which supports one of the most expansive horticultural industries in this part of the world and employs more than 250,000 people. The project will promote market linkages to give communities around LNB the opportunity to sell their sustainable produce to downstream enterprises in LNB, through support to the operationalization of the 'Green Shop', which is managed through a cooperative arrangement by the Naivasha Basin Sustainable Horticulture Farmers group. The Green Shop serves as a central point for access to markets for sustainable produce, thereby facilitating and increasing market access and reducing the costs of commercial supply-chain agents. This results in a win-win model for conservation agriculture and markets for small farmers that can be replicated elsewhere across the country.

In addition, the project will support the restructuring and expansion of the existing PES system, in close collaboration with private sector actors operating in the basin (principally horticulture producers, hoteliers and conference facilities) as well as financial institutions. In addition to the current PES system, which rewards land managers for providing ecosystem management and restoration services, a range of innovative options will be investigated and where possible tested, including climate-smart lending (Commercial credit agreements between agri-lenders and farmers, where credit access is conditional on implementation of on-farm sustainable land-management practices), sustainable produce offtake agreements (outgrower off-takers include requirements for sustainable land management practices in the terms of their off-take agreements) and eco-credits (Community groups manage a community-owned revolving credit facility and are able to access loans conditional on participation in local ecosystem restoration and protection activities).

Sustainability
By building on the existing capacity and previous investments in LNB, including a strong baseline of existing Public Private Partnerships i.e. Imarisha Lake Naivasha and Payment of Ecosystem Services (PES), and by involving relevant

stakeholders (including County Government, communities and private sector) in project development and implementation, the project's long-term sustainability will be inbuilt. In this regard, the project will address the following key parameters of sustainability:

Institutional Sustainability:
Through the participatory design process followed in the preparation of this project, including the involvement of all key Government agencies, the NETFUND, Imarisha Lake Naivasha – the basin coordination entity – and Nakuru and Nyandarua Counties' relevant departments, ownership has been secured. The executing organization's mandate stretches beyond the period of the project, ensuring continuity. The project will have a strong focus on building capacity of government staff at the County level, including at the Ward level. This will ensure that experiences, lessons learned, and best practices generated by the project are maintained within the County government structures.

Financial Sustainability:
Firstly, the project builds strongly on the existing programs and initiatives supported from Government budget, at both national and County level. This support will continue beyond the scope of the project. Secondly, one of the areas of focus of component 2 of the project is to demonstrate and prove viable models for providing markets and financial incentives for sustainable agricultural production that would form the basis of a sustainable catchment economy, with the key objective of ensuring that investments proposed under the project will become self-sustainable. A key mechanism in this regard, will be the restructured PES system.

Social sustainability:
The engagement of non-governmental stakeholders, County Government, including communities and the private sector, is a key factor in assuring the long-term sustainability of GEF investments in the sector. In this regard, a considerable part of the project is dedicated to enhancing community participation in sustainable land management including vulnerable groups such as women and youth.

Scaling up
By linking field-level interventions with institutionalizing approaches through planning (LNBIMP and County Development Plans for Nakuru and Nyandarua Counties) and establishing related regulatory mechanisms (Code of Conduct), while building skills and capacities through a train-the-trainers approach that builds capacity within extension services, developing a sustainable finance and resource mobilization strategy for long-term sustainability, generating knowledge and sharing data across LNB stakeholders, the project is also set to lay the foundations for up-scaling sustainable and biodiversity-friendly agricultural practices and sustainable land and natural resources management in other basins in Kenya and beyond. In this regard, the project is envisaged to lay a strong basis for expansion in the basin and other regions.

1b. Project Map and Geo-Coordinates. Please provide geo-referenced information and map where the project interventions will take place.

See Annex E.

2. *Stakeholders*. Please provide the Stakeholder Engagement Plan or equivalent assessment. (Type response here; if available, upload document or provide link) In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement.
Select what role civil society will play in the project:
☐ Consulted only;
☒ Member of Advisory Body; contractor;
☒ Co-financier;
☒ Member of project steering committee or equivalent decision-making body;

☒ Executor or co-executor;
☐ Other (Please explain)

In compliance with WWF's Standard, stakeholder consultations were undertaken during the project PIF stage and during the project design (PPG) stage. A summary of these consultations is presented in the attached Stakeholder Engagement Plan.

The main objectives of the Stakeholder Engagement Plan are to:

- establish mechanisms that ensure high level of ownership across project partners, affected
- and interested parties throughout the project life cycle to align with the multi-sectoral and
- multi-stakeholder project approach;
- facilitate close engagement and grievances mechanisms of stakeholders in the further
- development and throughout implementation and closure of the project;
- establish time frame and methods that ensure stakeholder consultation and disclosure of
- project information through the project life cycle; and
- establish and manage communication and engagement mechanisms across partners, affected
- and interested parties in a transparent, timely and clear manner.

The attached Stakeholder Engagement Plan provides details on the individual interests, influence and role of various groups of stakeholders in the project, a summary of which is presented in Table 3 below.

Table 3 List of potential key stakeholders and their contributions and roles in the proposed project

Stakeholder Type	Stakeholder list	Interest in the Project	Influence on project and role in project implementation
Partner National and Government Institutions	• Imarisha Lake Naivasha • Ministry of Environment and Forestry (MoE&F) • National Environment Trust Fund (NETFUND) • Nakuru and Nyandarua Counties • Ministry of Agriculture, Livestock and Fisheries	Alignment and contribution to national and County government priorities and plans. These include; Kenya Vision 2030 Fourth Medium Term Plan, County Integrated Development Plans, national strategies such as the 10% tree cover, Kenya Climate-Smart Agriculture Strategy 2017-2026, Agricultural sector Transformation and Growth Strategy, Lake Naivasha Basin Integrated Management Plan.	The stakeholders have high influence and power as they make County policies and plans related to conservation. They can advise the projects on how to align project goals with the government priorities. Direct responsibilities for the coordination and implementation of the project will be assigned to NETFUND, as lead Executing Agency, Imarisha Tanzania, to oversee Component 1 and for the development of the Code of Conduct under Component 3.
Enforcement	• Water Resources Authority (WRA)	Design and implementation of the project as well as alignment	Enforcement agents have (high) influence and power

Stakeholder Type	Stakeholder list	Interest in the Project	Influence on project and role in project implementation
Agencies	• National Environment Management Authority (NEMA) • Kenya Forest Service (KFS) • Kenya Plant Health and Inspectorate Service (KEPHIS) • Kenya Wildlife Service (KWS) • Horticultural Crop Directorate (HCD)	to the organisation's mandate and roles.	with specific enforcement mandates. The agencies can collaborate and clarify laws and ensure enforcement. Their role in the project may include awareness creation about laws, knowledge sharing on good practices and responding or acting to community needs when they report. Agencies can link community members to relevant authorities wherever they have low influence or power. Responsibilities for the coordination and implementation of the restoration and forest management activities of the project (Component 3) will be assigned to KFS.
Local Communities and Organizations and Civil Society Organizations	• Beach Management Unit (BMUs) • Community Forest Associations (CFAs) • Water Resource Users Association (WRUAs) • Lake Naivasha Basin Umbrella Water Resource Users Association (LANABWRUA) • Lake Naivasha Basin Landscape Association (LANABLA) • Lake Naivasha Basin Riparian Association (LNRA) • WWF Kenya	The communities are interested in the project because they want to improve their farming practices for better yield and higher resilience, as well as conserve the resources that affect their lives and livelihoods. Proper management of the resources will benefit them directly and indirectly. A particular point of attention in this is the Masaai community, which is not resident in the basin, but as pastoralists use it as a refuge in case of severe drought.	Generally, communities have high interest but low power in resource management. They cannot make or enforce policies. Their role is to implement conservation actions in the basin. However, through the various stakeholder engagement mechanisms to be established and supported by the project, their influence will be strengthened.
Private Sector	• Lake Naivasha Growers Group (LNGG) • Banking Institutions	These stakeholders would be mainly interested in protecting and sustainably ensuring their	Institutions like the bank have low interest and low influence in the project as

Stakeholder Type	Stakeholder list	Interest in the Project	Influence on project and role in project implementation
	(Equity, KCB, Barclays) • Hotels and Lodges • Chamber of Commerce	commercial interests, including benefits from farming, the provision of financial services, as well as the provision of accommodation and conference facilities	they do not interact mostly with resources. On the other private sector institutions like LNGG have a high interest in the project because they are water users. Their role is to facilitate others with services and products.

The key institutional mechanisms for stakeholder engagement during project implementation are:

- The Project Steering Committee (PSC), which will include the key Government Agencies to be responsible for the delivery of the project, and other key stakeholders as appropriate, notably: NETFUND, Ministry of Environment and Forestry, Ministry of Agriculture, Livestock, Fisheries and Co-operatives, Imarisha Lake Naivasha, Nyandarua County Government, Nakuru County Government, WWF Kenya, LANABWRUA, LNRA, LANABLA and WWF GEF Agency (as observer).
- A Technical Committee which will be established as a mechanism for coordination among project partners on the ground, both for the project specifically and for the LNBIMP at large. The Committee will consist, to start, of NETFUND Imarisha Lake Naivasha, KFS, WWF Kenya, the Horticultural Crops Directorate (HCD), Agricultural Training Center, the County Government Environment and Agricultural Departments, LANABWRUA, participating CFAs and WRUAs, Lake Naivasha Green Horticulture Association and LNRA.
- Beyond the PSC and Technical Committee, the LNB Multi-stakeholder Platform, led by Imarisha, will be formed to serve as a way of engaging a broader group of stakeholders

Beyond these institutional mechanisms, the project provides for the psoiton of a community engagemenet officer, who will serve as the main liaison person for engagemenet with different community and other interest groups in the landscape. Throughout the project components, provisions have been made, and budget allocated, to support the effective involvement and consultation of project stakeholders.

4. *Gender Equality and Women's Empowerment.* Provide the gender analysis or equivalent socio-economic assessment. (Type response here; if available, upload document or provide link)

The Kenya Government has placed gender equality and women's empowerment at the center of Kenya's development strategies and the Constitution of Kenya 2010 is seen as the single most important step in entrenching gender equality in Kenya's political and economic agenda. It includes an affirmative action policy in the public sector and the creation of the National **Gender Equality Commission** (NGEC) as an independent constitutional commission. In 2013, a Gender Directorate was created under the new Ministry of Devolution and Planning. Gender has also been mainstreamed in Kenya Vision 2030, in which several socio-economic development programmes have been formulated to empower women and increase their participation in all sectors. Despite these efforts to promote gender equality and women's empowerment, including the constitution of 2010, which is quite unambiguous on gender inclusivity, Kenya still reflects varied gender-based inequalities exacerbated by gender-based violence, including sexual abuse, rape, physical violence, and sexual harassment ostensibly due to lack of awareness and or inadequate budget allocations for equality and inclusion, implementation and mainstreaming of pertinent policies. Kenya ranked 128th in the Gender Inequality Index of 2021 (UNDP) with a score of 0.506, showing inequalities in economic and political participation.

In particular, women's empowerment is hindered by i) the patriarchal social order supported by statutory laws, ii) religious and customary laws and practices, and iii) the administrative and procedural mechanisms for accessing the rights[16], especially rights on socio-economic benefits or access to livelihood securities for women. This results in unequal access of women to and control of important (natural and productive) resources such as land and finance, unbalanced participation and decision-making in public processes and governance at all levels, and uneven access to socio-economic benefits and services. In terms of literacy and employment, a slightly larger proportion of females never attend school relative to males. Women are also disproportionately affected by HIV/AIDS, with 6.9% of women aged 15 to 64 affected, compared to 4.4% for men of the same age groups[17].

LNB is mainly inhabited by communities who depend on small-scale rain-fed agriculture on the upper side and pastoralism in the lower areas. A desktop gender analysis for the LNB was carried out for the elaboration of the PIF based on a literature review and stakeholder consultations. The gender analysis of this area reveals complex gender dynamics correlated to gender roles and responsibilities, patterns of power and household decision making, access to and control over assets and resources, and meaningful participation in public decision-making. Women and men are involved in different crops and types of animal husbandry and have different roles in farming. A clear example of the division of labor can be found in harvest management, where women and men perform different tasks. Using machines and marketing is a task carried out by men while women put more of their labor in winnowing, especially if this is done manually; drying grain; storage and; preparation of grain for consumption[18]. In general, women tend to take care of the day-to-day farming business, whereas men are seeking employment or income opportunities elsewhere.

The forest is used by women for firewood and by men for logging, farming and grazing of cows. This is regulated by the KFS licenses, although illegal activities do still take place. Rivers are used by women to wash clothes and to fetch water if there is drought.

Whereas spouses tend to discuss on the use of resources such as land and equipment, men are the main decision-makers and owners of the resources, which affects the visibility of women as farmers and their ability to implement certain agricultural practices that require resources controlled by men. Because of women's limited mobility, extension services and training are less accessible to women compared to men, which reduced their abilities to adapt to changing circumstances.

Women constitute the majority of the workers on the horticulture farms surrounding the Lake because of gendered perceptions about their ability to be precise and concentrated. However, men constitute the majority of managers, directors and owners, which has an impact on the visibility and representation of women in the LNB. These women form a different category from women farmers as they are less directly involved in the management of LNB, so their issues and interest in LNB will be different. When it comes to fishing in the lake, women benefit less from this as it is mostly men who own and operate the boats. Even if women own boats, they hire men to fish for them. There are incidences of sex for fish, but there is little documentation of this.

Leaders and representatives of community organizations, associations and institutions active in the LNB are mostly men, despite gender provisions in by-laws that aim to stimulate women's participation. This is due to cultural perceptions about leadership and public participation of women, women's mobility and time constraints and self-esteem and confidence issues. This lack of participation of women negatively affects the representation of women's interests in regard to natural resource use, especially water and land use. In addition, awareness of gendered differences in resource use and management among representatives of stakeholder groups in the LNB was found to be

[16] Republic of Kenya. 2019. National Policy on Gender and Development. Available online at http://psyg.go.ke/wp-content/uploads/2019/12/NATIONAL-POLICY-ON-GENDER-AND-DEVELOPMENT.pdf

[17] UN Women. Kenya. Available online at https://africa.unwomen.org/en/where-we-are/eastern-and-southern-africa/kenya

[18] Swiss Agency for Development and Cooperation SDC. Gender Analysis of Maize Post-Harvest Management in Kenya. 2015. Available online at https://www.shareweb.ch/site/Agriculture-and-Food-Security/focusareas/Documents/phm_sdc_egsp_gender_analysis_kenya.pdf

low, indicating a potential gap between needs and representation in various stakeholder forums and governance processes.

Gender-responsive stakeholder consultations were conducted during the project development phase to refine information gathered during PIF design on gender issues that may be at play in the project area. A Gender Action Plan (GAP) was developed to outline how the project aims to promote gender mainstreaming and women's empowerment in project design and execution. The GAP identifies gender entry points in the project to ensure activities are gender-responsive and provide recommendations for including gender in the overall project design, including gender-sensitive indicators and outputs where sex-disaggregated data should be collected. Further gender-responsive stakeholder consultations will be conducted throughout the project lifetime. The project will follow the WWF GEF Gender Policy, which is aligned with the GEF Policy on Gender Equality, throughout the development and implementation of the proposed project.

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women's empowerment? (yes☒ /no☐) If yes, please upload gender action plan or equivalent here.
If possible, indicate in which results area(s) the project is expected to contribute to gender equality:
☒ closing gender gaps in access to and control over natural resources;
☒ improving women's participation and decision making; and or
☒ generating socio-economic benefits or services for women.
Does the project's results framework or logical framework include gender-sensitive indicators? (yes☒ /no☐)

With reference to SDG5, the proposed project will promote gender equality and the empowerment of women in several ways. The project will ensure gender expertise is integrated throughout the components. Activities will be designed to take into account the context of this country and to address critical gender imbalances that relate to the project: i) the gendered division of labor ii) lack of participation in the decision making for the management of resources, iii) differential use, control over and benefits from natural and other resources, and iv) lack of access to financing and credits for women.

- *Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin* will develop activities that ensure an increased awareness of gender differences in activities, resource use and control in the LNB, promoting women representation among community groups, and adequate involvement of women in the decision-making process and leadership by building capacity of women through women's groups, associations and women-led farmers' groups and CSOs to increase their agency and improve access to and benefits from active participation in the decision-making processes on natural resources management fora and through other governance entities.
- *Component 2: Market and financial mechanisms for implementation of LNBIMP* will identify socio-economic interests for women and youth, ensure equitable access to financing and market opportunities for women, men, and youth, by providing the necessary training, among other methods, to facilitate this access, including training for women on the development of business plans and access to markets and active participation in marketing events. This also includes awareness raising among financial institutions of the barriers to access credits for women. Particularly in the revision of the PES, equal participation and benefit among women and men will be closely monitored.
- Under *Component 3: Improved land management in upper LNB*, the project will work to ensure equal access for women and men small-holder farmers to capacity building opportunities and technical support to apply sustainable agricultural and restoration techniques to contribute to the improved management of land and natural resources of the LNB. This requires awareness raising and capacity building of agricultural officers and staff to ensure gender-sensitive training content and delivery methods and where possible apply a household approach to ensure improved collaboration and joint decision making on farming activities and resources. The project will also actively select and promote women as lead farmers and select model farms owned by women to create role models.

- Knowledge products generated in *Component 4: Knowledge Management and Monitoring and Evaluation* will highlight the role of women in conservation agriculture practices and activities, as well as lessons learnt in regard to the promotion of gender and social inclusion through the project, and ensure information is shared with LNB women and youth. The Community Engagement and Gender specialist in the PMU will work closely with the Project Coordinator, MEL and Safeguards specialist, project partners and stakeholders to ensure proper capacity on gender to implement, monitor and evaluate progress on the GAP during project implementation.

4. Private Sector Engagement. Elaborate on the private sector's engagement in the project, if any.

The project has as one of its specific targets to promote the engagement of private sector in expanding market linkages for smallholder farmers under Component 2. This includes both linking smallholder farmers to micro-financial institutions (MFIs) to access agribusiness financial services, but also securing market access for horticultural produce from sustainable and biodiversity-friendly agricultural practices promoted through the project. In this regard, a close connection will be established with hotels, traders and marketing companies and financial institutions operating in LNB. As part of the training activities under Component 2, smallholders will be trained on contract management, market requirements and production standards, and meetings will be facilitated between farmers' groups and potential buyers.

In addition, the upgraded PES scheme to be developed as part of Component 2 will involve the engagement of private sector stakeholders, including horticulture companies, tourism operators and hoteliers, geothermal and land development operators, large land owners, Water Service Providers, as well as finance institutions and service providers, in the exploration and design of the various modalities. In this regard, engagement with private sector stakeholders has already been undertaken as part of the PES review.

During the stakeholder consultations, in preparation of this project document, discussions were held with the riparian association and Tourism Association - Naivasha branch. They perceived PES as a great initiative to protect the resources of LNB. On the other hand, there is a challenge in scaling it up since there will be a need to increase the number of farmers. It would mean more investment from the private sector. Also, the current model lacked a significant impact as few farmers benefited. Although the farmers that benefited from the PES initiative adopted good farm practices, the change was minimal downstream. They proposed an approach that targets farmers in a particular area or for a specified period. For example, farmers in a section, village or ward would create more impact than distribution across the basin. Also, other than individual incentives, they recommended communal incentives that more community members can use. Further discussions with the private sector, in his regard, are planned as part of Component 2 of the project in particular.

Other private sector stakeholders with an interest and stake in the project include financial institutions like banks (several farmers mentioned Equity bank because of wide coverage and proximity to farmers), micro-finance institutions and SACCOs (Muki), as well as flower farmes (represented by the Lake Naivasha Growers Group0, the Saw millers' association, Boda Boda (Motorbike) association, Private Geothermal Companies and Agro dealers. Provisions for engagement with these sectors are planned for under Component 1 of the project in particular.

5. Risks. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation.(table format acceptable):

<u>General risks</u>

An analysis of the project risks, risk rating and preventive measures for the proposed project is presented in Table **4**.

Table 4 Risk Analysis

Risk Description	Ranking	Preventive Measures
1. Limited uptake of sustainable land management practices by stakeholders	L	Stakeholders were actively engaged in the development phase of the project through in-person consultations to ensure project activities are appropriate, secure their buy-in and validation of project activities. The project builds, in this regard on the experiences and lessons learnt from the GOALAN project, which had a similar scope of work regarding the introduction of sustainable farming practices. These lessons learnt have been incorporated into the design of the project. Local communities that were engaged have long-standing relationships and on-the-ground experience with executing partners and LNB stakeholders on SLM practices and risk of limited involvement is considered low.
2. Strong climate variability during project lifetime can negatively affect farmers' productivity	H	Current climatic variability (as identified in the climate change risk screen below and supporting document) was taken into account during design and will be considered during implementation of project interventions. Climate-resilient variants of crops and plants, where possible, will be used in active planting interventions.
3. Economic developments, such as large infrastructure projects may compete with the implementation of project	M	The project will disseminate biophysical information of LNB environment among and actively engage with stakeholders including government, private sector, academia, communities, development partners, CSOs, and media to promote adequate incorporation of mitigation measures to safeguard the environment in policy frameworks and their enforcement in development plans and implementation. In particular, output 1.1.2. involves the development of annual position papers as input into the development of County Development Plans.
4. Capacity constraints of local and national institutions to undertake project interventions	M	In addition to conducting due diligence/capacity assessment on executing partners, the project will seek to build institutional and technical capacities of government staff and the LNB coordinating entity for overall improved coordination across LNB, as well as a train-the-trainers plan that involves capacity building among ward agricultural officers.
5. Lack of engagement from horticulture sector and hoteliers	L	The proposed project will build on a strong baseline of public-private-partnerships and investments in LNB, and create linkages with the existing efforts under the GOALAN project (market linkages with hoteliers) and the voluntary PES scheme (horticulture sector). The project will also work with the Horticultural Crops Directorate to bring in potential buyers for farmers' SCP products.
6. Limited opportunities for developing viable markets for sustainable farm produce	L	Current baseline work on sustainable consumption and production activities with smallholder farmers in Lake Naivasha link to markets around the Basin (retailers, hotels, etc.) have shown the potential for attracting viable markets. Proposed project activities will build on and scale-up these linkages.
7. Risk of recurrent COVID-19	M	In the case of COVID restrictions during project implementation, the

Risk Description	Ranking	Preventive Measures
related limitations		project partners will either work from home or different offices and will be equipped (and trained if needed) for using virtual communication. In such case, it is also envisioned that the PSC will meet virtually, not in person. Outreach to LNB stakeholders and farmers will be done in person while strictly observing the Ministry of Health COVID 19 guidelines and where possible, engage through phone conversations or through online meetings.

COVID-19 Risk Analysis

While the COVID pandemic seems to be largely over, future situations may occur either through re-emergence of COVID or the emergence of other similar pandemics. Below risk assessment defines the basic mitigation approaches that will be deployed in such case.

Risk category	Potential Risk	Mitigations and Plans
i) Availability of technical expertise and capacity, and changes in timelines	Continued or renewed efforts in COVID-19 containment measures (such as travel and meeting restrictions) are likely into the earlier stages of implementation. This may hinder outreach in person to LNB stakeholders and farmers.	The project partners will be based in different offices and will be equipped (and trained if needed) for using virtual communication. They have all been in contact virtually during the project development stage. It is envisioned that the PSC will meet virtually, not in person. Outreach to LNB stakeholders and farmers will be done in person while strictly observing the Ministry of Health COVID 19 guidelines and where possible, engage through phone conversations or through online meetings.
	Capacity and experience for remote work and online interactions as well as limited remote data and information access and processing capacities that projects will need to strengthen.	For interaction with LNB stakeholders and farmers, provision of data/internet access where devices are available, and provision of devices if needed.
	Changes in project implementation timelines.	During the project development stage, project duration was extended by one year (total 4) to allow for 6 months of start up and 6 months of project close.
	Changes in baseline and potential co-financing sources identified may change due to changed government/project partner priorities for existing funding, reduced funding availability, or due to delays until implementation.	Some baseline and co-finance may need to be adjusted in the event of future pandemic situations and responses.
ii) Stakeholder Engagement	Reduced mobility and stakeholder	Local level outreach to LNB stakeholders and

Risk category	Potential Risk	Mitigations and Plans
Process	engagement.	farmers via NETFUND and Imarisha Lake Naivasha during project implementation will only be undertaken if it complies to national and local government guidelines and follows COVID-19 safety protocols (including provision of PPE where needed). Outreach to LNB stakeholders and farmers will be done in person where possible, over the phone, and as a last resort over the internet.
iii) Enabling Environment	Reduced government focus on the environment during the COVID-19 crisis.	Sensitization on Sustainable Natural Resource Management is ongoing through current projects. This is done through different forums attended by the Government representatives where importance of the environment and its relation to agriculture, community livelihoods, health (including COVID), food safety and security are discussed. Through the projects, the LNB Civil Society Organizations (CSOs) have been empowered and are engaging the Government in environmental related policy development and implementation, ensuring the communities have improved access to the natural resources and are deriving maximum benefits.
iv) Financing	Reduced co-financing availability (co-financing from the private sector and governments, loan-based projects with MDBs).	Regular meetings with the key stakeholders involved in co-financing will be held to provide updates and replacements done where necessary.
v) Private sector engagement	There may be reduced appetite from in particular the horticulture and tourism sector, both of which are hit by the COVID crisis or other simiar pandemic situations, to pay for the transaction costs associated with upstream restoration, as well as pay for the additional costs associated with sourcing sustainable produced products.	The project will undertake close dialogue with the private sector to establish trust in the approach, including the potential benefits for the horticulture and tourism sector from engagement. For the upstream landscape management and restoration aspects, the project will support the restructuring of the existing PES scheme. In this process, private sector stakeholders will be closely consulted and engaged. On the market side, the project will strengthen the Green Shop as a point of engagement with potential buyers, circumventing the often costly chain of agents involved and

Risk category	Potential Risk	Mitigations and Plans
		therewith keeping the price of sustainable products to a minimum, as well as facilitating market access to the local tourism sector.
vi) Future risks of similar crises	There is minimal risk that this project will contribute to future crises of this nature.	It is not anticipated that this project will have adverse impacts that might contribute to future pandemics. The project is designed to support local livelihoods which depend on the water resources and ecosystem services of Lake Naivasha. Project outcomes will contribute to famers' and ecosystem resilience in the face of future crises.

COVID19 Opportunity Analysis

Opportunity Category	Potential	Project Plans
i) Can the project do more to protect and restore natural systems and their ecological functionality?	The goal of the project is to increase protection of Lake Naivasha water resources, headwater forests and riparian vegetation and associated ecosystems to support the local and national economy.	By strengthening LNB stakeholder engagement in LNB conservation and improving land, water, and biodiversity management in the LNB through promotion of sustainable and biodiversity-friendly agricultural practices and improved riparian and forest management, the project will contribute to building longer term resilience to future shocks, improve livelihood benefits and reduce deforestation and ecosystem degradation and fragmentation.
ii) Can GEF projects include a focus on production landscapes and land use practices within them to decrease the risk of human/nature conflicts?	The project activities under Component 3 focuses on sustainable and biodiversity-friendly agricultural practices in production landscapes.	Through project activities, smallholder farmers will be trained in the adoption of best farming practices, thereby enhancing agricultural productivity while promoting efficient land and water use and reducing demand for land conversion. This will ensure production is achieved with less resources and thereby reduce competition with other living organisms. The promotion and adoption of sustainable production practices will build a resilient agricultural system which supports the growing human population in the wake of climate change, and thereby reduce conflict risks. The project will also work to increase production per unit area using good

Opportunity Category	Potential	Project Plans
		agricultural practices, e.g., Use of certified seeds, reducing the demand for new areas for production. The project will also promote the adoption of an Integrated Pest Management (IPM) approach which will reduce pesticide use and enhance soil and water quality thus promoting well-balanced ecosystems. Linking farmers to markets will reduce post-harvest losses which, if not abated, will contribute to diminishing the scarce production resources leading to increased competition and conflicts.

Climate Change Risks[19]

Current models predict that by 2030, climate change related losses will account for approximately 2.6% of Kenya's GDP.[20] As Climate Change continues to exacerbate extreme weather events on a global scale, it is critical to examine the impacts of climate change on a smaller scale to better understand the project barriers and aid in achieving a lasting impact. Table **5** focuses on the two counties that this project will be implemented in, Nyandarua and Nakuru counties, the climatic threats they face at present (fluctuating temperatures, increased rainfall/floods, and more intense dry spells/droughts) and in the future, and the impacts these threats have.

Table 5 Climate change risk assessment and mitigation measures

Climate hazards	Climate Risk	Mitigation measure
Temperature Fluctuation Today the mean annual temperature in Kenya is 24.29°C. The temperature in Kenya has been increasing over the past several decades at a rate of .21°C per decade. By 2050, the mean annual temperature will have risen by 1.68°C[21], demonstrating a faster rate of warming than in previous decades. A report completed by USAID also predicts that heat waves will last longer, increasing between 9 and 30 days.[22]	Increased temperatures can exacerbate drought events. There are temperature thresholds for agricultural crops at which point the crops become less productive. Agriculture is highly temperature dependent, with crop yields in lower elevations predicted to decrease by 20%. Higher temperatures will also increase the likelihood of vector- and water-borne diseases spreading, Malaria in particular.[23]Increasing temperatures will also exacerbate the rate of glacial melt, affecting water runoff from Mt. Kenya, located near Lake Naivasha.[24]	The project will provide training to selected farmers, as well as provide tools and materials need for more sustainable (climate-smart) agricultural practices, including soil fertility approaches, crop rotation, efficient water use practices, certified seeds (including drought-resilient variants of crops and other plants), contour farming, compost, and mulching tools as a form of ecosystem-based adaptation and management. The promotion and adoption of sustainable production

[19] For more information, please refer to the Climate Change Risk Screen supporting document.

[20] USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

[21] Harris et al., 2014: Updated high-resolution grids of monthly climatic observations – CRU TS3.10: The Climatic Research Unit (CRU) Time Series (TS) Version 3.10 Dataset, Int. J. Climatology, 34(3), 623-642, doi: 10.1002/joc3711; updated from previous version of CRU TS3.xx (most recent use in CCKP: TS3.24).

[22] USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

Climate hazards	Climate Risk	Mitigation measure
		practices will increase production per unit of area as well as the resilience of the agricultural system to withstand the effects of fluctuating temperatures and drought events
Frequency and Intensity of Heavy Rainfall Within the LNB, the long-term spatial rain distribution varies from about 600 mm at Naivasha Town to some 1,700 mm on the slopes of the Nyandarua Mountains (the Aberdares)[25]. Future scenarios predict that rainfall will increase in Kenya, the average total increase could reach an additional 49mm per month. At the current rate of global climate change and emissions, the annual maximum 5-day rainfall is expected to increase 12.22mm by the year 2060. [26] Inter-seasonal rainfall variability will increase over the next 50 years.	Extreme flood events have already led to displacement of local people in the LNB, which has been linked to food insecurity. Flood events and fluctuating rainfall patterns also lead to degradation of soil, destruction of crops, pollution of water supply, increased frequency of landslides and an increased risk of waterborne diseases. Crop types and growing seasons will also change in relation to water availability and seasonal and temporal changes.	The project will strengthen enabling conditions for the integrated natural resources management in the LNB. Smallholder farmers will be supported to adopt sustainable and climate-smart agricultural practices to improve soil and water management conditions. In addition, priority management measures and restoration activities in degraded areas of the riparian will include measures that could potentially mitigate against flooding.
Dry Spells/ Drought In Kenya, dry spells are not expected to increase in length, but instead are projected to increase in severity, by an average of 25% by 2050. Severe and long-lasting dry spells lead to increased evaporation and decreased water availability. Since the 1970s, central Kenya has seen a decrease in long-lasting rain events.	Drought and water availability will continue to detrimentally affect crops and agricultural yields, breaking down food systems causing food insecurity and hunger. The drought event in Kenya from years 2008- 2011 caused approximately $12.1 billion in damage and crop/agricultural losses. [27]	This project will support smallholder farmers through training and facilitation to adopt best farming practices that enhance land, soil and water conservation to increase farm production, including the application of rainwater harvesting and drip irrigation. Project activities contribute to the overall objective of reducing land degradation in the upper catchment for increased protection of the Basin's water resources, biodiversity and its associated ecosystem services.

=[23] WHO. 2015a. Climate and health country profile, Kenya.

[24] USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

[25] Becht, R., Odada, E.O., Higgins, S., 2005/ Lake Naivasha: Experience and Lessons Learnt.

[26] Harris et al., 2014: Updated high-resolution grids of monthly climatic observations – CRU TS3.10: The Climatic Research Unit (CRU) Time Series (TS) Version 3.10 Dataset, Int. J. Climatology, 34(3), 623-642, doi: 10.1002/joc3711; updated from previous version of CRU TS3.xx (most recent use in CCKP: TS3.24).

[27] USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

Current climatic variability and anticipated climate change patterns will be taken into account in the project implementation in various ways:

a) Through consideration in the development of the LNBIMP and the related County Development Plans.
b) Through the incorporation of climate smart agricultural approaches into the agricultural training manual and curriculum, and the demonstration of the same at model farm sites
c) In the selection of sites targeted for restoration, as well as the selection of tree and plant species, and the design of specific restoration methods.

Environmental and Social Safeguards Risks

In compliance with WWF Environmental and Social Safeguards Framework (ESSF), as detailed in WWF's Environmental and Social Safeguard Integrated Policies and Procedures (SIPP), the Lake Naivasha EBM Project was screened according to WWF's Standard on Environmental and Social Risk Management. The Project has been and has been categorized as a Category "B" project, given that it is essentially a conservation initiative expected to generate significant positive and durable social, economic and environmental benefits. Any adverse environmental and social impacts are site specific and can be mitigated. The proposed project triggered the following standards:

- **Natural Habitats:** At this point, there are no planned activities that would negatively impact natural habitats. However, this standard has been triggered because the project entails on-the-ground activities, including restoration activities on key riparian degradation areas (such as demarcation) and small-scale irrigation infrastructure, even if these are geared towards reducing the unsustainable use and extraction of natural resources. Consequently, further environmental impact assessments will be needed as the specific activities and its locations become better defined to determine which safeguard measures, if any, need to be in place to ensure no lasting damage to natural habitats or the people that rely on them occur.
- **Pest Management:** This standard has been triggered because, while the project will not procure any pesticides, it will involve the use of registered biopesticides and conventional pesticides in class III and IV. Because the project will adopt an integrated pest management approach (which considers cultural, mechanical, physical and chemicals methods), the use of these pesticides will be minimized to promote environmental conservation and human health and ensure economical management of pests. Thus, the project will build knowledge regarding the advantage and disadvantage of their use and, where appropriate, will train farmers on application rates, techniques and equipment, disposal of empty containers and remaining/unused pesticides mixtures. Due to these activities, a Pest Management Plan will be prepared as part of the ESMF to conform to WWF's Environment and Social Safeguards Framework.
- **Indigenous Peoples**: This standard has been triggered because there are different ethnic groups and clans present that can be identified as Indigenous Peoples, including but not limited to the Maasai who live in neighboring counties, such as Narok, and cross over to LNB looking for pasture and water during severe droughts. Although the Kenyan government does not formally recognize the Maasai as indigenous, they are considered so under WWF and GEF policies. Furthermore, more information on the presence and resource use of other pastoralist communities is needed, including but not limited to the Samburu and Turkana. Consequently, an Indigenous Peoples Planning Framework will be prepared as part of the ESMF to conform to WWF's Environment and Social Safeguards Framework.
- **Restriction of Access and Involuntary Resettlement:** The project does not support involuntary resettlement of persons directly or indirectly nor will proceed with activities without consulting the communities as guided by the relevant regulations and laws of Kenya and WWF US policies. However, this standard has been triggered because this project is concerned with land management, which often results in changes of access. As such, more information is needed to determine the extent of these potential access restrictions and the risk they might pose, if any, if no mitigation measures are taken. A Process Framework will be prepared as part of the ESMF to conform to WWF's Environment and Social Safeguards Framework to ensure community rights are respected.

- **Community Health, Safety and Security:** This standard has been triggered at this stage as a precaution because, although the project's activities have not been fully defined yet, some of the envisaged ones (such as on-farm practices and post-harvest activities, as well as the installation of small-scale irrigation infrastructure) represent potentially negative environmental and health impacts, as well as implications for labor standards, if these are not done correctly and the risks are not minimized. As the specific activities and their locations become better defined, further environmental impact assessments will be carried out before development of small-scale infrastructure begins. Additionally, there has been a reported increase in conflict between humans and hippos in Lake Naivasha, likely as a result of infrastructure development for tourism purposes and encroachment on riparian land by farmers. The project does not expect to develop on-the-ground activities in the LNB riparian area itself (beyond the development of the Code of Conduct under Component 3), which is where this potential conflict primarily plays out. Nonetheless, if this were to change, the ESMF will identify and list measures for mitigating human wildlife conflict.

Since the exact location and/or nature of potential investments have not yet been determined, an Environment and Social Management Framework (ESMF), including a Process Framework (PF) and an Indigenous Peoples Planning Framework (IPPF) was prepared to conform to WWF's Environment and Social Safeguards Framework. The ESMF, including the PF and IPPF, outlines the principles, procedures, and mitigation measures for addressing environmental and social impacts associated with the project in accordance with the laws and regulations of the Government of Kenya and with the WWF SIPP. The ESMF was prepared based on the following information: a) desk review of the WWF SIPP and Kenya's environmental and social assessment policies; and b) consultations and focus group discussions held in October 2022.

The project will have a direct and tangible effect on a large number of communities and individuals residing within or in the vicinity of project sites. There is thus a need for an efficient, effective, culturally responsive and accessible Grievance Redress Mechanism (GRM) that collects and responds to stakeholders' inquiries, suggestions, concerns, and complaints. The GRM shall constitute an integral part of the Project and assist the PMU in identifying and addressing the needs of local communities. The GRM will be constituted as a permanent and accessible institutional arrangement for addressing any grievances arising from the implementation of project activities. The Project's GRM will be administered by the PMU. Guidelines for the establishment and operation of the GRM are presented in the ESMF.

Roles and responsibilities

Responsibilities for the implementation and oversight of environmental and social safeguards measures related to the project are outlined in the ESMF. The overall responsibility for ensuring that safeguards are implemented lie with NETFUND, as Lead Executing Agency, with oversight by the Project Steering Committee and the WWF GEF Agency. At more practical level, the PMU, and more specifically the Project Coordinator / Sustainable Food Systems Specialist, will be responsible for the practical implementation of safeguards measures, as well as related monitoring and reporting. The Project will furthermore recruit an environmental and social safeguards specialist to support the PMU in an advisory and supporting role; this position will be merged with the Monitoring & Evaluation Officer role.

Financial arrangements

In order to appropriately cater for the implementation of above-mentioned measures, project budget has been allocated for the following:

- Costs for a part time environmental and social safeguards specialist (consultant or staff) to work with the PMU for the full 3 years of the project period; and
- Budget for travel costs, training workshops and meetings for safeguards monitoring.

It should be noted that the ESMF and Process Framework specifies that the project budget would cover potential compensation to project affected people related to the implementation of the Process Framework (i.e., resulting from the GRM). At this stage, no amount has been earmarked for such events, but as necessary, budget adjustments will be made to accommodate for this.

6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

A schematic representation of the proposed institutional arrangements for the project is presented in **Error! Reference source not found.**.

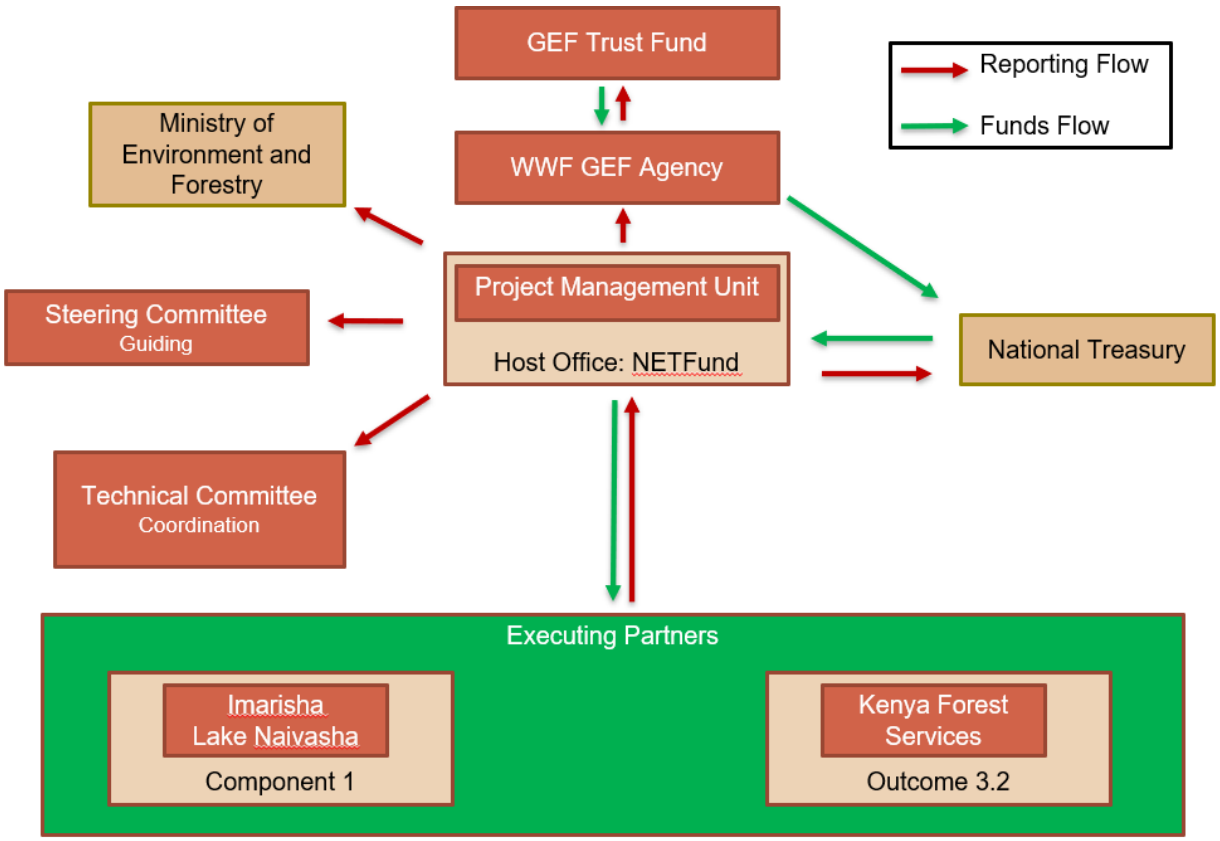


Figure 3. Project Institutional Arrangements

The National Environment Trust Fund (NETFUND) will act as the Lead Executing Agency for the project. Established by the Environmental Management and Coordination Act of 1999 as a State Corporation, NETFUND's mission is "to mobilize, manage and avail resources for: environmental awards, capacity building, research and publications, scholarships and grants in Kenya"[28]. As such, NETFUND operates under the auspices of the Ministry of Environment and Forestry. As Lead Executing Agency, NETFUND will take overall fiduciary responsibility of the project as well as of forming and leading the Project Steering Committee. NETFUND will appoint a Project Focal point who will be responsible of overall administration and supervision of the PMU.

NETFUND will furthermore host the Project Management Unit (PMU), which will be tasked with the day-to-day management of the project. The main function of the PMU will be to coordinate efforts between the various partners in the project, as well as be responsible for the reporting, monitoring and evaluation functions.

In terms of technical delivery, the PMU will directly deliver Components 2 and 4, as well as Outcome 3.1 under Component 3. Several other Executing Partners will be sub-granted to deliver other aspects of the project, as follows:

[28] NETFUND, https://www.netfund.go.ke/who-we-are/

- Imarisha Lake Naivasha will be operating under sub-contract to NETFUND to lead on Component 1, as well as on the development and roll-out of the Code of Conduct under Component 3 (outputs 3.2.1 and 3.2.2).
- Kenya Forest Services (KFS) will be operating under sub-contract to NETFUND to lead on the development of PFMPs and undertaking targeted restoration work under Component 3 (output 3.2.3).

Project oversight and strategic guidance will be provided by a national Project Steering Committee (PSC), which will include the key Government Agencies to be responsible for the delivery of the project, and other key stakeholders as appropriate, notably: NETFUND, Ministry of Environment and Forestry, Ministry of Agriculture, Livestock, Fisheries and Co-operatives, Imarisha Lake Naivasha, Nyandarua County Government, Nakuru County Government, WWF Kenya, LANABWRUA, LNRA, LANABLA and WWF GEF Agency (as observer). The PSC will meet twice a year to formally review project progress, endorse the Annual Project Workplan and Budget as well as discuss and strategic matters related to the project.

In addition to the PSC, a Technical Committee will be established as a mechanism for coordination among project partners on the ground, both for the project specifically and for the LNBIMP at large. The Committee will consist, to start, of NETFUND Imarisha Lake Naivasha, KFS, WWF Kenya, the Horticultural Crops Directorate (HCD), Agricultural Training Center, the County Government Environment and Agricultural Departments, LANABWRUA, participating CFAs and WRUAs, Lake Naivasha Green Horticulture Association and LNRA. Other execution partners may be added as appropriate. Meetings of the Committee will be conducted on a quarterly basis.

Beyond the PSC and Technical Committee, the LNB Multi-stakeholder Platform, led by Imarisha, will be formed to serve as a way of engaging a broader group of stakeholders (see Component 1).

As the GEF Project Agency, WWF GEF Agency will provide technical and financial supervision and implementation support of the project and support on issues affecting timely and quality project implementation. WWF GEF Agency will undertake implementation support, including yearly supervision missions. A key responsibility of the supervision is to review quality of outputs and progress against the targets set in the project's logical framework.

A financial agreement shall be signed between WWF US, as the GEF Project Agency, and the Ministry of Finance (also referred to as the National Treasury), on behalf of the Government of Kenya. Funds will be deposited in a dedicated account hosted by NETFUND.

The PMU will be the central financial management hub of the Project responsible for data processing and reporting. The PMU will manage and oversee fund transfers to partner executing agencies on the basis of activity tagged, as well as facilitate financial reporting and generation of withdrawal applications.

Program accounting procedures shall follow Government procedures and shall furthermore adhere to WWF GEF Agency standards.

7. Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

- National Action Plan for Adaptation (NAPA) under LDCF/UNFCCC
- National Action Program (NAP) under UNCCD
- ASGM NAP (Artisanal and Small-scale Gold Mining) under Mercury
- Minamata Initial Assessment (MIA) under Minamata Convention
- National Biodiversity Strategies and Action Plan (NBSAP) under UNCBD
- National Communications (NC) under UNFCCC
- Technology Needs Assessment (TNA) under UNFCCC
- National Capacity Self-Assessment (NCSA) under UNCBD, UNFCCC, UNCCD
- National Implementation Plan (NIP) under POPs
- Poverty Reduction Strategy Paper (PRSP)
- National Portfolio Formulation Exercise (NPFE) under GEFSEC
- Biennial Update Report (BUR) under UNFCCC

- Others

The proposed project is aligned with a range of national and sectoral strategies and plans, as described in Table **6**.

Table 6 Project Alignment with National Strategies and Plans

National Strategies/Plans	Alignment
Kenya Land Degradation Neutrality Targets	As land restoration and sustainable land management efforts are potential solutions to improve degraded land, this project stands to contribute to the country's sub-national LDN goal of achieving LDN in the Rift Valley Catchment Zone by 2030 compared to 2015 levels and an additional 9% of the zone has improved (net gain)[29]. Kenya is one of over 120 countries to date that have engaged with the United Nations Convention to Combat Desertification's (UNCCD) LDN Target Setting Programme which includes setting national baselines, targets and measures to achieve LDN to contribute to Sustainable Development Goal (SDG) 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world"[30]. Land degradation threatens sustainable development, food security and the country's ability to meet growing demand for environmental services[31]. Because land is the natural resource upon which most of Kenya's economic activities depend, LDN has been highlighted as the "cornerstone of achieving all Sustainable Development Goals in Kenya" and also as a "catalyst to Green Economy as it promotes restoration of degraded lands and other sustainable land management practices"[32].
National Biodiversity Strategy and Action Plan (NBSAP)	Through its work on forest landscape restoration and work with farmers groups on sustainable agricultural practices (components 2 and 3), the project will contribute in particular to goal n°2 of the NBSAP, which is to ensure 'informed and empowered communities fully involved in sustainable utilization and conservation of biodiversity'. In addition, through mainstreaming biodiversity into the LNBIMP and County Development Plans (component 1) the project will contribute to goal n[1]1, which is to create 'an enabling policy, legislative and constitutional environment for the conservation and sustainable use of biodiversity'. More specifically, the project is in alignment with various strategies as defined in the NBSAP, in particular related to the rehabilitation of degraded ecosystems, and the promotion of farming practices that conserve the ecosystem.
Sustainable Development Goals (SDGs)	Sustainable Development Goal (SDG) 15 focuses specifically on managing forests sustainably, halting and reversing land and natural habitat degradation, successfully combating desertification and stopping biodiversity loss. On the

[29] Republic of Kenya, Land Degradation Neutrality Target Setting Final Report, 2020. https://knowledge.unccd.int/sites/default/files/ldn_targets/2020-09/Kenya%20LDN%20TSP%20Final%20Report%20%28English%29.pdf, pg. 29.
[30] LDN Target Setting Programme, https://www.unccd.int/actions/ldn-target-setting-programme
[31] Categorization of the proneness to erosion based on slope gradient classified according to the FAO relief classes (Flat 0-2%, Undulating 2-8%, Rolling 8-16%, Hilly 16-30%, Mountainous >30%).
[32] Republic of Kenya, Land Degradation Neutrality Target Setting Final Report, 2020, pg. 12. https://knowledge.unccd.int/sites/default/files/ldn_targets/2020-09/Kenya%20LDN%20TSP%20Final%20Report%20%28English%29.pdf

National Strategies/Plans	Alignment
	other hand, SDG 6 recognizes that social development and economic prosperity depend on the sustainable management and sharing of freshwater resources and ecosystems. The proposed project is quite relevant in driving these SDGs as it intends to promote reducing land degradation and habitat loss within LNB and thus contributing to the conservation of Lake Naivasha which is an important freshwater lake.
Aichi Biodiversity Targets	Kenya is a party to the Convention on Biological Diversity (CBD) and thus is expected to deliver on the Aichi Biodiversity Targets. The components of the proposed project will contribute to the following strategic goals of the Aichi targets: Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.
Vision 2030	Catchment Management initiative is one of the flagship projects under the Vision 2030 which is the country's long term development blueprint and more specifically, the rehabilitation of the Aberdares range is one of the priority water towers. The proposed project intends to contribute to the rehabilitation of this water tower by supporting the conservation of the Naivasha basin which falls within the Aberdares. Also, the project will contribute towards enhancing the adaptation capacity of communities to global climate change which one of the aspirations of the Vision 2013.
Medium Term Development Plan 2023-2027 (MTP4)	The Government is currently in the process of developing its fourth Medium Term Development Plan (MTP4) which will cover the period from 2023 to 2027. It is anticipated that MTP4 will build further on the Third Medium Term Development Plan, which provides specific targets, among others, for improving conservation of forest resources, water towers and wildlife. The project will contribute towards the realization of these objectives by supporting the conservation of LNB and reforestation of the Aberdares.
The Big 4 Agenda	One of the Big Four Agenda as pushed by the President of Kenya is to achieve food security and proper nutrition for all Kenyans. This requires increased and sustainable food production. One of the objectives of the proposed project is to promote sustainable agricultural production practices within the LNB that will ensure increased production, productivity and food safety.
National Climate Change Action Plan	Restoration of degraded land has important climate benefits, including the sequestration of carbon dioxide and improved climate resilience by recovering lost ecosystems. This project will, therefore, contribute to the realization of adaptation targets by promoting ecosystem-based adaptation.

National Strategies/Plans	Alignment
Lake Naivasha Integrated Management Plan 2012-2022	The proposed project intends to support the implementation of the strategies stipulated within the plan especially those relating to coordination framework, sustainable agriculture and forest conservation.
Green Economy Strategy and Implementation Plan	The Green Economy Strategy and Implementation Plan aspires to place the country towards a low carbon and sustainable development pathway. One of the key strategies stipulated in the adoption of sustainable production and consumption practices. This is one aspect that the project will promote in farming systems within the LNB.
National Tree Planting Strategy	Kenya has set an ambitious target to achieve a 10% national tree cover by 2022. Among the strategies to realize this is to rehabilitate gazetted forests and promote farm forestry. The proposed project will contribute to this agenda by supporting CFAs in forest landscape restoration activities.
County Integrated Development Plans (CIDPs) within the target counties	The CIDPs of the counties within the basin (Nyandarua, Nakuru and Narok) all aspire to increase County forest cover and promote sustainable agricultural activities. This project will, therefore, play a critical role in the realization of the goals and objectives set out in these CIDPs.

8. *Knowledge Management.* Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.

Utilizing available knowledge to apply best practices and lessons learned is important during both project design and implementation to achieving greater, more efficient, and sustainable conservation results. Sharing this information is then useful to other projects and initiatives to increase effectiveness, efficiency, and impact among the conservation community. Knowledge exchange is tracked and budgeted in Component 4 of the Results Framework. The total budget allocated for general knowledge management and communication is US$ 87,887 (4.92%).

Prior to finalizing the project design, existing lessons and best practices were gathered from various sources and incorporated into the project design. Please reference Section 3.7 to review the lessons and understand how they were utilized.

During project implementation and before the end of each project year, knowledge produced by or available to the Project will be consolidated from project stakeholders and exchanged with relevant actors by the project management unit (PMU). The annual LNB Stakeholder Forum will be an important outlet in this regard, but products will be shared more widely, including with other GEF and non-GEF funded projects, Government institutions, civil society organizations and academic and research institutions. This collected knowledge will be analyzed alongside project monitoring and evaluation data at the Annual Reflection and Planning meetings (to be held back-to-back with the LNB Stakeholders Forum). It is at this meeting that the theory of change will be reviewed, and modifications to the annual work plan and budget will be drafted. Making adjustments based on what works and what does not work should improve project results.

Lessons learned and best practices from the Project will be captured from field staff and reports and from stakeholders at the Annual Reflection and Planning meetings. These available lessons and best practices will then be documented in the semi-annual project progress reports (PPR) (with best practices annexed to the report).

The PMU Project Coordinator will ensure that the LNB Stakeholder group, such as OFPs, PSC members, project partners and other local stakeholders are informed of (and invited to) the Annual Reflection meetings, formal evaluations, and any documentation on lessons and best practices. These partners will receive all related documents, such as the Terminal Evaluation, technical reviews, market analyses, training manuals and guidelines, to ensure the sharing of important knowledge products.

A strategic communications plan has been budgeted for this Project and will include the following knowledge and communication products:

Table 4 Summary of knowledge and communications products

Components	Knowledge and communication products
Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin (LNB)	Report on key socio-economic trends and developments in the LNB and their potential threats to the environment Awareness raising products on the LNBIMP
Market and financial mechanisms for implementation of the LNBIMP	Study into potential mechanisms for ensuring sustainable finance and resource mobilization for implementation of the LNBIMP, including Imarisha. PES communications strategy and marketing products Report on opportunity/viability analysis and design for the establishment of a central basin investment fund Marketing products and supporting marketing events for sustainable horticulture products Awareness raising materials on the KS1758 certification
Improved land management in upper Lake Naivasha Basin	Report on training needs assessment Training manual on sustainable horticulture production Code of Conduct for LNB stakeholders, with related awareness raising materials Awareness raising materials on PFMPs
Knowledge Management and Monitoring and Evaluation	Inception report Basin-wide communication strategy Lessons-learnt report Semi-annual Project Progress Reports Terminal Evaluation

All knowledge and communication products produced by the Project will be shared on an online repository database hosted by Imarisha Lake Naivasha (see Component 1). This will allow a wider audience to gain knowledge from the Project. In addition, the PMU, in association with Imarisha will share these documents with stakeholders more directly through the annual LNB multi-stakeholder platform meetings.

9. *Monitoring and Evaluation. Describe the budgeted M & E plan.*

The project monitoring and evaluation plan has been developed in coordination with the Project Development Team, consisting of NETFUND, Imarisha Lake Naivasha, the Ministry of Environment and Forestry, WWF Kenya and the WWF GEF Agency. US$ 88,415 (4.95% of the total project cost) has been budgeted for M&E, which includes: staff time of a Monitoring, Evlauation and Learning Officer at 40% FTE (US$ 30,046), independent external consultants for the terminal evaluation (US$ 35,000), annual reflection meetings for adaptive management (US$10,678), and local travel costs for monitoring purposes (US$ 12,691).

Expenditure Category	Detailed Description	Component 4. Knowledge Management and Monitoring and Evaluation		
		Output 4.2.1 Project M&E plan implemented and project progress reports completed	*Output 4.2.2: Annual reflection workshops to track progress against workplan and results framework indicator targets for effective project management*	*TOTAL OUTCOME 4.2. Effective M&E ensured to inform effective adaptive project management*
International Consultants	Consultant for terminal evaluation	35,000		35,000
Total International Consultants		**35,000**	**-**	**35,000**
	Monitoring, Evaluation and Learning (MEL) Officer / Safeguards specialist	15,023	15,023	30,046
Total Staff Costs		**15,023**	**15,023**	**30,046**
	Planning and coordination meetings		10,678	10,678
Total Trainings, Workshops, Meetings		**-**	**10,678**	**10,678**
	Local travel costs	12,691		12,691
Total Travel		**12,691**	**-**	**12,691**
Grand Total		**62,714**	**25,701**	**88,415**

The Project will be monitored through the Results Framework (see **Error! Reference source not found.**). The Results Framework includes 1-2 indicators per Outcome. The baseline has been completed for each indicator along with feasible targets, set annually where relevant. A methodology for measuring indicator targets is provided. Indicator targets are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART), and disaggregated by sex where applicable. Component 4 of the Results Framework is dedicated to M&E, knowledge sharing and coordination. Relevant Core indicators have been included to provide a portfolio level understanding of progress towards the GEF Global Environmental Benefits (GEBs).

The MEL Officer will be responsible for gathering M&E data for the annual results framework tracking, and providing suggestions to the PMU Project Manager to improve the results, efficiency and management of the project. A summary of the main project reports is presented in Table **7**.

Table 7 Summary of project reports

M&E/ Reporting Document	How the document will be used	Timeframe	Responsible
Inception Report	Summarize decisions made during inception workshop, including changes to project design, budget, Results Framework, etc.	Within three months of inception workshop	**PMU Project Manager and M&E Officer**
Quarterly Financial Reports	Assess financial progress and management.	Every three months	**PMU F&A officer**
WWF Project Progress Report (PPR) with annual RF and workplan tracking.	Inform management decisions and drafting of annual workplan and budget; Share lessons internally and externally; Report to the PSC and GEF Agency on the project progress.	Every six months	**PMU Project Manager and M&E Officer**

Terminal Project Evaluation Report	External summative evaluation of the overall project; Recommendations for GEF and those designing related projects.	Before project completion	**External expert or organization**

An independent formal terminal evaluation has been budgeted by the project and will adhere to WWF and GEF guidelines and policies. The Terminal Evaluation will be completed before the official close of the project. The evaluation provides an opportunity for adaptive management as well as sharing of lessons and best practices for related and future projects. The Operational Focal Point will be briefed and debriefed before and after the evaluation and will have an opportunity to comment on the draft and final report.

An annual reflection workshop has been budgeted for the PMU and other project stakeholders to review project progress and challenges to date, taking into account results framework tracking, work plan tracking, stakeholder feedback and quarterly field reports to review project strategies, risks and the theory of change (ToC). The results of this workshop will inform project decision making (i.e., refining the ToC, informing Project Progress Reports and Annual Workplans and Budgets).

10. *Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels, as appropriate. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project will deliver socio-economic benefits on a number of fronts:

1. By focusing on improved agricultural production methods, and streamlining the value chain, the project will directly benefit participating farmer groups and other value chain actors.
2. Direct benefits to local communities are expected from the proposed restoration and management of land, forest and wetland ecosystems, by generating associated increases in productivity, and benefits from forest (both timber and non-timber forest products) and wetland (e.g. fish) products.
3. Overall the above direct project benefits will increase income and jobs.
4. Through its specific gender focus, furthermore, the project will result in more inclusion/access by women to productive activities and decision-making processes at the local level on natural resources management.
5. In the longer run, the project will increase the resilience of the ecosystem which will ensure the longer-term economic function of such systems in many different ways, both through direct services such as the productivity of lands, water provisioning, fish and forest products, as well as through indirect ecosystem services such as opportunities for tourism development in the LNB catchment, including wildlife areas and biodiversity-rich wetland systems.
6. Finally, through the project's investments in capacity building and awareness raising, it will open up opportunities for individuals and partner organizations to develop spin-off opportunities related to integrated land-use planning, sustainable agriculture, and restoration/management of land and forest ecosystems.

PART IV: ANNEXES

Annex A: Project Results Framework (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

							Targets (annual, or mid-term and close)				
Indicator / unit	**Definition (note if cumulative)**	**Method/ source**	**Frequency**	**Responsible**	**Disaggregation**	**Baseline**	**YR1**	**YR2**	**YR3**	**Notes/ Assumptions**	**Cost to monitor**
Objective level indicators											
Project Objective: to restore forest ecosystems and reduce land degradation in the LNB catchment for increased protection of Lake Naivasha's water resources, biodiversity, and associated ecosystem services to support the local and national economy											
Objective indicator 1: Area of land restored (forest and forest land) (GEF Core Indicator 3/ Sub-indicator 3.2))	Restored is defined as process of repairing and /or assisting the recovery of land and ecosystems that have been degraded, damaged, destroyed, or modified to an extent that the land and/or ecosystem cannot fulfill its ecological functions and/or fully deliver environmental services. Activities may include (i) ecosystem restoration that reduces the causes of decline and improves basic functions. And (ii) ecological restoration that enhances native habitats, sustains ecosystem resilience, and conserves biodiversity. For the sake of this project, the area of land restored would be evidenced by an increase in vegetation cover through natural regeneration of at least 25% Cumulative	Measuring area of land restored by the project through georeferencing of restored areas and presentation in GIS map	Annual	KFS	By target area and type of land	0 ("new" improvements = those made within project period)	500ha	1,000ha	1,600ha	Assuming that external pressures to forests will not further increase	$5,000 (production of GIS maps M&E and project staff time covered by project funding)
Objective indicator 2: Area of landscapes under improved management to benefit biodiversity (non-	Defined as the landscape area being managed to benefit biodiversity, but which is not certified (4.1) and landscape under	Georeferencing areas covered by PFMPs and farms adopting improved	End of project	PMU	GEF sub-indicators (4.1 and 4.3)	0 ("new" improvements = those made within		35,086 ha	37,086 ha	Qualitative analysis of performance under this indicator will be	$5,000 (production of GIS maps M&E and project staff

							Targets (annual, or mid-term and close)				
Indicator / unit	**Definition (note if cumulative)**	**Method/ source**	**Frequency**	**Responsible**	**Disaggregation**	**Baseline**	**YR1**	**YR2**	**YR3**	**Notes/ Assumptions**	**Cost to monitor**
certified) (GEF Core Indicator 4/ Sub-indicator 4.1 and 4.3))	sustainable land management in production systems (4.3). Shall include the existence of participatory forest management plans (PFMPs) to improve forest management as well as productive land brought under improved farming practices Cumulative	production practices				project[33]				through methods described under Outcome 3.1 and 3.2 indicators (see below)	time covered by project funding)
Objective indicator 3: Carbon sequestered or emissions avoided in the sector of Agriculture, Forestry, and other land use (GEF Core Indicator 6/ Sub-indicator 6.1)	Carbon sequestration is defined as the process of increasing the carbon content of a reservoir/pool other than the atmosphere (IPCC, 2012). Avoided emissions refers to reduced emissions due to avoided deforestation or forest degradation, sustainable forest management, and improved practices on other land uses such as in agriculture. Calculates the carbon sequestration value resulting from project interventions Cumulative	Calculating the cumulative consequence of improved agricultural practices and land restoration on carbon sequestration value using EX-ACT tool, with inputs from remote sensing and ground truthing over a 20 year period.	End of project	PMU	Direct and indirect emissions	1M tCO2eq loss per year			1,413,610 tCO2	Assumption that the impacts of project activities can be distinguished from other influences	$0 (M&E and project staff time covered by project funding)
Objective indicator 4: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment (GEF Core Indicator 11)	Direct beneficiaries are the individual people who receive targeted support from a given GEF project/activity and/or who use the specific resources that the project maintains or enhances. . Individuals are aware that they are receiving that support and/or aware they use the	Aggregates the total number of direct beneficiaries from reports on project activities; population count of priority communities targeted	End of project	PMU	By target area, gender, target group (e.g. community members, farmers, Govt officials, private sector and CSOs etc.) and types of benefits	0 (“new” improvements = those made within project period)	500	1,500	3,200	At least 40% female	$0 (M&E and project staff time covered by project funding)

							Targets (annual, or mid-term and close)				
Indicator / unit	**Definition (note if cumulative)**	**Method/ source**	**Frequency**	**Responsible**	**Disaggregation**	**Baseline**	**YR1**	**YR2**	**YR3**	**Notes/ Assumptions**	**Cost to monitor**
	specific resource. Cumulative	through project support									
Outcome indicators											
Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin											
Outcome 1.1: Harmonized inter-sectoral and multi-stakeholder planning and management across LNB and county plans for integrated, inclusive and sustainable land management in LNB											
Outcome 1.1 indicator Number of ILM plans meeting targeted criteria in ILM Scorecard (environmental and social management effectiveness, alignment, etc)	Targeted criteria- these are annual benchmarks to be defined in the scorecard, which will include, but not be limited to: existence of alignment between LNBIMP¨ and the County Development Plans, and environmental and social sustainability criteria Non-cumulative	Analysis of LNBIMP (1) and Annual County Development Plans (2 annually) using scorecard	Annual	PMU	By type of plan (LNBIMP, Annual County Development Plans)	0 ("new" improvements = those made within project period)	2	2	3	Development of a score-card system for analysis of county development plans foreseen. Note that the County Development Plans can only be influenced, as they are not under the control of the project	$0 (M&E and project staff time covered by project funding)
Component 2: Promotion of sustainable food production practices and responsible value chains											
Outcome 2.1: Improved access to finance for implementation of restoration and improved land management activities in LNB											
Outcome 2.1 indicator Amount of new leveraged funding ($) for implementation of the LNBIMP	Leveraged funding: secured and committed funding and investments through donor & investor engagement (based on the resource mobilization strategy to be developed under Outcome 2.1), the PES scheme and engagement with finance institutions Cumulative	Review of secured and committed funding and investment from various sources	Annual	PMU	Disaggregated by type and source of funding and investment	0	0	100,000 US$	250,000 US$	The level of funding potentially leveraged will depend in part on the speed of operationalizatio n of the new Water Towers Bill Current income through PES is appr. 20,000 US$ p.a.	$0 (M&E and project staff time covered by project funding)[34]
Outcome 2.1: Improved access to markets for sustainable agricultural produce											

							Targets (annual, or mid-term and close)				
Indicator / unit	**Definition (note if cumulative)**	**Method/ source**	**Frequency**	**Responsible**	**Disaggregation**	**Baseline**	**YR1**	**YR2**	**YR3**	**Notes/ Assumptions**	**Cost to monitor**
Outcome 2.2 indicator % increase in market sales for sustainable agricultural produce	Sustainable agriculture produce: includes all agricultural products marketed as sustainable at the Green Shop and other outlets associated with the project Cumulative	Compares sales of sustainable produce at Green Shop and other outlets for with the baseline	Annual	PMU MEL Program Officer	Actual Sales by outlet	0	20%	50%	100%	Uptake will be incremental as more market access points get identified	$0 (M&E and project staff time covered by project funding)
Component 3: Improved land management in upper LNB											
Outcome 3.1: Improved capacity of LNB smallholder farmers for the transition towards sustainable and biodiversity-friendly agricultural practices											
Outcome 3.1 indicator Number of farmers in the target areas applying sustainable horticulture production / value chain practices.	Sustainable horticulture production / value chain practices: minimal soil disturbance, permanent soil cover, drip irrigation and rainwater harvesting, grass barriers and contour farming, diversified crop rotations and crop combinations, integrated pest management and green/blue label pesticides when only necessary, etc. [35] Cumulative	Survey to establish adopted farming methods, with ground-truthing. To be counted, farmers must apply at least one of the production practices listed in survey.	Annual	PMU	By practice and gender	0	0	1,350	2,700	Uptake will be incremental as successful farmer groups are inspiring others	$5,000
Outcome 3.2: Priority forest land management and restoration interventions implemented in the Lake Naivasha upper catchment area for enhanced water and biodiversity protection											
Outcome 3.2 indicator Performance of the PFMPs	Performance: the level of implementation of PFMPs as a means towards improved forest management Cumulative	Score-card to be developed; annual participatory review with CFAs and KFS	Annual	KFS	By forest station	0	0	TBD	TBD	The score-card system will define specific indicators for performance	$0 (M&E and project staff time covered by project funding)
Component 4: Knowledge Management and Monitoring & Evaluation											
Outcome 4.1: Effective Knowledge Management and communications ensured to support long-term support for Lake Naivasha Basin with potential for upscaling and replication											

[35] Minimal soil disturbance (through reduced or no-tillage) in order to preserve soil structure, soil fauna and organic matter; Permanent soil cover (cover crops, residues and mulches) to protect the soil and contribute to the suppression of weeds; Drip irrigation, ideally combined with rainwater harvesting, to minimize water use; Grass barriers and contour farming to avoid erosion and sediment runoff; Diversified crop rotations, and crop combinations, which promote soil micro-organisms and disrupt plant pests, weeds and diseases; Where pesticides are needed, as a last resort, only green and blue label pesticides would be applied. Other practices to be determined through project.

							Targets (annual, or mid-term and close)				
Indicator / unit	**Definition (note if cumulative)**	**Method/ source**	**Frequency**	**Responsible**	**Disaggregation**	**Baseline**	**YR1**	**YR2**	**YR3**	**Notes/ Assumptions**	**Cost to monitor**
Outcome 4.1 indicator Number of KM products and communication events	Counts the number of knowledge management products and communication events delivered by the project KM: knowledge management product CE: communication event Non-Cumulative	Review of learning products and event reports	Annual	MEL Program Officer	By project By type of product and, event	0	2 CE	1 KM 1 CE	2 KM 2 CE		$0 (M&E and project staff time covered by project funding)
Outcome 4.2: Effective M&E ensured to inform effective adaptive project management											
Outcome 4.2 indicator Number of MEL reports and reflection exercises	Counts the number of Monitoring, Evaluation and Learning (Knowledge Management) products delivered by the project. PPR: Project progress report PCR: Project close report QFR: Quarterly financial report RE: Reflection exercise TE : Terminal evaluation Non-Cumulative	Review of Monitoring, Evaluation products	Annual	MEL Program Officer	By project By type of product	0	7 2 PPR 4 QFR 1 RE	7 2 PPR 4 QFR 1 RE	9 2 PPR 1 PCR 4 QFR 1 RE 1 TE		$0 (M&E and project staff time covered by project funding)

Annex B: Response to Project Reviews (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion, and responses to comments from the Convention Secretariat and STAP at PIF).

GEFSEC PIF Review Round 3

WWF GEF (Original) Response Matrix **GEF Sec Review of "Lake Naivasha Ecosystem Based Management Project"** **(GEF ID 10589) – January 24, 2021**	**GEF Agency Response**
ADDITIONAL COMMENTS	
Additional recommendations to be considered by Agency at the time of CEO endorsement/approval.	
To inform the design of the project's interventions on the PES mechanism during PPG, please refer to the related STAP advisory document: http://stapgef.org/sites/default/files/stap/wp-content/uploads/2013/05/Payments-for-Environmental-Services-and-GEF.pdf Likewise, to inform the design of project interventions related to behavior change (which notably includes here by-laws, code of conduct, PES and financial incentives, knowledge sharing), please refer to related STAP contributions: https://www.stapgef.org/resources/advisory-documents/why-behavioral-C73change-matters-gef-and-what-do-about-it	Details regarding the consideration of STAP guidance on PES and behaviour change have been included in the alternative scenario section and the lessons learned section of the ProDoc (section 3.7).

Annex C: Status of Utilization of Project Preparation Grant (PPG) (Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF:			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Project Design	38,000	25,278	12,722
Stakeholder Engagement	6,000	6,000	
Safeguards and Gender Actions Plans	6,000	6,000	
Total	50,000	37,278	12,722

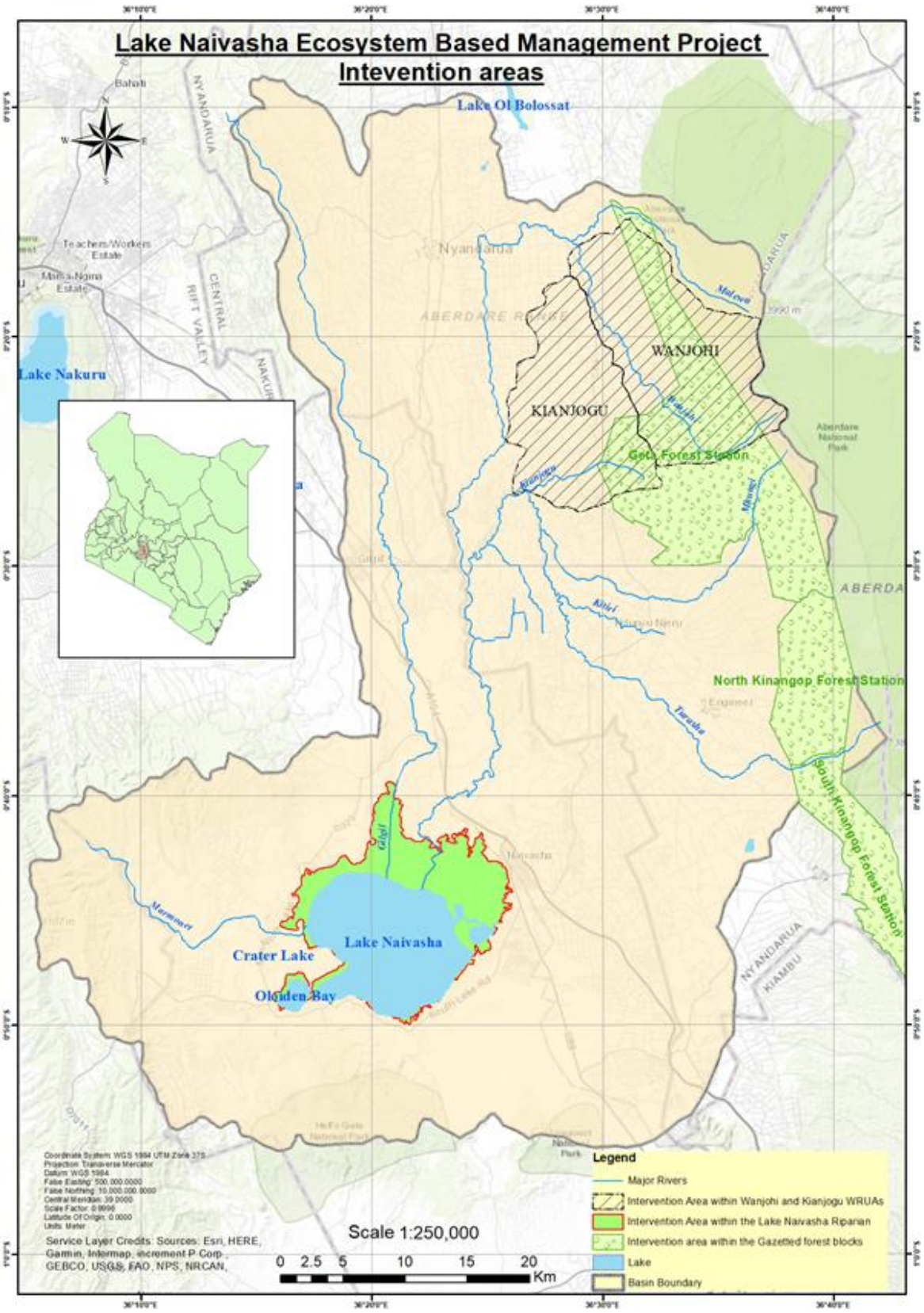
If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

Annex D: Calendar of Expected Reflows (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF Trust Funds or to your Agency (and/or revolving fund that will be set up)

N/A

Annex E: Project Map(s) and Coordinates
Please attach the geographical location of the project area, if possible.



Geta forest reserve is located between Longitude 36° 29.843'E and 36° 40.035'E and Latitude 0° 14.217'S and 0° 31.518'S. The station borders Ndaragwa Forest station to the North East and North Kinangop to the South East.

North Kinangop forest reserve is located between Longitude 36° 37.305'E and 36° 40.904'E and Latitude 0° 31.200'S and 0° 38.884'S. The station borders Geta Forest station to the North, South Kinangop to the South and Gatare forest station to the east.

South Kinangop forest borders North Kinangop forest station to the North and is between Longitudes 36° 38.207'E to 36° 44.276'E and latitude 0° 38.090'S to 0° 48.429'S

All the forest stations are located within the Nyandarua County and forms part of the extensive Aberdare ranges on the West. The Aberdare Ranges are a mountain range located in central Kenya, in the East African Rift Valley. With an elevation of 5,499 – 14,001 ft (1,675–4,267 m), they are part of the Eastern branch of the East African Rift System, which runs from the Red Sea in the north to Zimbabwe in the south. The Aberdare Ranges stretch for approximately 140 km and have a maximum width of 60 km.

The two WRUAs (Wanjohi and Kianjogu) span from 36° 38.005'E to 36° 25.812'E and 0° 14.824'S to 0° 27.621'S. Wanjohi WRUA immediately borders Geta Forest station to the East. The two WRUAs are a part of the Kinangop Plateau which has an average altitude of approximately 6,500 feet (2,000 meters) above sea level. This high elevation and its location in the central highlands result in a cooler, more temperate climate than the surrounding lowlands. They both boarder Geta Forest station to the West.

Note: The sites targeted for on-the-ground intervention include:

- For the agricultural part of the project (Outcome 3.1), the project will target the upper catchment of Lake Naivasha as the area of focus, in particular areas within the catchment of the two main rivers flowing into the Lake Naivasha basin: the river Kianjogu (in Kianjogu WRUA) and the river Wanjohi (in Wanjohi WRUA), which are the main tributaries of River Malewa, in turn the main source of water majority of the targeted area falls in the Upper zone of the catchment (>2500 m above sea level) while a small percentage falls in the middle zone of the catchment (2000 m-2500 m above sea level).
- For the restoration work (Outcome 3.2), the project will target a number of areas where degradation of forests is increasingly causing erosion and affecting water retention, in particular in the upper escarpments of the Aberdares. Restoration sites were identified, among others, on the basis of earlier assessments undertaken as part of the Lake Naivasha FLR project. The focus will be on three degraded forest areas: Sophfia Beat in Geta Forest Station (1200 ha) and two sites in South Kinangop, of 16 and 23 ha respectively (North Kinangop is already covered under the Green Zones project).
- In addition, the project will focus on improving the overall management of forest landscapes in the Geta, Kinangop North and Kinangop South Forest Stations, which cover the upper extents of the LNB catchment towards the Aberdares, the area most prone to erosion. The project will support the development and operationalization of Participatory Forest Management Plans for these Forest Stations under Outcome 3.2.
- Finally, the Lake Naivasha riparian area is targeted for improved stakeholder engagement and participation in the management of the Lake Zone through the development and roll-out of a Code of Conduct (Outcome 3.2).

Annex F: GEF 7 Core Indicator Worksheet

Use this Worksheet to compute those indicator values as required in Part I, Table F to the extent applicable to your proposed project. Progress in programming against these targets for the program will be aggregated and reported at anytime during the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Core Indicator 1	**Terrestrial protected areas created or under improved management for conservation and sustainable use**					***(Hectares)***
			Hectares (1.1+1.2)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 1.1	Terrestrial protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Indicator 1.2	Terrestrial protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score		
				Baseline	Achieved	
				Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Core Indicator 2	**Marine protected areas created or under improved management for conservation and sustainable use**					***(Hectares)***
			Hectares (2.1+2.2)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	*TE*
Indicator 2.1	Marine protected areas newly created					
Name of Protected Area	WDPA ID	IUCN category	Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Indicator 2.2	Marine protected areas under improved management effectiveness					
Name of Protected Area	WDPA ID	IUCN category	Hectares	METT Score		
				Baseline	Achieved	
				PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
		Sum				
Core Indicator 3	**Area of land restored**					***400***
			Hectares (3.1+3.2+3.3+3.4)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.1	Area of degraded agricultural land restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.2	Area of forest and forest land restored					
Degraded riparian land in project area			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE

restored through natural regeneration and active rehabilitation						
			1,600	*1,600*		
Indicator 3.3	Area of natural grass and shrublands restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 3.4	Area of wetlands (including estuaries, mangroves) restored					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 4	**Area of landscapes under improved practices (hectares; excluding protected areas)**					***60***
			Hectares (4.1+4.2+4.3+4.4)			
			Expected		Expected	
			PIF stage	Endorsement	MTR	TE
			37,682	*37,086*		
Indicator 4.1	Area of landscapes under improved management to benefit biodiversity					
			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			35,682	*35,086*		
Indicator 4.2	Area of landscapes that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 4.3	Area of landscapes under sustainable land management in production systems					
Agricultural lands in project area brought under improved management, through support to smallholder farmers on sustainable production practices			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
			2,000	*2,000*		
Indicator 4.4	Area of High Conservation Value Forest (HCVF) loss avoided					
Include documentation that justifies HCVF			Hectares			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 5	**Area of marine habitat under improved practices to benefit biodiversity**					***(Hectares)***

Indicator 5.1	Number of fisheries that meet national or international third-party certification that incorporates biodiversity considerations					
Third party certification(s):			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 5.2	Number of large marine ecosystems (LMEs) with reduced pollution and hypoxial					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 5.3	Amount of Marine Litter Avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 6	**Greenhouse gas emission mitigated**					***(Metric tons of CO_2e)***
			Expected metric tons of CO_2e (6.1+6.2)			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)		*1,413,610 t*	*1,413,610 t*		
	Expected CO2e (indirect)					
Indicator 6.1	Carbon sequestered or emissions avoided in the AFOLU sector					
			Expected metric tons of CO_2e			
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.2	Emissions avoided Outside AFOLU					
			Expected metric tons of CO_2e			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
	Expected CO2e (direct)					
	Expected CO2e (indirect)					
	Anticipated start year of accounting					
	Duration of accounting					
Indicator 6.3	Energy saved					
			MJ			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 6.4	Increase in installed renewable energy capacity per technology					
		Technology	Capacity (MW)			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		(select)				
		(select)				
Core Indicator 7	**Number of shared water ecosystems (fresh or marine) under new or improved cooperative management**					***(Number)***
Indicator 7.1	Level of Transboundary Diagnostic Analysis and Strategic Action Program (TDA/SAP) formulation and implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.2	Level of Regional Legal Agreements and Regional Management Institutions to support its					

	implementation					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.3	Level of National/Local reforms and active participation of Inter-Ministerial Committees					
		Shared water ecosystem	Rating (scale 1-4)			
			PIF stage	Endorsement	MTR	TE
Indicator 7.4	Level of engagement in IWLEARN through participation and delivery of key products					
		Shared water ecosystem	Rating (scale 1-4)			
			Rating		Rating	
			PIF stage	Endorsement	MTR	TE
Core Indicator 8	**Globally over-exploited fisheries Moved to more sustainable levels**					***(Metric Tons)***
Fishery Details			Metric Tons			
			PIF stage	Endorsement	MTR	TE
Core Indicator 9	**Reduction, disposal/destruction, phase out, elimination and avoidance of chemicals of global concern and their waste in the environment and in processes, materials and products**					***(Metric Tons)***
			Metric Tons (9.1+9.2+9.3)			
			Expected		Achieved	
			PIF stage	PIF stage	MTR	TE
Indicator 9.1	Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)					
POPs type			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
(select)	(select)	(select)				
(select)	(select)	(select)				
(select)	(select)	(select)				
Indicator 9.2	Quantity of mercury reduced					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.3	Hydrochloroflurocarbons (HCFC) Reduced/Phased out					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.4	Number of countries with legislation and policy implemented to control chemicals and waste					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.5	Number of low-chemical/non-chemical systems implemented particularly in food production, manufacturing and cities					
		Technology	Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 9.6	Quantity of POPs/Mercury containing materials and products directly avoided					
			Metric Tons			
			Expected		Achieved	
			PIF stage	Endorsement	PIF stage	Endorsement

Core Indicator 10	**Reduction, avoidance of emissions of POPs to air from point and non-point sources**					***(grams of toxic equivalent gTEQ)***
Indicator 10.1	Number of countries with legislation and policy implemented to control emissions of POPs to air					
			Number of Countries			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Indicator 10.2	Number of emission control technologies/practices implemented					
			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
Core Indicator 11	**Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment**					***400***
Direct beneficiaries of the project include 2,700 smallholder farmers as well as an estimated 500 representatives of LNB stakeholder organizations and communities. Of these, it is expected that around 40% will be women.			Number			
			Expected		Achieved	
			PIF stage	Endorsement	MTR	TE
		Female	*1,280*	*1,280*		
		Male	*1,920*	*1,920*		
		Total	*3,200*	*3,200*		

Annex G: GEF Project Taxonomy Worksheet

Use this Worksheet to list down the taxonomic information required under Part I, item G by ticking the most relevant keywords/ topics/themes that best describe this project.

Level 1	Level 2	Level 3	Level 4
☒**Influencing models**			
	☐**Transform policy and regulatory environments**		
	☒**Strengthen institutional capacity and decision-making**		
	☒**Convene multi-stakeholder alliances**		
	☐**Demonstrate innovative approaches**		
	☐**Deploy innovative financial instruments**		
☒**Stakeholders**			
	☐**Indigenous Peoples**		
	☒**Private Sector**		
		☐Capital providers	
		☒Financial intermediaries and market facilitators	
		☐Large corporations	
		☒SMEs	
		☒Individuals/Entrepreneurs	
		☐Non-Grant Pilot	
		☐Project Reflow	
	☒**Beneficiaries**		
	☒**Local Communities**		
	☒**Civil Society**		
		☒Community Based Organization	
		☒Non-Governmental Organization	
		☐Academia	
		☐Trade Unions and Workers Unions	
	☒**Type of Engagement**		
		☒Information Dissemination	
		☒Partnership	
		☒Consultation	
		☒Participation	
	☒**Communications**		
		☒Awareness Raising	
		☐Education	
		☐Public Campaigns	
		☒Behavior Change	
☒**Capacity, Knowledge and Research**			
	☐**Enabling Activities**		
	☒**Capacity Development**		
	☒**Knowledge Generation and Exchange**		
	☐**Targeted Research**		
	☒**Learning**		
		☐Theory of Change	
		☒Adaptive Management	
		☐Indicators to Measure Change	
	☐**Innovation**		
	☒**Knowledge and Learning**		
		☒Knowledge Management	
		☐Innovation	
		☒Capacity Development	
		☐Learning	
	☒**Stakeholder Engagement Plan**		
☒**Gender Equality**			

	☒**Gender Mainstreaming**		
		☒Beneficiaries	
		☐Women groups	
		☒Sex-disaggregated indicators	
		☒Gender-sensitive indicators	
	☒**Gender results areas**		
		☐Access and control over natural resources	
		☒Participation and leadership	
		☒Access to benefits and services	
		☒Capacity development	
		☒Awareness raising	
		☒Knowledge generation	
☒**Focal Areas/Theme**			
	☐**Integrated Programs**		
		☐Commodity Supply Chains ([36]Good Growth Partnership)	
			☐Sustainable Commodities Production
			☐Deforestation-free Sourcing
			☐Financial Screening Tools
			☐High Conservation Value Forests
			☐High Carbon Stocks Forests
			☐Soybean Supply Chain
			☐Oil Palm Supply Chain
			☐Beef Supply Chain
			☐Smallholder Farmers
			☐Adaptive Management
		☐Food Security in Sub-Sahara Africa	
			☐Resilience (climate and shocks)
			☐Sustainable Production Systems
			☐Agroecosystems
			☐Land and Soil Health
			☐Diversified Farming
			☐Integrated Land and Water Management
			☐Smallholder Farming
			☐Small and Medium Enterprises
			☐Crop Genetic Diversity
			☐Food Value Chains
			☐Gender Dimensions
			☐Multi-stakeholder Platforms
		☐Food Systems, Land Use and Restoration	
			☐Sustainable Food Systems
			☐Landscape Restoration
			☐Sustainable Commodity Production
			☐Comprehensive Land Use Planning
			☐Integrated Landscapes
			☐Food Value Chains
			☐Deforestation-free Sourcing
			☐Smallholder Farmers
		☐Sustainable Cities	
			☐Integrated urban planning
			☐Urban sustainability framework
			☐Transport and Mobility
			☐Buildings
			☐Municipal waste management
			☐Green space
			☐Urban Biodiversity
			☐Urban Food Systems
			☐Energy efficiency
			☐Municipal Financing
			☐Global Platform for Sustainable Cities

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			☐ Urban Resilience
	☒ **Biodiversity**		
		☐ Protected Areas and Landscapes	
			☐ Terrestrial Protected Areas
			☐ Coastal and Marine Protected Areas
			☐ Productive Landscapes
			☐ Productive Seascapes
			☐ Community Based Natural Resource Management
		☒ Mainstreaming	
			☐ Extractive Industries (oil, gas, mining)
			☐ Forestry (Including HCVF and REDD+)
			☐ Tourism
			☒ Agriculture & agrobiodiversity
			☐ Fisheries
			☐ Infrastructure
			☐ Certification (National Standards)
			☐ Certification (International Standards)
		☐ Species	
			☐ Illegal Wildlife Trade
			☐ Threatened Species
			☐ Wildlife for Sustainable Development
			☐ Crop Wild Relatives
			☐ Plant Genetic Resources
			☐ Animal Genetic Resources
			☐ Livestock Wild Relatives
			☐ Invasive Alien Species (IAS)
		☒ Biomes	
			☐ Mangroves
			☐ Coral Reefs
			☐ Sea Grasses
			☐ Wetlands
			☒ Rivers
			☒ Lakes
			☐ Tropical Rain Forests
			☒ Tropical Dry Forests
			☐ Temperate Forests
			☐ Grasslands
			☐ Paramo
			☐ Desert
		☐ Financial and Accounting	
			☐ Payment for Ecosystem Services
			☐ Natural Capital Assessment and Accounting
			☐ Conservation Trust Funds
			☐ Conservation Finance
		☐ Supplementary Protocol to the CBD	
			☐ Biosafety
			☐ Access to Genetic Resources Benefit Sharing
	☒ **Forests**		
		☒ Forest and Landscape Restoration	
			☐ REDD/REDD+
		☐ Forest	
			☐ Amazon
			☐ Congo
			☐ Drylands
	☒ **Land Degradation**		
		☒ Sustainable Land Management	
			☒ Restoration and Rehabilitation of Degraded Lands
			☒ Ecosystem Approach
			☐ Integrated and Cross-sectoral approach
			☒ Community-Based NRM
			☒ Sustainable Livelihoods

			☒ Income Generating Activities
			☒ Sustainable Agriculture
			☐ Sustainable Pasture Management
			☐ Sustainable Forest/Woodland Management
			☒ Improved Soil and Water Management Techniques
			☐ Sustainable Fire Management
			☐ Drought Mitigation/Early Warning
		☐ Land Degradation Neutrality	
			☐ Land Productivity
			☐ Land Cover and Land cover change
			☐ Carbon stocks above or below ground
		☐ Food Security	
	☐ **International Waters**		
		☐ Ship	
		☐ Coastal	
		☐ Freshwater	
			☐ Aquifer
			☐ River Basin
			☐ Lake Basin
		☐ Learning	
		☐ Fisheries	
		☐ Persistent toxic substances	
		☐ SIDS : Small Island Dev States	
		☐ Targeted Research	
		☐ Pollution	
			☐ Persistent toxic substances
			☐ Plastics
			☐ Nutrient pollution from all sectors except wastewater
			☐ Nutrient pollution from Wastewater
		☐ Transboundary Diagnostic Analysis and Strategic Action Plan preparation	
		☐ Strategic Action Plan Implementation	
		☐ Areas Beyond National Jurisdiction	
		☐ Large Marine Ecosystems	
		☐ Private Sector	
		☐ Aquaculture	
		☐ Marine Protected Area	
		☐ Biomes	
			☐ Mangrove
			☐ Coral Reefs
			☐ Seagrasses
			☐ Polar Ecosystems
			☐ Constructed Wetlands
	☐ **Chemicals and Waste**		
		☐ Mercury	
		☐ Artisanal and Scale Gold Mining	
		☐ Coal Fired Power Plants	
		☐ Coal Fired Industrial Boilers	
		☐ Cement	
		☐ Non-Ferrous Metals Production	
		☐ Ozone	
		☐ Persistent Organic Pollutants	
		☐ Unintentional Persistent Organic Pollutants	
		☐ Sound Management of chemicals and Waste	
		☐ Waste Management	
			☐ Hazardous Waste Management
			☐ Industrial Waste
			☐ e-Waste
		☐ Emissions	
		☐ Disposal	
		☐ New Persistent Organic Pollutants	

		☐ Polychlorinated Biphenyls	
		☐ Plastics	
		☐ Eco-Efficiency	
		☐ Pesticides	
		☐ DDT - Vector Management	
		☐ DDT - Other	
		☐ Industrial Emissions	
		☐ Open Burning	
		☐ Best Available Technology / Best Environmental Practices	
		☐ Green Chemistry	
	☐ **Climate Change**		
		☐ **Climate Change Adaptation**	
			☐ Climate Finance
			☐ Least Developed Countries
			☐ Small Island Developing States
			☐ Disaster Risk Management
			☐ Sea-level rise
			☐ Climate Resilience
			☐ Climate information
			☐ Ecosystem-based Adaptation
			☐ Adaptation Tech Transfer
			☐ National Adaptation Programme of Action
			☐ National Adaptation Plan
			☐ Mainstreaming Adaptation
			☐ Private Sector
			☐ Innovation
			☐ Complementarity
			☐ Community-based Adaptation
			☐ Livelihoods
		☐ **Climate Change Mitigation**	
			☐ Agriculture, Forestry, and other Land Use
			☐ Energy Efficiency
			☐ Sustainable Urban Systems and Transport
			☐ Technology Transfer
			☐ Renewable Energy
			☐ Financing
			☐ Enabling Activities
		☐ **Technology Transfer**	
			☐ Poznan Strategic Programme on Technology Transfer
			☐ Climate Technology Centre & Network (CTCN)
			☐ Endogenous technology
			☐ Technology Needs Assessment
			☐ Adaptation Tech Transfer
		☐ **United Nations Framework on Climate Change**	
			☐ Nationally Determined Contribution