



WWF GEF Project Document *Cover Page*

Project Title:	Lake Naivasha Basin Ecosystem Based Management
GEF Project ID:	10589
WWF-US Project ID:	G0027
Countries:	Kenya
Project Duration:	48 months
Project Type:	MSP
GEF Trust Fund(s):	
GEF Focal Area(s):	Biodiversity; Land Degradation
GEF Focal Area Objective(s):	BD 1-1 Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors
	LD 1-1- Maintain or improve flow of agro-ecosystem services to sustain food production and livelihoods through Sustainable Land Management (SLM)
Implementing Agency:	World Wildlife Fund, Inc.
Lead Executing Agency:	NETFUND

GEF Project Cost:	US\$ 1,785,422
GEF Agency Fee:	US\$ 160,688
Project Co-financing:	US\$ 10,525,689
Total Project Cost:	US\$ 12,471,799

WWF GEF Agency Contact:	Astrid Breuer, Senior Program Officer
WWF Network Team Contact:	William Ojwang, Manager, African Rift Lakes (ARL)
Version Date:	06 April 2023

Contents

ACRONYMS AND ABBREVIATIONS	4
EXECUTIVE SUMMARY	7
SECTION 1: PROJECT BACKGROUND AND SITUATION ANALYSIS.....	9
1.1 Project Scope and Environmental Significance.....	9
1.2 Environmental Problem(s), Threats and Root Causes	12
1.3 Barriers addressed by the project.....	13
1.4 National and Sectoral Context	15
1.5 Baseline Scenario	16
LNB stakeholder engagement and coordination	17
Forest Landscape Restoration (FLR).....	17
Sustainable agriculture	18
Payment for Ecosystem Services	19
Water resources management	19
1.6 Coordination with other relevant GEF & non-GEF Initiatives	20
SECTION 2: PROJECT EXECUTION STRATEGY	21
2.1 Project Objective and Theory of Change	21
Project Objective.....	21
Theory of Change.....	21
2.2 Project Components and Expected Outcomes	23
2.3 Institutional Arrangements.....	33
Project supervision	34
Financial management.....	34
2.4 Stakeholder Engagement.....	35
Stakeholder engagement during project development.....	35
Stakeholder engagement during project execution	36
2.5 Gender	37
Gender assessment (context)	37
Gender action plan for project execution (summary)	39
2.6 Safeguards	40
Roles and responsibilities	41
Financial arrangements	41
2.7 Monitoring & Evaluation.....	42
2.8 Budget.....	43

2.9 Private Sector Engagement.....	46
SECTION 3: GEF ALIGNMENT AND JUSTIFICATION	46
3.1 Incremental Cost Reasoning and Global Environmental Benefits	46
Incremental cost reasoning and expected contributions	46
Global environmental benefits	48
3.2 Alignment with GEF Focal Area and/or Impact Program Strategies.....	51
3.3 Socioeconomic Benefits	51
3.4 Risks and proposed Mitigation Measures.....	52
General risks	52
Climate Change Risks	56
3.5 Consistency with National Priorities or Plans	58
3.6 Innovativeness, Sustainability & Potential for Scaling up.....	60
Innovation	60
Sustainability.....	60
Scaling up	61
3.7 Lessons learned during project preparation and from other relevant projects.....	61
SECTION 4: TECHNICAL APPENDICES (PUT IN ORDER AS REFERENCED IN TEXT):	66
Annex 1: Project Map(s) with geo-coordinates	67
Annex 2: Results Chain.....	69
Annex 3: High Level Work Schedule	70
Annex 4: GEF Results Framework	78
Annex 5: Draft ToRs for PMU	84
Annex 6: Site Selection	95
Annex 7: Knowledge Management and Communications.....	98
Annex 8: Climate Risk Screening Tool.....	100

ACRONYMS AND ABBREVIATIONS

AfDB	African Development Bank
AFR100	African Forest Landscape Restoration Initiative
AWPB	Annual Work Plan and Budget
CBD	Convention on Biodiversity
CFA	Community Forest Association
CSO	Civil Society Organisation
EBM	Ecosystem-based Management
ENSDA	Ewaso Ng'iro South Development Authority
ESMF	Environmental and Social Management Framework
ESSF	Environmental and Social Safeguards Framework
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
FLR	Forest Landscape Restoration
FOLUR	Food Systems, Land Use and Restoration
GAP	Gender Action Plan
GDP	Gross Domestic Product
GEB	Global Environment Benefit
GEF	Global Environment Fund
GHG	Greenhouse Gas
GIS	Geographic Information System
GOALAN	Green Horticulture at Lake Naivasha project
GoK	Government of Kenya
GRM	Grievance Redress Mechanism
HCD	Horticulture Department
IFAD	International Fund for Agriculture Development
ILM	Integrated Landscape Management
IPPF	Indigenous Peoples Planning Framework
IUCN	International Union for the Conservation of Nature
KALRO	Kenya Agricultural and Livestock Research Organization
KCB	Kenya Commercial Bank
KEPHIS	Kenya Plant Health and Inspectorate Service
KFS	Kenya Forest Services

KM	Knowledge Management
KWS	Kenya Wildlife Service
KWTA	Kenya Water Tower Agency
LANABLA	Lake Naivasha Basin Landscape Association
LANABWRUA	Lake Naivasha Basin Water Resources Users Association
LDN	Land Degradation Neutrality
LNB	Lake Naivasha Basin
LNBIMP	Lake Naivasha Basin Integrated Management Plan
LNGG	Lake Naivasha Growers Group
LNRA	Lake Naivasha Riparian Association
M&E	Monitoring and Evaluation
MELKM	Monitoring, Evaluation, Learning & Knowledge Management
MFI	Micro-Finance Institution
MoA&F	Ministry of Agriculture, Livestock and Fisheries
MoE&F	Ministry of Environment and Forestry
MSME	Micro, Small or Medium Enterprise
MTP	Medium-term Development Plan
NARIGP	National Agriculture Rural Inclusive Growth Programme
NBSAP	National Biodiversity Strategy and Action Plan
NDC	Nationally Determined Contribution to the UNFCCC
NEMA	National Environment Management Authority
NETFUND	National Environment Trust Fund
NGAD	National Gender and Development Policy
NRM	Natural Resources Management
PES	Payment-for-Ecosystem-Services
PF	Process Framework
PFMP	Participatory Forest Management Plans
PMU	Project Management Unit
PPG	Project Preparation Grant
PSC	Project Steering Committee
SCMP	Sub-Catchment Management Plan
SDG	Sustainable Development Goal
SEP	Stakeholder Engagement Plan
SIPP	Environmental and Social Safeguard Integrated Policies and Procedures

SLM	Sustainable Land Management
SMART	Specific, Measurable, Achievable, Relevant, and Time-bound
TA	Technical Assistance
UNCCD	United Nations Convention on Climate Change and Desertification
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VLUP	Village Land Use Plan
VSLA	Village Savings and Loans Association
WRA	Water Resources Authority
WSTF	Water Sector Trust Fund
WRUA	Water Resources User Association
WWF	Worldwide Fund for Nature

EXECUTIVE SUMMARY

1. 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.
2. The LNB is challenged by land degradation, water pollution and loss of biodiversity, resulting in a reduction in provision of ecosystem services. This is caused by a number of threats, in particular:
 - Poor agricultural practices by small scale farmers in the upper catchment
 - Overgrazing and illegal logging in the lower, middle and upper catchment
 - Pollution of water bodies from farmlands, settlements and industries
 - Over-abstraction of water resources
 - Urbanization, agricultural expansion, infrastructure development and other types of development associated with land use change
 - Impacts of climate change
3. 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 key barriers towards effective conservation and restoration of the LNB, to know:
 - Lack of collective accountability between upstream and downstream water users and actors
 - Inadequate institutional coordination between Government and non-Government agencies
 - Limited financial and market incentives for farmers to transition to sustainable production practices
 - Limited access to finance for farm inputs and investments required to transition to sustainable production practices
 - Limited capacity of extension services to support farmers in their transition to sustainable production practices
 - Limited finance and capacity for implementing effective landscape management and restoration
4. In addressing these barriers, the project will build on a baseline of numerous projects and initiatives, amounting to an investment of more than US\$10 million, including:
 - Ongoing LNB stakeholder engagement and coordination through Imarisha Lake Naivasha
 - Several Forest Landscape Restoration initiatives, such as the Forest Landscape Restoration (FLR) in East Africa' project, the Lake Naivasha Basin Reforestation Project and the Green Zones Development Support Project
 - Several Sustainable Agriculture programmes and projects, such as the Green Horticulture at Lake Naivasha (GOALAN) project and the Green Zones Development Support Project, as well efforts through the Njabini Agricultural Training Centre (ATC) and the County Departments of Agriculture Livestock and Fisheries
 - An existing Payment for Ecosystem Services programme

- Water Resources Management through Water Resources Authority (WRA) and the Water Resources User Associations (WRUAs), as well as the ‘Securing water resources for vulnerable communities in Nakuru, Narok, Kajiado and Bomet Counties’ project
5. 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.
 6. Based on the overall theory of change, the project is structured around 4 key components:
 1. Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin
 2. Component 2: Market and financial mechanisms for implementation of the LNB Integrated Management Plan
 3. Component 3: Improved land management in LNB
 4. Component 4: Knowledge Management and Monitoring and Evaluation
 7. The project will be implemented over a timespan of four years, with a total budget of 1,785,422 US\$ in addition to an estimated co-financing contribution of 10,525,689 US\$; the project will operate under a financial agreement to be signed between WWF US, as the GEF Project Agency, and the Ministry of Finance, on behalf of the Government of Kenya (GoK). 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.
 8. The National Environment Trust Fund (NETFUND) will act as the Lead Executing Agency for the project. The day-to-day management of the project will be assured by a Project Management Unit (PMU), with responsibilities for the coordination of work between the various partners in the project, for leading on specific components of work, as well as for facilitating procurement processes. The PMU will also be responsible for the reporting, monitoring and evaluation functions. Several executing partners will be engaged in the implementation and coordination of specific project components, of which most notably Imarisha Lake Naivasha and Kenya Forest Services (KFS).
 9. High-level project advisory and strategic guidance will be provided by a national Project Steering Committee (PSC), which will include key Government Agencies and other key stakeholders in the project. In addition, a Technical Committee will be established as a mechanism for coordination between project partners on the ground. Finally, the Imarisha Multi-stakeholder Platform will serve as a way of engaging a broader group of stakeholders.
 10. Through the baseline and GEF-funded alternative, the project will generate a range of Global Environmental Benefits, including improved management and protection of water and land in an area of high value biodiversity; enhanced carbon sequestration capacity through the improved management and restoration of forest landscapes; and abatement of land degradation through improved land-use planning, agricultural practices and forest landscape restoration. Within the context of Kenya’s ambitious national development goals and strategies, the project's impact will extend well beyond the specific target landscapes and will also provide a scalable model for the country.

SECTION 1: PROJECT BACKGROUND AND SITUATION ANALYSIS

1.1 Project Scope and Environmental Significance

11. The Lake Naivasha Basin (LNB) is located in the eastern Rift Valley in Kenya and encompasses about 3,400 km², 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 2020⁴. 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 change⁷.

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.

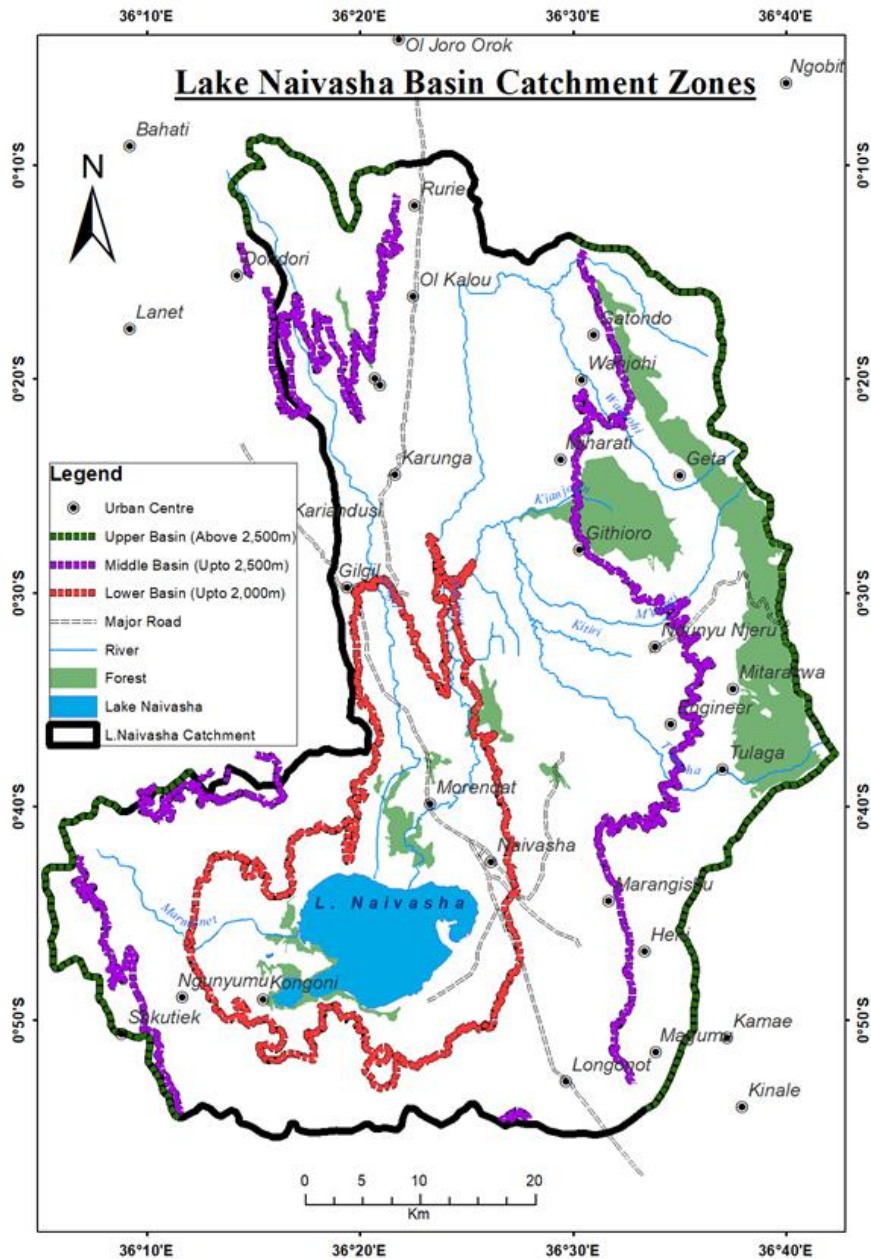


Figure 1 Lake Naivasha Basin Catchment Zones

12. Figure 1 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). A map of the proposed project intervention zones is presented in Annex 1.

13. Lake Naivasha is one of the two freshwater lakes in the Kenyan part of the Rift. The key values provided by LNB are globally significant biodiversity, and provision of water and fertile soil. In 1995, the LNB was designated as a wetland of international importance (See Figure 2)⁸. 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. The lake ecosystem supports about 400 bird species, and hence is an Important Bird Area⁹. In addition to its importance as home to exceptional biodiversity, riparian land in the lake ecosystem provides myriad benefits, including ecological functions and services such as carbon storage and climate change mitigation, water purification (filtration of sediments and buffer to pollutants), flood control and mitigation. However, the riparian land is under immense pressure due to anthropogenic activities within the Naivasha headwaters. Uncontrolled agricultural activities by local farmers have degraded the land and damaged the integrity of the lake ecosystem, reducing its biodiversity levels. Proliferation and invasion by exotic species, exacerbated by pollution from farming upstream, have resulted in a decline in biodiversity of Lake Naivasha.

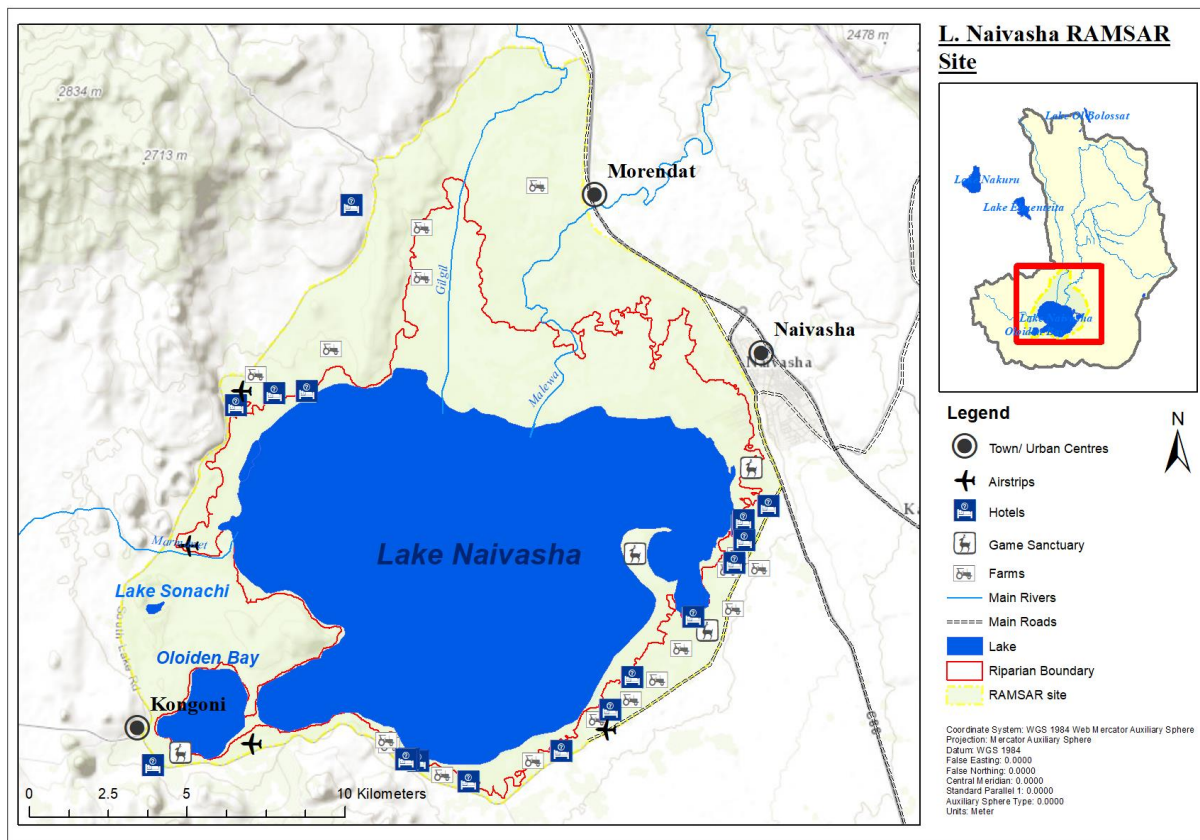


Figure 2 Lake Naivasha Ramsar Site

⁸ MEMR 2012: Kenya's Wetlands Atlas

⁹ Birdlife International: Kenya's Important Bird Areas - Status and Trends, 2007

14. 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 species¹⁰. 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).
15. 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 people¹¹. 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 sector¹². LNB accounts for more than 50% of the country's cut flower exports. The lake plays a critical role in the groundwater system¹³ which supports irrigation around the lake basin. Additionally, the Naivasha area is steadily rising as a conference tourism destination in the country.¹⁴ 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.

1.2 Environmental Problem(s), Threats and Root Causes

16. The proposed project area is highly prone to erosion due to steep gradients compounded by poor land use practices and therefore is a key area for reducing land degradation. 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:
17. 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.
18. 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

¹⁰ KWS Aberdares National Park: <http://www.kws.go.ke/content/aberdare-national-park>

¹¹ 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.

¹² Business Daily, 2017: Kenya's horticulture exports <https://www.businessdailyafrica.com/datahub/Kenya-s-horticulture-exports/3815418-4121118-o4ygd4/index.html>

¹³ Ojiambo, Bwire & Poreda, Robert & Lyons, William. (2001). Ground Water/Surface Water Interactions in Lake Naivasha, Kenya, Using $\delta^{18}O$, δD , and $3H/3He$ Age-Dating. *Ground water*. 39. 526-33. 10.1111/j.1745-6584.2001.tb02341.x.

¹⁴ <https://www.nation.co.ke/lifestyle/dn2/Naivasha--the-new-conference-hub/957860-3157942-t0oj50z/index.html>

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.

19. 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.
20. 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.
21. 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.
22. 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. Annex 8 provides a detailed analysis of climate change related risks and effects in the project area.

1.3 Barriers addressed by the project

Key barriers to conservation and management of the LNB include:

23. 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) that 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'¹⁵.
24. 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

¹⁵ A more detailed description of the PES scheme and its challenges is presented in the baseline section.

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.

25. 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 groups¹⁵.
26. 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).
27. Lack of capacity for 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.
28. 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).
29. Limited finance and capacity for implementing the participatory Sub-Catchment Management Plans (SCMPs) and Participatory Forest Management Plans (PFMPs) by the 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.

1.4 National and Sectoral Context

30. One of the main provisions of the (current) Kenya Constitution of 2010 was the creation of County Governments. Article six of the Constitution establishes the National and County Governments as distinct and inter-dependent entities. One of the objects of devolution is the recognition of communities' participation in the management of natural resources, promotion of equity in sharing of benefits accruing from local resources, and decentralization of state organs and strengthening of local institutions. Since the successful completion of this devolution process in 2013, responsibilities for agriculture and natural resources rest with the counties. Therefore, the Counties established departments responsible for the development, maintenance and management of their respective sectors. However, the overall responsibility for natural resource management and climate governance remains with the respective ministries at the National level. As such, Counties have created County Environment Committees and County Agriculture Sector Steering Committees to facilitate coordination, cooperation and consultation of stakeholders and partners in their respective sectors.
31. At the community-level, furthermore, there are sector-based organizations such as the Water Resource User Associations (WRUAs), Community Forest Associations (CFA) and Farmer Cooperatives. Community Wildlife Associations are encouraged under the Wildlife Act. All of these governance structures have their influence on the management of resources in the County. Unfortunately, women tend to be under-represented in these organizations, particularly at leadership level. Furthermore, Kenya Forest Services (KFS), Kenya Wildlife Service (KWS), Kenya Water Tower Agency (KWTA), Water Resources Authority (WRA), National Environment Management Authority (NEMA) and Kenya Agricultural and Livestock Research Organization (KALRO) are all national institutions whose influence is felt at the County level. The individual sectoral context as relevant to the project is presented below.
32. Regarding the agricultural sector, the County Department of Agriculture implements policies pertaining to food crops, livestock and fisheries and commodities. The agricultural sector plays a major role in the country's economy and is the second largest contributor to Kenya's gross domestic product (GDP) after the service sector. The sector accounts for 65 percent of the export earnings, and provides livelihood opportunities (employment, income and food security needs) for more than 80 percent of the Kenyan population. The sector employs more than 40 percent of the total population (21 million Kenyans) and more than 70 percent of Kenya's rural population. Smallholder farmers play a significant role in the overall agricultural production accounting for 78 percent of total production. Gender dynamics influence the roles and responsibilities that men, women, boys and girls have in relation to agricultural production in Kenya, as well as the type of crops and commodities they are active in. Men are more active in sectors such as cash crops, livestock and fisheries, whereas women are largely involved in food crops for subsistence and local markets. Men control resources and decision-making on agricultural production, including the adoption of sustainable agricultural practices.
33. The country's major agricultural exports are tea, coffee, cut flowers, and vegetables. Kenya is the world's leading exporter of black tea and cut flowers. The Lake Naivasha basin produces 70% of the country's floriculture; a sector that overall contributes to almost 1.3% of the country's GDP. The growth of the agriculture sector accounted for the largest share of poverty reduction between 2005 and 2015 (World Bank, 2018). As such, the sector is central to the government's Vision 2030 and the President's Big 4 development Agenda aiming to attain 100 percent food and nutritional security for all Kenyans by 2022.
34. Regarding the forest sector, the project counties signed a Transition Implementation Plan with KFS to ensure the smooth transfer of devolved forestry functions, including forest governance and farm forestry extension services. This has been supported by the Devolved

Government Act No. 1 of 2012 and the Constitution of Kenya. In 2016 the Forest Act was revised to the Forest Conservation and Management Act providing for the development of management plans in state or local (community) forests that are implemented through signing forest management agreements (PFMPs) between the local communities and KFS. There are three of these PFMPs in the upper catchment area of the LNB, one each for Geta, South Kinangop and North Kinangop forest stations. The PFMPs are valid for three years, but all three have expired.

35. The conservation and management of water resources is guided principally by the Water Act of 2002 and the National Policy on Water Resources Management and Development. Institutionally, the Water Act 2016 establishes a Water Resources Authority which is a regulatory authority mandated to perform the following functions: 1) Formulation and the enforcement standards, procedures and regulations for the management and use of water resources and flood mitigation; 2) Regulation of water resources use and management; 3) Receiving water permit applications for water abstraction, water use and recharge and decision making, issue, vary water permits; and enforce the conditions of those permits.
36. The Lake Naivasha Catchment Area Protection Order, 2012 (L.N. No. 8 of 2013) declares the Lake Naivasha Catchment Area to be a protected area for the purposes of the Water Act and provides that the Lake Naivasha Catchment Area Water Allocation Plan shall be the basis for allocation of water in the Lake Naivasha Catchment Area. The Order furthermore provides for the establishment of Water Resources Users' Associations (WRUAs) as agents to carry out various functions such as: monitor the use of water; facilitate and enforce compliance with the conditions of water use permits; monitor revenue collections and follow up payment on non-revenue generating water used. The WRUAs are associations of water users, water abstractors, riparian land owners and any other stakeholders who voluntarily come together to cooperatively manage water resources. Their management committee comprises of a regulated minimum of 1/3 women. The WRUAs have a chairman, secretary and treasurer, as well as member committees on Finance, Procurement, Monitoring and Evaluation. There are 12 WRUAs in Naivasha basin actively participating and taking responsibility with regard to sustainable basin management. The proposed project will work with the Kianjogu, Wanjohi and Naivasha WRUAs. The current membership of these WRUA is estimated at 40% women, with a majority of members counted as youth. All 12 WRUAs in the LNB are member of the Lake Naivasha Basin Umbrella Water Resource Users Association (LANABWRUA), which is the body representing all the 12 WRUAs. LANABWRUA draws its membership from the individual WRUAs in the project area. The Association has a management committee that oversees its functions. The committee is composed of 10 men and 5 women to meet the one third gender rule.
37. Finally, under Kenya's 2010 Constitution, responsibilities for planning and managing land use are largely devolved to the County governments, the details of which are specified in the County Governments Act 2012. The specific planning instruments available to County governments in this regard are Spatial Plans and Integrated Development Plans (which may be complemented by more specific Sectoral Plans and Urban Development Plans). All three counties within the basin (Nyandarua, Nakuru and Narok) have developed Integrated Development Plans, which are valid for 5 years. As these plans expire in 2022, new County Developments are currently under development. Annual Development Plans, furthermore, guide the work of the County Governments on a more day-to-day basis. Planning at County level is guided and overseen by the National Land Commission, which has the mandate to monitor and have oversight responsibilities over land use planning throughout the country.

1.5 Baseline Scenario

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

LNB stakeholder engagement and coordination

38. 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.
39. 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)

40. 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 AFRI100 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. The project builds on Green Horticulture at Lake Naivasha Project (2018-2021) with the following outcomes and outputs:
 - *Outcome 1:* FLR implementation in Kenya is supported by effective policies, strategies, legislations and guidelines and enhancing the development and implication of the target groups.
 - A national civil society FLR Alliance is in place and informing policy making processes.
 - A Forest Landscape Restoration strategy for Nyandarua County is in place.
 - *Outcome 2:* Income from forestry and agriculture value chains is increased by 20% for at least 400 community members in Nyandarua County.
 - Target communities have reliable access to markets and value-addition facilities for forestry and agricultural products.
 - 500 ha Bamboo and mixed forest and 100 ha of degraded farmland are restored and sustainably managed by the communities through i.e., an effective business model for bamboo benefiting communities.
41. WWF-Kenya is 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 inseting 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.

42. KFS through financing from the Africa Development Bank is supporting 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

43. As part of the before-mentioned *Green Zones Development Support Project*, NETFUND 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.
44. 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.
45. 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

46. 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 LANABWRUA. Contributions into the scheme are voluntary.
47. 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 scheme¹⁶ 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.
48. 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) confirmed interest into such a revised PES system.
49. 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

50. 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 SCMPs and PFMPs for management of areas within their jurisdictions. However, these have not been effectively implemented due to inadequate funding.
51. 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

¹⁶ 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.

300,000 seedlings. The group is currently in the process of starting other income-generating activities such as trout fish farming.

52. 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.

1.6 Coordination with other relevant GEF & non-GEF Initiatives

53. There are several GEF and non-GEF projects currently being implemented in Kenya that focus on biodiversity, natural resource use, and land and water management. The proposed project will coordinate with and build on several ongoing projects and initiatives to: i) benefit from lessons learned on sustainable land and water management and practices; and ii) ensure little to no overlap between proposed project activities and those from ongoing initiatives to maximize efficiency and effectiveness. Relevant ongoing GEF-funded projects and initiatives are described below:

- FAO/GEF (GEF ID 10958): *Integrated Landscape Management for conservation and restoration of the Mt. Elgon Ecosystem in Western Kenya*. The project is a child project under the GEF7 Food Systems, Land-use and Restoration (FOLUR) Impact Program, and in essence incorporates similar components of work to the proposed project, including a component on integrated landscape management, a component on sustainable agricultural practices and a component of work on conservation and restoration. In light of these similarities, the two projects would benefit from close coordination and sharing of lessons learned across the different project components as well as more widely through the various knowledge sharing and capacity building activities under FOLUR.
- IFAD/GEF (GEF ID 9139): *Establishment of the Upper Tana-Nairobi Water Fund*. The project is implemented as part of the GEF 6 Integrated Approach Pilot “Fostering Sustainability and Resilience for Food Security in Sub-Saharan Africa.” The project objective is “A well-conserved Upper Tana River basin with improved water quality and quantity for downstream users (public and private); maintaining regular flows of water throughout the year; enhancing ecosystem services, specifically food security, freshwater and terrestrial biodiversity; and improving human well-being and quality of life for upstream local communities”.
- FAO/GEF (GEF ID 9556): *Restoration of arid and semi - arid lands of Kenya through bio - enterprise development and other incentives under The Restoration Initiative*. The GEF-6 project under implementation adopts an integrated approach to address deforestation, land degradation and biodiversity loss, targeting policy and institutional capacity while supporting community - led forest and landscape restoration (FLR) and the development of alternative livelihoods.
- UNEP/GEF (GEF ID 9626): *Enhancing Integrated Natural Resource Management to Arrest and Reverse Current Trends in Biodiversity Loss and Land Degradation for Increased Ecosystem Services in the Tana Delta, Kenya*. This GEF-6 project is currently under implementation (executed by Nature Kenya) and its objective is to strengthen integrated natural resource management and restoration of degraded landscapes in the Tana Delta, and systemically scale up best practices and lessons learned to other priority landscapes in Kenya.

- UNEP/GEF (GEF ID 5272): *Scaling Up Sustainable Land Management and Biodiversity Conservation to Reduce Environmental Degradation in Small Scale Agriculture in Western Kenya*. This GEF-5 project is currently under implementation and seeks to promote the adoption and adaptation of sustainable land and forest ecosystem management (SLEM) practices across the productive landscape of Kakamega-Nandi ecosystem in western Kenya.

54. In addition to these GEF-funded projects, there is a range of other ongoing projects and initiatives that are relevant to the specific outcomes and objectives of the project. The baseline section (1.5) provides an overview of the main initiatives in this regard. Under Component 1 of the project, Imarisha Lake Naivasha will be strengthened to provide a coordination function among these different initiatives.

SECTION 2: PROJECT EXECUTION STRATEGY

2.1 Project Objective and Theory of Change

Project Objective

55. 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.

Theory of Change

56. The high-level theory of change of the proposed 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.

57. A high-level schematic representation of the theory of change is presented in Figure 3. A detailed theory of change diagram is presented in Annex 2.

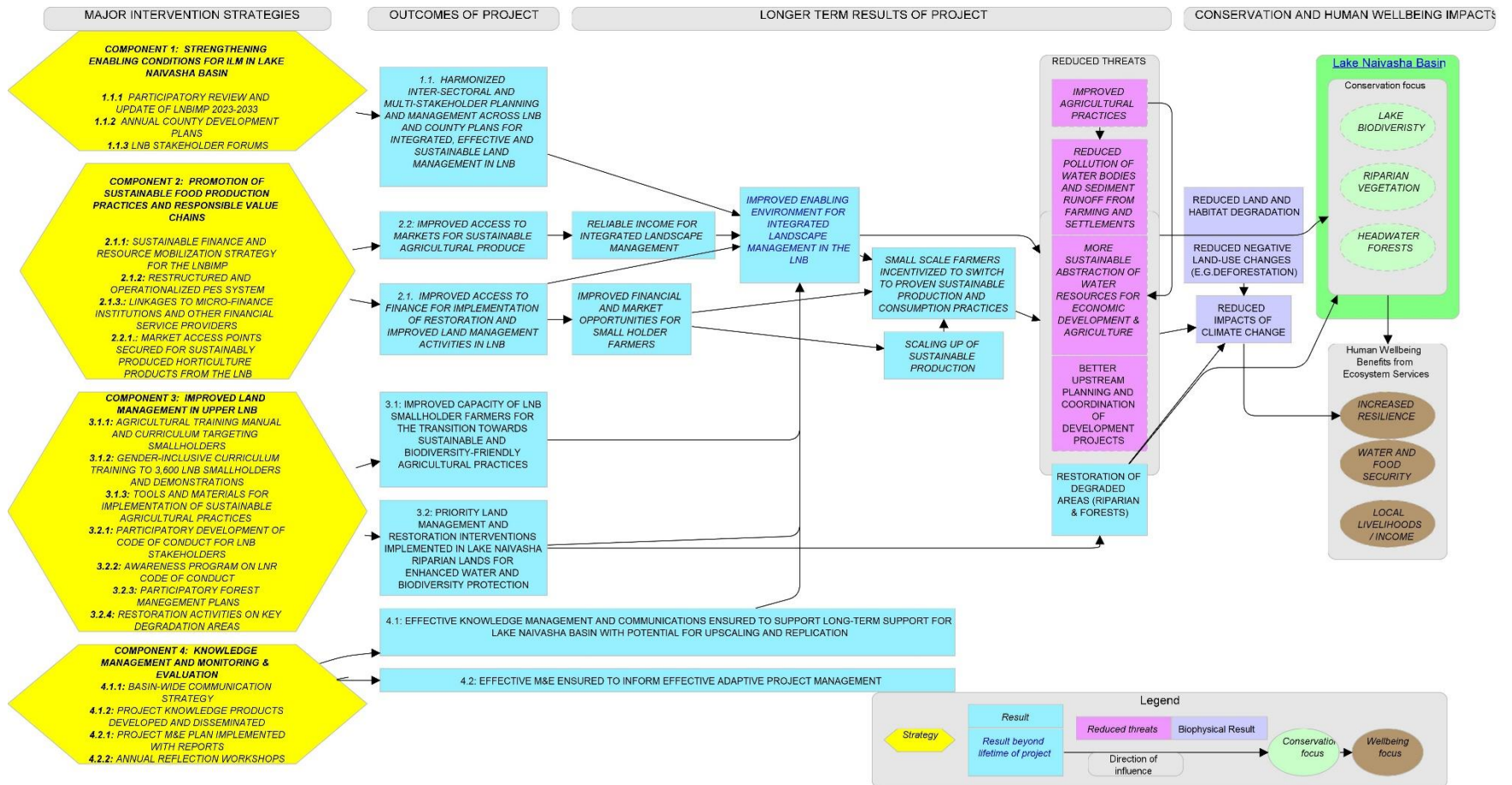


Figure 3 High-level schematic visualization of the Theory of Change.

2.2 Project Components and Expected Outcomes

58. Based on the overall theory of change, the project is structured around 4 key components:
1. Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin
 2. Component 2: Market and financial mechanisms for implementation of the LNBIMP
 3. Component 3: Improved land management in upper LNB
 4. Component 4: Knowledge Management and Monitoring and Evaluation
59. An overview of the planned outcomes and outputs under each of these components is presented in Table 1.

Table 1 Project description summary

Components	Project Outcomes	Output
1. Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin (LNB)	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
	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
2. Market and financial mechanisms for implementation of the LNBIMP	2.2. Improved access to markets for sustainable agricultural produce	2.2.1. Market outlets for sustainably produced horticulture products from the LNB secured
	3.1. 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
3. Improved land management in upper Lake Naivasha Basin		

Components	Project Outcomes	Output
		<p>smallholder farmers through ward agricultural officers (group facilitators) and field days with demonstrations for technical backstopping</p> <p>3.1.3. Tools and materials for implementation of sustainable, biodiversity-friendly agricultural practices (e.g., certified seeds, compost/mulching tools, etc.)</p>
	<p>3.2. Priority forest land management and restoration interventions implemented in the Lake Naivasha upper catchment area for enhanced water and biodiversity protection</p>	<p>3.2.1. Lake riparian area Code of Conduct for LNB stakeholders</p> <p>3.2.2. Awareness program on Lake Naivasha Riparian Code of Conduct</p> <p>3.2.3. Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta) updated</p> <p>3.2.4. Protection and restoration activities on key degradation areas implemented (in particular passive restoration through demarcation and natural regeneration)</p>
<p>4. Knowledge Management and Monitoring and Evaluation</p>	<p>4.1. Effective Knowledge Management and communications ensured to support long-term support for Lake Naivasha Basin with potential for upscaling and replication</p>	<p>4.1.1. Basin-wide communication strategy developed and implemented to support sustainable land management and biodiversity-friendly agricultural practices in LNB</p> <p>4.1.2. Project knowledge products adequately developed and disseminated with LNB stakeholders and potentially wider audience</p>
	<p>4.2. Effective M&E ensured to inform effective adaptive project management</p>	<p>4.2.1. Project M&E plan implemented and project progress reports completed</p> <p>4.2.2. Annual reflection workshops to track progress against workplan and results framework indicator targets for effective project management</p>

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

Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin (LNB)

- 60. 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 (see section 2.3), 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

61. 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 basin¹⁷. 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 (LNBIMP 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.

¹⁷ 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.

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

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

62. 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

63. 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.¹⁶ 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 revenues¹⁸.

64. The PES review will be undertaken by the Lake Naivasha Water Resource Users Association (LANABWRUA), with close oversight provided by NETFUND, and is expected to consider and explore a number of options, as outlined in Table 2.

Table 2 Overview of potential PES modalities to be considered by the project

#	Name	Description	Implementing Partner/s
1	Traditional PES	Contracts which reward land managers for either (i) supply of ecosystem services, such as forest restoration, to an agreed level, or (ii) adopting land-use practices which improve supply of ecosystem services. Deployment focused on community/public-owned land.	LANABWRUA/Upper-catchment WRUAs
2	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.	Financial institutions
3	Sustainable produce-offtake agreements	Outgrower off-takers include requirements for sustainable land management practices in the terms of their off-take agreements. Please note this is different to the current scheme where certain hotels buy sustainable catchment produce.	Naivasha-based outgrower producers
4	Eco-credit	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.	Eco Finance, WRUAs and VSLA equivalents

65. Other modalities may also be considered as part of the restructuring.¹⁹ The revised PES scheme 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. To support operationalization of the scheme, the project will support the development of new products (e.g., climate-smart lending facility, sustainable produce offtake agreements and eco-credits) through the implementation of a communication and marketing plan to secure private sector participation and investment into the facility. A PES registration and tracking system will be established to enable contract monitoring and to allow for a transparent way of identifying potential beneficiaries for a cost-effective

¹⁸ 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.

¹⁹ e.g. certain horticultural producers have suggested purchase of offsets produced within the catchment as a means to offset emissions associated with export of produce to Europe. There are nascent plans in place to develop such a scheme and which would return 100% of carbon revenue to catchment management without the need for a carbon broker. Voluntary emissions reductions (VERs) purchased by participating exporters could contribute to the above financing need.

delivery of environmental services under the various PES modalities. Furthermore, the project will support means for operationalizing the new Water Towers Bill through institutionalizing payments (taxes) for water resource use into a basin investment fund to facilitate the deployment of PES transactions. All these modalities should consider gender dimensions, including land ownership, decision-making power on land use, requirements for collateral etc. that discriminate against women in order to ensure women can equally participate in and benefit from these schemes. The project will benefit, in this regard, from the capacity and experience resting with NETFUND. Finally, the project will facilitate increased access to finance and markets, through linking smallholder farmers to Micro-Finance Institutions and other agribusiness financial services (e.g., Equity Bank, Agricultural Finance Corporation and Tower SACCO), including the existing PES scheme, as well as by building capacity for farmers to access such financial support opportunities.

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 (see Table 2)
- Development and roll-out of PES communications strategy and marketing products to attract participation and investments downstream ‘buyers’ and other investors
- 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

66. 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 outlets 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.

Component 3: Improved land management in upper LNB

67. 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

68. 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.

69. 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.
70. 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.
71. 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

72. 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.
73. 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

74. 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

2.3 Institutional Arrangements

75. A schematic representation of the proposed institutional arrangements for the project is presented in Figure 4.

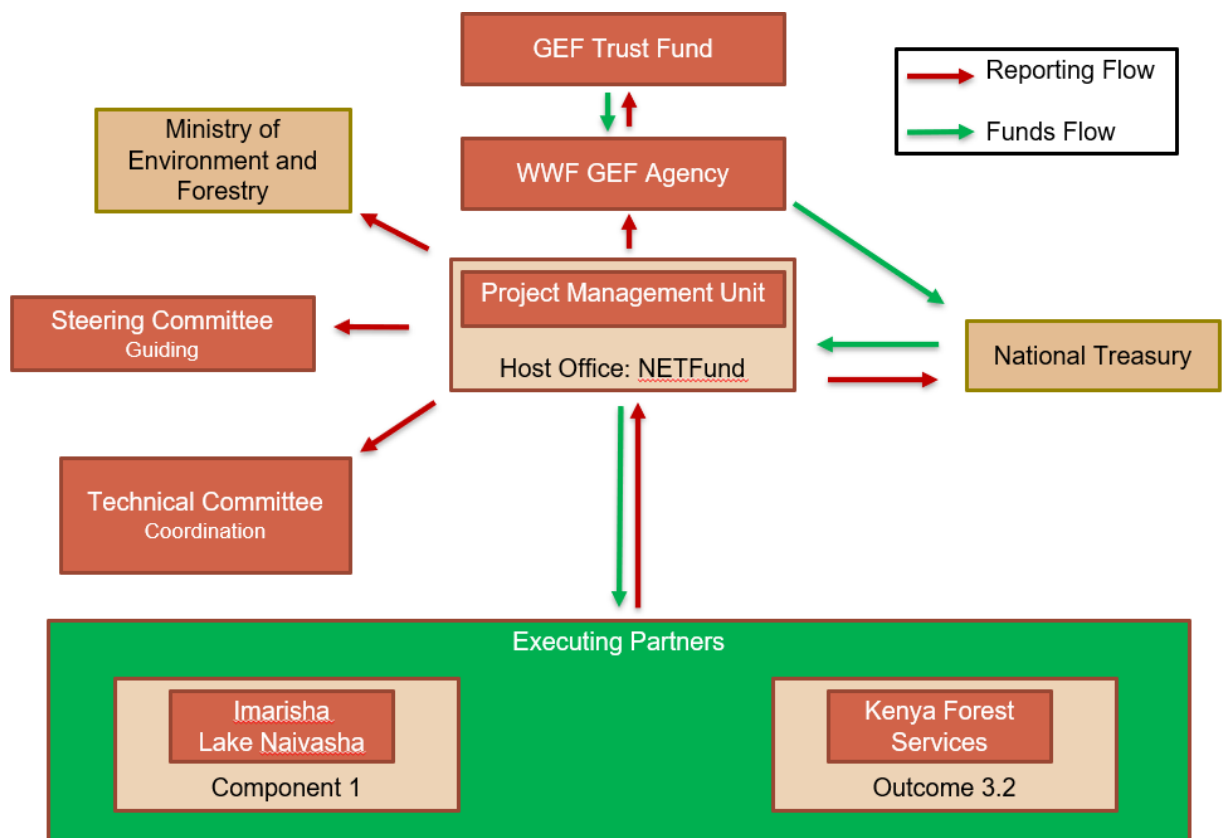


Figure 4 Project institutional arrangements

76. 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"²⁰. As such, NETFUND operates

²⁰ NETFUND, <https://www.netfund.go.ke/who-we-are/>

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.

77. 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.
78. 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:
 - 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).
79. 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.
80. 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.
81. 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).

Project supervision

82. 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.

Financial management

83. 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.

84. 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.
85. Program accounting procedures shall follow Government procedures and shall furthermore adhere to WWF GEF Agency standards.

2.4 Stakeholder Engagement

Stakeholder engagement during project development

86. The project team conducted an initial scoping of stakeholders that included, among others, National Government Institutions and partners (i.e., NETFUND, Imarisha Lake Naivasha, Ministry of Environment and Forestry, Ministry of Agriculture, Water Towers Authority, Kenya Forest Service, Kenya Wildlife Service), research institutions (KMFRI, National Museums of Kenya), local government institutions (Nakuru and Nyandarua County government representatives), local community and civil society organizations (i.e., Community Forest Associations, Water Resources Users Associations, Lake Naivasha Basin Umbrella Water Resource Users Association and Lake Naivasha Basin Landscape Association), and private sector (Lake Naivasha Growers Group, Cher, OSERIAN, Gitei Fresh Growers, Kenya Association of Hotel Keepers and Caterers).
87. Initial field consultations with these stakeholders were conducted in LNB in August 2019 for collaborative development of the project's technical design, and follow-up stakeholder consultations were carried out in September-October 2019 to consult the project strategy. The technical design workshop and ensuing consultations resulted in common agreement among stakeholders on the *values of LNB* (provision of water and fertile soil for irrigation and source of livelihoods (floriculture, horticulture, livestock) and global biodiversity (critical ecosystems, migratory bird routes and wildlife corridors, RAMSAR site and IBA), and the *principal environmental problem* in LNB which is the loss and degradation of water, soil and habitat, which reduce provision of ecosystem services which the proposed project seeks to address. Additional outcomes of the workshop were the project focus on Lake Naivasha Basin (as opposed to the lake itself), a project objective (to reduce threats to land and water to increase protection of globally significant biodiversity and ecosystem services that support the local and national economy), and a theory of change, which contributed to the currently proposed project objective and theory of change.
88. During the detailed project development stage, in November 2022, further consultations were held through interviews and focus group discussions. Stakeholders that participated included Imarisha; County of Nyandarua (Department of Agriculture); County gov. of Nakuru (Department of Environment, Energy, Natural Resources and Climate Change); LANABRUA; CFAs and WRUA (community members and representatives); Goalan Project members and Vasha Green shop owners; Beach Management Unit; Riparian Association; Agriculture Training Centre; and the Gender department in Nyandarua County. Stakeholder engagement helped to better understand who is involved and why stakeholders are involved as documented in the Stakeholder Engagement Plan (SEP).
89. A final validation meeting was held on 19 December 2022. The meeting brought together the key stakeholders in the process, the Ministry of Environment and Forests, NETFUND, Imarisha Lake Naivasha, the County Governments, KFS, LNRA, LANABWRUA, WWF Kenya and Rhino Ark. The meeting raised a number of minor suggestions for improvement and clarification, which have been integrated into the present project document.

Stakeholder engagement during project execution

90. A list of key stakeholders, and contributions and/or involvement in the project is provided 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	<ul style="list-style-type: none"> - 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 	<p>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.</p>	<p>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.</p> <p>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.</p>
Enforcement Agencies	<ul style="list-style-type: none"> - Water Resources Authority (WRA) - National Environment Management Authority (NEMA) - Kenya Forest Service (KFS) - Kenya Plant Health and Inspectorate Service (KEPHIS) - Kenya Wildlife Service (KWS) - Horticultural Crop Directorate (HCD) 	<p>Design and implementation of the project as well as alignment to the organisation's mandate and roles.</p>	<p>Enforcement agents have (high) influence and power 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.</p> <p>Responsibilities for the coordination and implementation of the restoration and forest management activities of the project (Component 3) will be assigned to KFS.</p>
Local Communities and Organizations	<ul style="list-style-type: none"> - Beach Management Unit (BMUs) 	<p>The communities are interested in the project because they</p>	<p>Generally, communities have high interest but low power in</p>

Stakeholder Type	Stakeholder list	Interest in the Project	Influence on project and role in project implementation
and Civil Society Organizations	<ul style="list-style-type: none"> - 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 	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.	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	<ul style="list-style-type: none"> - Lake Naivasha Growers Group (LNGG) - Banking Institutions (Equity, KCB, Barclays) - Hotels and Lodges - Chamber of Commerce 	These stakeholders would be mainly interested in protecting and sustainably ensuring their commercial interests, including benefits from farming, the provision of financial services, as well as the provision of accommodation and conference facilities	Institutions like the bank have low interest and low influence in the project as 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.

2.5 Gender

Gender assessment (context)

91. 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.
92. 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 rights²¹, 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 groups²².

93. 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 consumption²³. In general, women tend to take care of the day-to-day farming business, whereas men are seeking employment or income opportunities elsewhere.
94. 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.
95. 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.
96. 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.
97. 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

²¹ 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>

²² UN Women. Kenya. Available online at <https://africa.unwomen.org/en/where-we-are/eastern-and-southern-africa/kenya>

²³ 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

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

98. 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.

Gender action plan for project execution (summary)

99. 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.

2.6 Safeguards

100. 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.

101. 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.

102. 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

103. 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

104. 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.

105. 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.

2.7 Monitoring & Evaluation

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, Evaluation and Learning Officer at 40% FTE (US\$ 30,046), independent, external consultants for the terminal evaluation (\$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

106. The Project will be monitored through the Results Framework (see Annex 4). 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).

107. The MEL Officer (see TOR in Annex 5) 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 4.

Table 4 summary of project reports

M&E/ Reporting Document	How the document will be used	Timeframe	Responsible
Inception Report	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> Assess financial progress and management. 	Every three months	PMU F&A officer
WWF Project Progress Report (PPR) with annual RF and workplan tracking.	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> External summative evaluation of the overall project; Recommendations for GEF and those designing related projects. 	Before project completion	External expert or organization

108. 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.

109. 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).

2.8 Budget

The total GEF project grant is US\$ 1,785,422 and the total project co-financing is US\$ [10,525,689](#) over a period of 4 years. A summary budget (by outcome and output) is presented in Table 5. **Error! Reference source not found.**

Table 5 Summary project budget

ANNUAL BUDGET SUMMARY by Outcome and Output		
CATEGORY	PROJECT TOTAL	
Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin (LNB)	\$	190,483
TOTAL OUTCOME 1.1. Harmonized inter-sectoral and multi-stakeholder planning and management across LNB and County plans	\$	190,483
Output 1.1.1: Participatory review and update of the Lake Naivasha Basin Integrated Management Plan (LNBIMP) 2023-2033	\$	98,780
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	\$	30,186
Output 1.1.3 : LNB Stakeholder Forums coordinated by Imarisha	\$	61,517
Component 2: Market and financial mechanisms for implementation of the LNBIMP	\$	295,170
TOTAL OUTCOME 2.1. Improved access to finance for implementation of restoration and improved land management activities in LNB	\$	206,920
Output 2.1.1 Sustainable finance and resource mobilization strategy for the LNBIMP	\$	40,492
Output 2.1.2 Restructured and operationalized PES system	\$	108,249
Output 2.1.3 Linkages to micro-finance institutions and other financial service providers, including the PES scheme	\$	58,180
TOTAL OUTCOME 2.2 Improved access to markets for sustainable agricultural produce	\$	88,250
Output 2.2.1 Market outlets for sustainably produced horticulture products from the LNB secured	\$	88,250

Component 3. Improved land management in upper Lake Naivasha Basin	\$	962,165
TOTAL OUTCOME 3.1 Improved capacity of LNB smallholder farmers for the transition towards sustainable and biodiversity-friendly agricultural practices	\$	695,580
Output 3.1.1 Agricultural training manual and curriculum targeting smallholder farmers developed with key state agencies and stakeholders	\$	128,273
Output 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	\$	311,671
Output 3.1.3 Tools and materials for implementation of sustainable, biodiversity-friendly agricultural practices	\$	255,636
TOTAL OUTCOME 3.2. Priority land management and restoration interventions implemented in Lake Naivasha riparian lands	\$	266,585
Output 3.2.1 Lake riparian area Code of Conduct for LNB stakeholders	\$	35,398
Output 3.2.2. Awareness program on Lake Naivasha Riparian Code of Conduct	\$	42,203
Output 3.2.3. Participatory Forest Management Plans for three target Forest Stations (South and North Kinangop and Geta) updated	\$	69,958
Output 3.2.4. Protection and restoration activities on key degradation areas implemented	\$	119,025
Component 4. Knowledge Management and Monitoring and Evaluation	\$	176,302
TOTAL OUTCOME 4.1. Effective Knowledge Management and communications ensured to support long-term support for Lake Naivasha Basin with potential for upscaling and replication	\$	87,887
Output 4.1.1. Basin-wide communication strategy developed and implemented	\$	48,425
Output 4.1.2. Project knowledge products developed and disseminated with LNB stakeholders and potentially wider audience	\$	39,463
TOTAL OUTCOME 4.2. Effective M&E ensured to inform effective adaptive project management	\$	88,415
Output 4.2.1 Project M&E plan implemented and project progress reports completed	\$	62,714
Output 4.2.2: Annual reflection workshops to track progress against workplan and results framework indicator targets for effective project management	\$	25,701
PMC	\$	161,302
TOTAL PROJECT COSTS	\$	1,785,422

2.9 Private Sector Engagement

110. 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.
111. 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.²⁴
112. 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 this regard, are planned as part of Component 2 of the project in particular.
113. 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 farms (represented by the Lake Naivasha Growers Group), 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.

SECTION 3: GEF ALIGNMENT AND JUSTIFICATION

3.1 Incremental Cost Reasoning and Global Environmental Benefits

Incremental cost reasoning and expected contributions

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

²⁴ 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.

Baseline	Proposed Alternative	Environmental Benefits
<i>Coordinated approach towards sustainable land, water and natural resource management in LNB</i>		
<p>Imarisha Lake Naivasha is coordinating the implementation of the LNBIMP 2012 – 2022.</p> <p>Lack of integration of ecosystem management measures in County Development Plans and priorities, as well as By-laws.</p> <p>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.</p>	<p>Annual LNB Stakeholders’ Forum</p> <p>Develop and socialize an updated LNBIMP.</p> <p>Institutionalization of the LNBIMP through alignment with County Development Plans and priorities.</p> <p>Improved implementation capacity through development of a sustainable finance and resource mobilization strategy for the LNBIMP.</p>	<p>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.</p>
<i>Sustainable Agriculture</i>		
<p>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.</p> <p>The Agricultural Training Centre is supporting basin farmers through training and extension services.</p> <p>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.</p> <p>National Agricultural Rural Inclusive Growth Programme gives grants to households to support livestock production.</p> <p>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</p>	<p>Expanded number of smallholder farmers trained on sustainable agricultural practices.</p> <p>Enhanced market linkages and outlets for farmers, including an operational Green Shop, for their sustainably produced products.</p> <p>Linkages to financial service providers and schemes to provide financial incentives, including through the existing PES scheme.</p> <p>Support farmers towards the transition to sustainable horticulture production.</p>	<p>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.</p>

Baseline	Proposed Alternative	Environmental Benefits
<p>produce through assurance to buyers of its quality, hygiene and environmental standards.</p>		
<p>Natural Resources Management in LNB</p>		
<p>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.</p>	<p>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.</p>	<p>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 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.</p>

Global environmental benefits

115. 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.

116. 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.

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)	
6	Greenhouse Gas Emissions Mitigated (metric tons of CO ₂ e)	1,413,610 tCO ₂ e
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.

117. 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.

118. 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

119. 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.
120. 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

121. 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.

3.2 Alignment with GEF Focal Area and/or Impact Program Strategies

122. 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)

123. 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 37,026 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.

124. 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).

3.3 Socioeconomic Benefits

125. The project will deliver clear 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.

3.4 Risks and proposed Mitigation Measures

General risks

126. An analysis of the project risks, risk rating and preventive measures for the proposed project is presented in Table 6.

Table 6 Risk Analysis

Risk Description	Ranking	Preventive Measures
1. Limited uptake of sustainable land management practices by stakeholders	L	<p>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.</p> <p>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.</p> <p>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.</p>
2. Strong climate variability during project lifetime can negatively affect farmers’ productivity	H	<p>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.</p>
3. Economic developments, such as large infrastructure projects may compete with the implementation of project	M	<p>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.</p>
4. Capacity constraints of local and national institutions to undertake project interventions	M	<p>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.</p>

Risk Description	Ranking	Preventive Measures
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 related limitations	M	In the case of COVID restrictions during project implementation, the 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.

Risk category	Potential Risk	Mitigations and Plans
	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 Process	Reduced mobility and stakeholder engagement.	<p>Local level outreach to LNB stakeholders and 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).</p> <p>Outreach to LNB stakeholders and farmers will be done in person where possible, over the phone, and as a last resort over the internet.</p>
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 similar pandemic situations, to pay for the transaction costs associated with upstream	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

Risk category	Potential Risk	Mitigations and Plans
	restoration, as well as pay for the additional costs associated with sourcing sustainable produced products.	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 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 farmers' 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.	<p>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.</p> <p>The project will also work to increase production per unit area using good 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</p>

Opportunity Category	Potential	Project Plans
		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 Risks²⁵

127. Current models predict that by 2030, climate change related losses will account for approximately 2.6% of Kenya’s GDP.²⁶ 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 7 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 7 Climate change risk assessment and mitigation measures

Climate hazards	Climate Risk	Mitigation measure
<p><i>Temperature Fluctuation</i> 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°C²⁷, 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.²⁸</p>	<p>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.²⁹Increasing temperatures will also exacerbate the rate of glacial melt, affecting water runoff from Mt. Kenya, located near Lake Naivasha.³⁰</p>	<p>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 practices will increase production per unit of area as well as resilience of the</p>

²⁵ For more information, please refer to the Climate Change Risk Screen supporting document.

²⁶ USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

²⁷ 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).

²⁸ USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

²⁹ WHO. 2015a. Climate and health country profile, Kenya.

³⁰ USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

Climate hazards	Climate Risk	Mitigation measure
<p><i>Frequency and Intensity of Heavy Rainfall</i> 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)³¹. 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. ³² Inter-seasonal rainfall variability will increase over the next 50 years.</p>	<p>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.</p>	<p>agricultural system to withstand the effects of fluctuating temperatures and drought events</p> <p>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.</p>
<p><i>Dry Spells/ Drought</i> 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.</p>	<p>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. ³³</p>	<p>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.</p>

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

³¹ Becht, R., Odada, E.O., Higgins, S., 2005/ Lake Naivasha: Experience and Lessons Learnt.

³² 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).

³³ USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

- 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.

3.5 Consistency with National Priorities or Plans

129. The proposed project is aligned with a range of national and sectoral strategies and plans, as described in Table 8.

Table 8 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) ³⁴ . 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” ³⁵ . Land degradation threatens sustainable development, food security and the country’s ability to meet growing demand for environmental services ³⁶ . 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” ³⁷ .
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 ^o 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

³⁴ 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.

³⁵ LDN Target Setting Programme, <https://www.unccd.int/actions/ldn-target-setting-programme>

³⁶ 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%).

³⁷ 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
	<p>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.</p>
<p>Sustainable Development Goals (SDGs)</p>	<p>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 other hand, SDG 6 recognizes that social development and economic prosperity depend on the sustainable management and sharing of freshwater resources and ecosystems.</p> <p>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.</p>
<p>Aichi Biodiversity Targets</p>	<p>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:</p> <p>Strategic Goal B: Reduce the direct pressures on biodiversity and promote sustainable use</p> <p>Strategic Goal C: To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.</p>
<p>Vision 2030</p>	<p>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 2030.</p>
<p>Medium Term Development Plan 2023-2027 (MTP4)</p>	<p>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.</p>
<p>The Big 4 Agenda</p>	<p>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.</p>
<p>National Climate Change Action Plan</p>	<p>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.</p>
<p>Lake Naivasha Integrated Management Plan 2012-2022</p>	<p>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.</p>

National Strategies/Plans	Alignment
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.

3.6 Innovativeness, Sustainability & Potential for Scaling up

Innovation

131. 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.
132. 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

133. 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:

134. 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:

135. 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:

136. 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

137. 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.

3.7 Lessons learned during project preparation and from other relevant projects

138. The project design benefitted from experiences from other GEF and non-GEF projects and initiatives in two different ways. These include relevant experiences related to integrated land-water management of natural resources through sustainable and inclusive value chains, the management and restoration of protected and other critical biodiversity areas, and approaches related to community involvement in participatory forest and water management. Key projects and initiatives in this are:

1. Important lessons learnt in the design of the Project were drawn from similar initiatives under the GEF7 FOLUR program, in particular the WWF/GEF project *Food Systems, Land Use and Restoration in Tanzania’s Forest Landscapes* (GEF ID 10262), a child project under the GEF7 Food Systems, Land-use and Restoration (FOLUR) Impact Program. The project incorporates similar components of work to the proposed project, including a component on integrated landscape

management, a component on sustainable agricultural practices and a component of work on conservation and restoration. In light of these similarities, the projects would benefit from close coordination and sharing of lessons learned across the different project components as well as more widely through the various knowledge sharing and capacity building activities under FOLUR.

2. The *Green Zones Development Support Project*, through which NETFUND is supporting specific work related to the development of sustainable agriculture practices, and the restoration of critical forest land in the Nyandarua and Nakuru counties. This GEF project will build on the approaches, experiences, partnerships and capacities developed under the Green Zones Development Support Project. An important lesson learnt from this project is the time and capacity needed to organize such large-scale agricultural extension and restoration efforts, and the related need to set realistic targets. In the case of the Green Zones project, ambitious targets had to be drastically reduced during project implementation.
3. The project *Green Horticulture at Lake Naivasha (GOALAN)* presents an integrated approach for a shift towards sustainable production by Micro Small and Medium Enterprises (MSMEs) in the horticulture sector with a focus on youth in agriculture and a shift towards sustainable consumption by consumers, public institutions, retailers and hotels. A key lesson learned from the GOALAN process lays in the combination of work on sustainable production, while simultaneously securing the uptake of such products in the market, among others through the establishment of a 'Green Shop' and direct engagement with potential buyers (hoteliers, tourist operators, flower farms etc.) present in the region, thereby securing markets and cutting the cost of intermediate trading agents. The project furthermore went beyond capacity building and the provision of technical assistance, tools and supplies, by facilitating access to credit facilities for enhanced uptake and sustainability. The project's high level of success (184 out of 190 trained SMEs have evidenced uptake of improved practices, while 69% have accessed credit facilities for sustainable production) speaks for itself. Component 2 of the proposed project builds heavily on the lessons learned of the GOALAN project.
4. The lessons learned from the *Lake Naivasha PES system* are also key to the design of the project. The recently completed independent review of the PES system, and the related Willingness-to-Pay study are an important basis for defining the focus of interventions in regard to strengthening financing mechanisms for longer-term sustainable management of the LNB catchment area. The elements of the findings and recommendations from this report are integrated in Component 2 of the project.
5. Kenya Forest Service and the community focus group observed that fencing was a strategy that worked well for forest regeneration. The KFS manager's experience with fencing stated the area had regenerated much quicker than non-fenced areas, in particular due to livestock intrusion. The stakeholders also referred to Rhino Ark, an organization that has supported fencing parts of the forest in the Aberdare and other parts of the country for conservation and forest regeneration efforts. The project can consider working with a like-minded organization and KFS to fence the area in Sophia where forest cover has diminished and in the forest area that is yet to be fenced.

139. The design of the project strategies furthermore took into consideration two key STAP advisory documents:

- STAP Advisory document 'Payments for Environmental Services and the Global Environment Facility'
- STAP advisory 'Why behavioural change matters to the GEF and what to do about it'

A summary of the specific project strategies inspired by these advisories is provided below.

STAP Advisory document ‘Payments for Environmental Services and the Global Environment Facility’

140. The STAP Advisory document ‘Payments for Environmental Services and the Global Environment Facility’ (revised edition – March 2010) summarizes the evidence base for PES effectiveness and the key issues to consider in the design and selection of PES programs in the GEF portfolio. The document identifies three different entry points for GEF investment in PES schemes: a) set up and pilot direct payments, b) co-finance multiple-service strategies, and c) financing PES start-up costs. The proposed Project aims to support the restructuring and operationalization of the existing PES scheme based on the recommendations of the PES review study³⁸, and in particular support the development of new products (e.g., climate-smart lending facility, sustainable produce offtake agreements and eco-credits), and the development and implementation of a communication and marketing plan to secure private sector participation and investment into the facility. Furthermore, the project will support means for operationalizing the new Water Towers Bill through institutionalizing payments (taxes) for water resource use into a basin investment fund to facilitate the deployment of PES transactions. The project will not make direct payments into the scheme. The project therefore falls into the second category of entry points as defined in the STAP Advisory Document: Co-finance multiple-service strategies.
141. The document furthermore identifies four key threats to PEF effectiveness, which have been considered in the design of the project as follows:

Potential threats to PES effectiveness	Mitigation measures adopted by the project
1. Non-compliance with contractual conditions	In the restructured PES, a contract monitoring system will be considered, including the establishment of a PES registration and tracking system (accounted for in the project budget).
2. Poor administrative selection (i.e., contracts are offered to areas or individuals who are not in the best position to supply environmental services cost-effectively)	The PES registration system to be established by the project will allow for a transparent way to register key parameters of potential PES beneficiaries that could be used to select beneficiaries on the basis of pre-set criteria that will enhance the effectiveness of the PES.
3. Spatial demand spillovers (a.k.a., general equilibrium effects, or “leakage”) whereby protecting a resource in one location pushes pressure onto resources elsewhere	The development of the PES will go hand in hand with other measures to protect resources, including the development of Participatory Forest Management Plans, a riparian area Code of Conduct and an updated basin-wide Integrated Management Plan. In addition, the PMU Coordinator will take responsibility for monitoring potential spillover effects.
4. Adverse self-selection, where people would have supplied the contracted PES service or activity even in the absence of a payment	While a certain level of self-selection may be a risk, the levels of funding supplied to beneficiaries through the Lake Naivasha PES scheme tends to be small-scale, and should be seen rather as an incentive than full compensation for environmental services. Nevertheless, the risk of self-

³⁸ 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.

selection will be considered in both the criteria for selection as well as in the monitoring plan.

STAP advisory ‘Why behavioral change matters to the GEF and what to do about it’

142. The STAP Advisory document ‘Why behavioral change matters to the GEF and what to do about it’ (December 2010) provides guidance for the design of behavior change approaches for programs in the GEF portfolio. The framework consists of six strategic levers to shift behaviors in project design and implementation. An overview of consideration of these levers in the design of the Lake Naivasha Basin Ecosystem Based Management project is presented below.

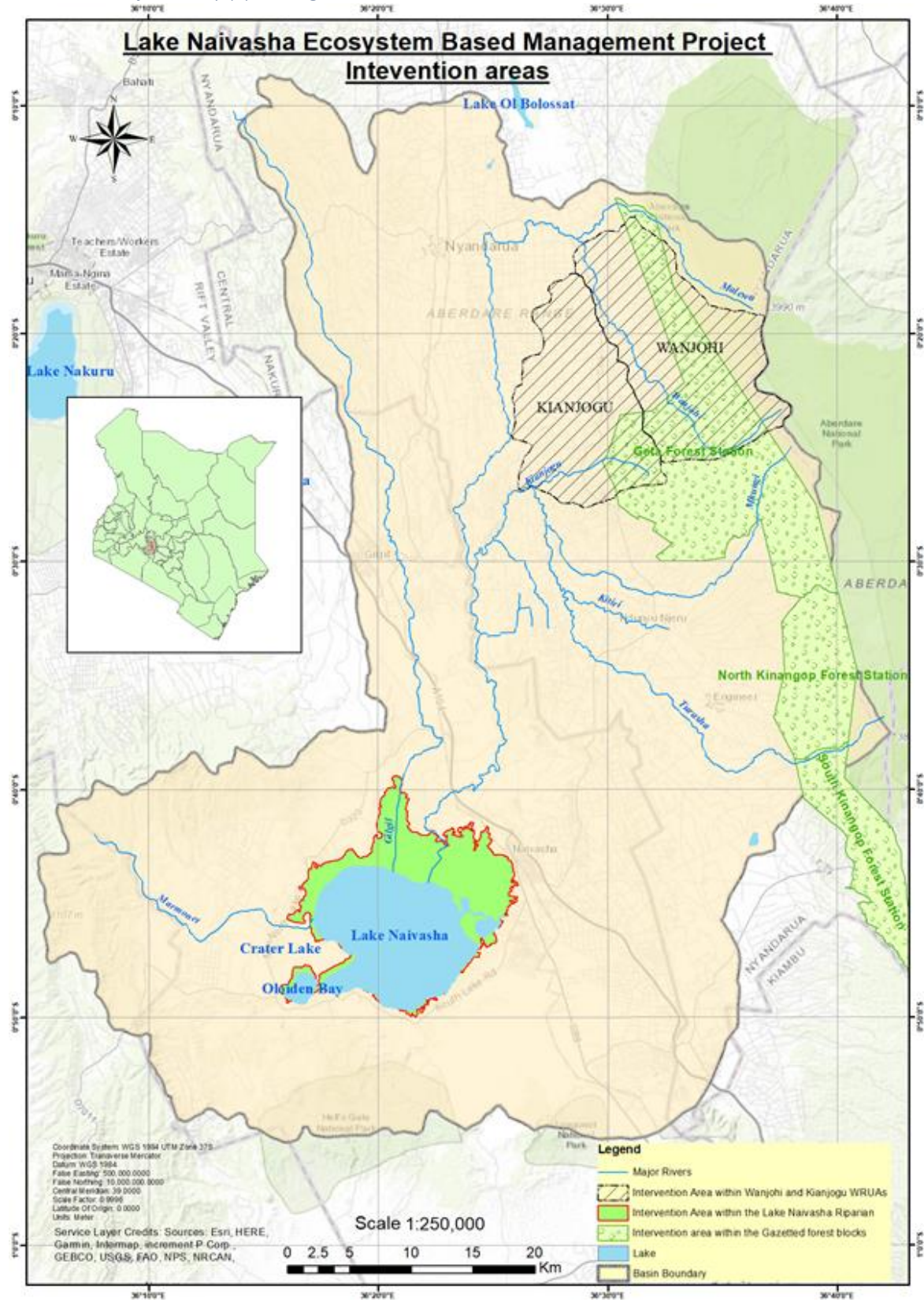
Behaviour change lever	Considerations in project design
1. Material incentives to make behavior more convenient and accessible by giving rewards and providing substitutes (or penalties) for the desired, or undesired, behavior.	The project will provide material incentives in different ways, in particular through the provision of (free) training and supply of materials to farmers willing to adopt more sustainable production methods, and through restructuring of the existing PES scheme for payment of community action on catchment area restoration and management.
2. Rules and regulations to require or encourage a desired behavior or to restrict or prohibit an undesired behavior.	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 in different ways; in particular through the development of a Code of Conduct for the riparian population and through building the capacity of community scouts to undertake surveillance of forest reserves.
3. Information about what the desired behavior is, why it matters and how to achieve it.	Information and awareness raising activities are planned under each of the three project components, with the main purpose of informing stakeholders of ‘what is at stake’ and ‘what would be their desired behaviour as a result’.
4. Choice architecture to change the context in which choices are made, including by providing steps, or options, to streamline complex decisions and focus on key information or actions.	The project invests in various ways in establishing a platform for stakeholder engagement in decision-making around natural resources management, for example in the context of the development of the Lake Naivasha Basin Integrated Management Plan and the Participatory Forest Management plans for three forest stations in the upper catchment of the Basin. Support is provided to strengthen the Lake Naivasha Basin Multi-stakeholder Forum as a platform for streamlining such engagement.

<p>5. Emotional appeals to encourage an emotion known to result in the desired behavior.</p>	<p>The project will invest heavily in stakeholder consultations through a variety of approaches, including meetings, target group discussions as well as key informants. The key objective of such consultations will be to understand the perspectives of different stakeholders, what drives their behaviour. Understanding such parameters will allow the project to appeal through stakeholder through a variety of rational and emotional arguments.</p>
<p>6. Social influences to understand how an actor relates to others in the social system, including those with power and prestige, and leveraging those dynamics to support changes in the actor's behavior.</p>	<p>Power- and relationship mapping will be an integral part of the stakeholder consultations as part of the project, in particular in the context of the development of the Lake Naivasha Riparian Code of Conduct.</p>

143. As a final lesson learnt, the project design process has taken a long time to mature, in large part to delays caused by the COVID-19 crisis. However, the intensive process of stakeholder engagement in the preparation process, including a series of workshops, consultations with local stakeholders and numerous bilateral consultations with individual stakeholders is the basis for a very strong ownership of the project.

SECTION 4: TECHNICAL APPENDICES (PUT IN ORDER AS REFERENCED IN TEXT):

Annex 1: Project Map(s) with geo-coordinates



Geo-coordinate information:

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.

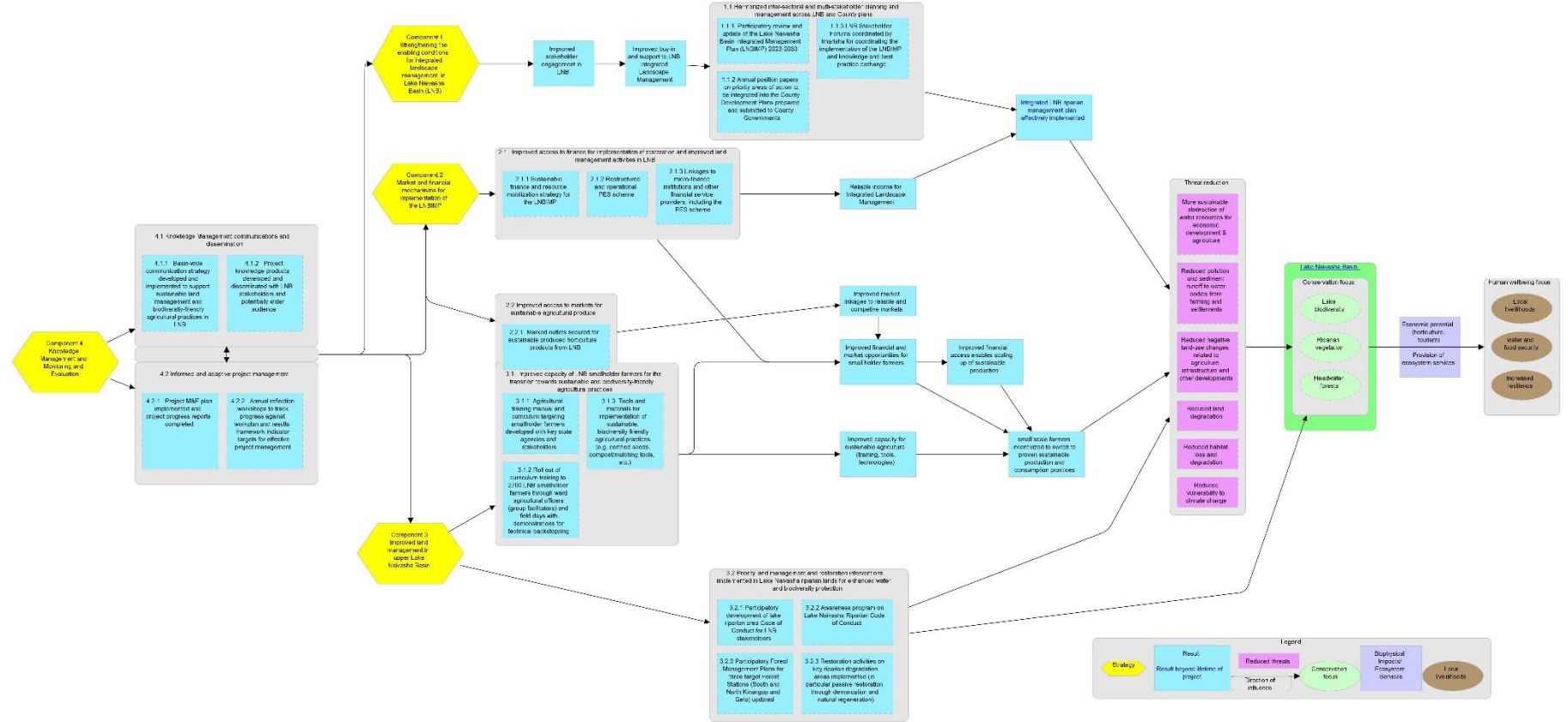
North Kinangop forest reserve is located between Longitude 36° 37.305'E and 36° 40.904'E and Latitude 0° 31.200'S and 0° 38.884'S. The station borders Geta Forest station to the North, South Kinangop to the South and Gatare forest station to the east.

South Kinangop forest borders North Kinangop forest station to the North and is between Longitude 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.

Annex 2: Results Chain



Annex 3: High Level Work Schedule

Outcome	Output	Activities	Year 1				Year 2				Year 3				Year 4							
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4				
Component 1: Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin																						
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	1.1.1.1 Consultations with key stakeholders to build support for the Plan and alignment with County Plans and priorities	Inception phase																Close-out phase			
		1.1.1.2 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)																				
		1.1.1.3 Update the LNBIMP (including its Riparian Plan)																				
		1.1.1.4 Socialize the Plan with key Basin stakeholders																				
	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	1.1.2.1 Annual participatory review of the status of implementation of the County Integrated Development Plans in terms of priorities identified in the LNBIMP																				
		1.1.2.2 Develop position papers on key policy and action areas in to be considered for the Annual County																				

Annex 4: GEF Results Framework

							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)

							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 indicator 2: Area of landscapes under improved management to benefit biodiversity (non-certified) (GEF Core Indicator 4/ Sub-indicator 4.1 and 4.3))	Defined as the landscape area being managed to benefit biodiversity, but which is not certified (4.1) and landscape under 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	Georeferencing areas covered by PFMPs and farms adopting improved production practices	End of project	PMU	GEF sub-indicators (4.1 and 4.3)	0 ("new" improvements = those made within project ³⁹)		35,086 ha	37,086 ha	Qualitative analysis of performance under this indicator will be through methods described under Outcome 3.1 and 3.2 indicators (see below)	\$5,000 (production of GIS maps M&E and project staff 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	End of project	PMU	Direct and indirect emissions	1M tCO ₂ eq loss per year			1,413,610 tCO ₂	Assumption that the impacts of project activities can be distinguished from other influences	\$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
		over a 20 year period.									
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 specific resource. Cumulative	Aggregates the total number of direct beneficiaries from reports on project activities; population count of priority communities targeted through project support	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)
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	\$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
										control of the project	
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 operationalization 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) ⁴⁰
Outcome 2.1: Improved access to markets for sustainable agricultural produce											
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 Office	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											

							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 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. ⁴¹ 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											
Outcome 4.1 indicator Number of KM products and	Counts the number of knowledge management products and	Review of learning products	Annual	MEL Program	By project	0	2 CE	1 KM 1 CE	2 KM 2 CE		\$0 (M&E and project staff)

⁴¹ 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
communication events	communication events delivered by the project KM: knowledge management product CE: communication event Non-Cumulative	and event reports		Office r	By type of product and, event						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 Office r	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)

TOR: Project Coordinator / Sustainable Food Systems Specialist

Position Title: Project Coordinator / Sustainable Food Systems Specialist

Reports to: Project Director

Location: Naivasha, Kenya

Position Type: Full time position for 2 years with possibility of extension

Background

The WWF GEF Project “Lake Naivasha Ecosystem Based Management” will work at the Lake Naivasha Basin (LNB) level to strengthen integrated natural resources management. More specifically, the project will work in the upper catchment (Nyandarua County) with the Wanjohi and Kianjohu Water Resources Users Associations (WRUAs), and around Lake Naivasha itself, in Nakuru County (under the jurisdiction of the Naivasha WRUA).

The 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’ will be delivered through the following four components: (1) Strengthening the enabling conditions for integrated natural resources management in Lake Naivasha Basin (LNB); (2) Market and financial mechanisms for implementation of the LNBIMP; (3) Improved land management in upper Lake Naivasha Basin; and (4) Knowledge Management and Monitoring and Evaluation.

Major functions

The Project Coordinator / Sustainable Food Systems Specialist will supervise staff in the Project Management Unit (PMU), coordinate with project partners and provide day-to-day management of the project. He/she will furthermore provide targeted technical support to the design and implementation of project activities under components 2 and 3 (Outcome 3.1). Approximately 30% time will be dedicated to coordinating the Project Management Unit, with the majority of time dedicated to technical delivery of project activities (70%), both the centrally managed outputs as well as through on-the-ground technical assistance.

Key responsibilities

1. Project Management:

- Day-to-day management, monitoring and evaluation of project activities and results as outlined in the ProDoc, Grant Agreement, and Annual Work Plan and Budget to achieve the project objective and targets in the Results Framework
- Manage the workflow for the Project Steering Committee (PSC), which will be led by the Project Lead
- In collaboration with all project sub-grantees and partners, develop the Annual Work Plan and Budget (AWPB) for each project year, for approval by the PSC and no-objection from the WWF GEF Agency

- Provide high level oversight and monitoring of procurement and expenditure in line with the AWPB
- Review progress of work plan and monitoring plan
- Lead planning and organization for reflection workshop to identify lessons learned and propose potential changes for adaptive management to ensure project results and indicator targets are reached
- Responsible for organization of Inception workshop and other project-level workshops/meetings
- Represent the project and provide support for project supervisions and internal and external reviews/evaluations
- Hold monthly virtual and/or physical meetings with the partners involved in the implementation of project activities per component

2. Staff management:

- Supervise the PMU staff including MEL Officer/Safeguards Specialist, Finance and Operations Manager, Community Engagement and Gender Field Officer and any directly recruited staff or consultants

2. Technical assistance:

- Technically lead and advise on the implementation of the centrally managed components of the project, in particular the following outputs:
 - Sustainable finance and resource mobilization strategy for the LNBIMP (output 2.1.1)
 - Restructured and operationalized PES system (output 2.1.2)
 - Linkages to micro-finance institutions and other financial service providers, including the PES scheme (output 2.1.3)
 - Market access points for sustainably produced horticulture products from the LNB (output 2.2.1)
 - Agricultural training manual and curriculum targeting smallholder farmers developed with key state agencies and stakeholders (output 3.1.1)
 - 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 (output 3.1.2)
 - Tools and materials for implementation of sustainable, biodiversity-friendly agricultural practices (e.g., certified seeds, compost/mulching tools, etc.) (output 3.1.3)
- Advise the project partners in regard to the technical design and implementation of activities under components 1, 2 and 3
- Prepare related TORs to recruit consultants to ensure technical deliverables and experience requirements are included, and in the development of sub-contracts to project partners
- Undertake regular field missions to monitor project implementation and to provide technical advice and support to the landscape teams and project partners

3. Reporting:

- Formulate semi-annual Project Progress Reports and ensure timely delivery to the WWF GEF Agency
- Oversee the preparation and disbursement of sub-grants

- Oversee development of quarterly financial reports and ensure timely delivery to the WWF GEF Agency
- Ensure co-finance reporting on a yearly basis

4. Quality Assurance:

- Provide quality assurance for project activities, including in sub-grants
- Review reports and other products from consultants, staff, and sub-grantees, and ensure quality
- Ensure implementation in line with the GEF and WWF standards and policies

5. Partnerships:

- Coordinate with co-financed projects and liaise with project partners to ensure co-financing commitments are realized
- Attract additional partners and co-financing
- Ensure smooth coordination and communication among all project partners, and with the Program partners
- Manage stakeholder engagement throughout the project duration
- Represent the project, as needed, at various meetings and workshops

Qualifications and Requirements

- 8 years technical working experience, including at least 4 years of project management experience
- Post-graduate degree in a discipline relevant to Sustainable Food Systems
- Technical experience and knowledge in the thematic areas of the project (i.e., integrated landscape management, sustainable agricultural production and landscape restoration)
- Experience in managing similar, complex, multi-stakeholder projects
- Experience in leading a team of staff and coordinating sub-grant partners
- Ability to interact with senior business, government, and NGO staff
- Adaptive management skills
- Knowledge of WWF Project and Programme Management Standards preferred
- Experience in delivering technical and financial reporting to donor agencies on large projects
- Experience with GEF Projects and GEF knowledge an advantage

TOR: Finance and Operations Manager

Position Title: Finance and Operations Manager

Reports to: Project Coordinator / Sustainable Food Systems Specialist

Location: Naivasha, Kenya

Position Type: Full time position for 2 years with possibility of extension

Background

The WWF GEF Project “Lake Naivasha Ecosystem Based Management” will work at the Lake Naivasha Basin (LNB) level to strengthen integrated natural resources management. More specifically, the project will work in the upper catchment (Nyandarua County) with the Wanjohi and Kianjohu Water Resources Users Associations (WRUAs), and around Lake Naivasha itself, in Nakuru County (under the jurisdiction of the Naivasha WRUA).

The 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’ will be delivered through the following four components: (1) Strengthening the enabling conditions for integrated natural resources management in Lake Naivasha Basin (LNB); (2) Market and financial mechanisms for implementation of the LNBIMP; (3) Improved land management in upper Lake Naivasha Basin; and (4) Knowledge Management and Monitoring and Evaluation.

Major functions

Under the direction of the GEF Project Coordinator / Sustainable Food Systems Specialist, the Finance and Operations Manager will be responsible for all financial and operational aspects of the Project including project budgeting, contracting, sub-recipient monitoring and evaluations, financial tracking and reporting, and administrative functions. He/she provides financial and administrative assistance to, and oversight of, program staff and grantees to ensure that budgets and agreements are handled in accordance with WWF policies, procedures, systems, and donor requirements.

Key Responsibilities

- Prepares, administers, and maintains the GEF project budget, ensuring that data is accurate and current. Reviews and monitors status of the budget, against the annual budget and the annual project workplan. Ensures spending levels are appropriate and coding is correct. Identifies problems and recommends corrective action, assists in the revision of budgets and communicates issues to the Project Coordinator / Sustainable Food Systems Specialist. Ensures GEF Requirements are met including the budget structure contained in the ProDoc Budget, and that all expenses are associated with the incremental costs.
- Reviews all documentation received from proposed sub-recipients per the WWF pre-award process, performs sub-recipient risk analysis and develops a risk mitigation plan for the project.
- Coordinates and prepares financial reports for submission to the WWF GEF Agency, ensuring GEF requirements are met.
- Supports, prepares and monitors grant and consultant agreements ensuring compliance with agreement terms. Ensures agreements and payments are processed timely and in accordance with WWF policy and procedures. Prepares paper work for approval, secures signatures, and distributes documents to appropriate parties.
- Reviews and analyzes sub-recipients’ financial reports to ensure compliance by sub-recipients with WWF-US and GEF Agency reporting requirements including project partner co-financing. Notifies grantees of any problems or discrepancies and provides technical assistance to grantees in resolving problematic issues.
- Supports WWF GEF Agency Annual supervision missions by providing requested documentation and other assistance as needed.
- Assists independent final evaluation by providing all requested financial information. Provides feedback where relevant on evaluation reports.
- Maintains information and files pertaining to all financial and administrative aspects of the project including agreements. Regularly monitors on-going compliance with WWF reporting

requirements and individual project deadlines. Ensures all project reports are acknowledged and routed to appropriate individuals for review.

- Provides support to the project management and coordination of day-to-day administrative operations and special projects. Identifies, coordinates and expedites the communication of information and issues both interdepartmentally and intra departmentally, as well as externally with sub-recipients, the Project Steering Committee, the WWF GEF Agency and independent evaluators as necessary.
- Performs other duties as assigned.

TOR: Monitoring, Evaluation and Learning (MEL) Officer / Safeguards specialist

Position Title: Monitoring, Evaluation and Learning (MEL) Officer / Safeguards specialist

Reports to: Project Coordinator / Sustainable Food Systems Specialist

Location: Naivasha, Kenya

Position Type: Full time position for 2 years with possibility of extension

Background

The WWF GEF Project “Lake Naivasha Ecosystem Based Management” will work at the Lake Naivasha Basin (LNB) level to strengthen integrated natural resources management. More specifically, the project will work in the upper catchment (Nyandarua County) with the Wanjohi and Kianjohu Water Resources Users Associations (WRUAs), and around Lake Naivasha itself, in Nakuru County (under the jurisdiction of the Naivasha WRUA).

The 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’ will be delivered through the following four components: (1) Strengthening the enabling conditions for integrated natural resources management in Lake Naivasha Basin (LNB); (2) Market and financial mechanisms for implementation of the LNBIMP; (3) Improved land management in upper Lake Naivasha Basin; and (4) Knowledge Management and Monitoring and Evaluation.

Key responsibilities

Under the guidance and supervision of the Project Coordinator / Sustainable Food Systems Specialist, the Monitoring, Evaluation and Learning (MEL) Officer / Safeguards Specialist will be responsible for tracking and reporting project implementation against project work plans, and reporting progress towards outcome indicator targets. He/she will be responsible for the collection and analysis of different data in relation to the project activities, outputs, and outcomes; maintaining the M&E results framework of the projects; and assisting the Program Coordinator in preparing quarterly, semi-annual, and annual reports on project progress. Through the collection and analysis of high quality and timely data inputs, he/she will be responsible for ensuring that the project maintains its strategic vision and that the activities result in the achievement of their intended outputs and outcomes in a cost effective and timely manner, as well as contributing to project team discussions of potential opportunities for adaptive management.

Furthermore, the MEL Officer/Safeguards Specialist will be responsible for coordination and supervision of environment/social safeguarding related to execution of the Project. Responsibilities will include, in

particular, the execution of the Environmental and Social Safeguards Management Framework (ESMF) and the related Process Framework and IPPF. They will also be responsible for the design and implementation of the project-level Grievance Redress Mechanism, as well as being the main point of contact for receiving and addressing any grievances. They will need to work in close coordination with the Community Engagement and Gender Officer to ensure transparent, effective and participatory stakeholder engagement and coordination between implementation of the ESMF and related PF and IPPF and the GAP and SEP.

This position is based in field and requires substantial travel to the remote project sites. He/she will work in close collaboration with the executing partners and will report to the Project Coordinator / Sustainable Food Systems Specialist.

Key responsibilities

1. Monitoring, Evaluation and Learning (50%):

- Work with the Project Coordinator to design the methodology for the collection of relevant data in close collaboration with all technical specialists;
- Work with field teams and implementation partners to ensure they are building and using effective monitoring systems aligned with the project Results Framework and M&E Plan;
- Based on the project Results Framework and M&E Plan, design a database that helps maintain data collected over the course of project implementation and is transparent to all partners;
- Manage said database to ensure data is accurate and updated, with guidance to ensure consistency of measurement methodologies over time;
- Monitor application of project M&E plans, gather and analyze data, and produce semi-annual, and annual reports on project progress and impact in partnership with the Project Coordinator including progress, reflections, adaptive management, M&E outcomes, and project ratings;
- Provide a completed and up to date Results Framework and Work Plan Tracking for the WWF-GEF Project at the end of each project year;
- Proactively investigate and reflect on emerging data collection for adaptive management proposals, including modifications to project strategy or theory of change;
- Coordinate annual reflection workshops to inform adaptive management of the project;
- Collect and analyze additional data relevant to project from external sources;
- Troubleshoot data collection challenges;
- Monitor for data inaccuracies or inconsistencies and seek clarifications when needed;
- Facilitate logistical and coordination support to facilitate project supervision missions and evaluations (by WWF-GEF Agency, NETFUND and external evaluators);
- Lead organization of annual reflection meetings
- Develop and lead the implementation of a gender-sensitive/responsive knowledge management and communications strategy in close collaboration with the PMU, NETFUND and Imarisha Lake Naivasha;
- Document, generate, and share knowledge products with relevant stakeholders or parties;
- Develop and maintain content on project-related websites for the purpose of making project news and resources available to diverse stakeholders.

2. Safeguards (50%)

- Provide inputs to the Project Coordinator to ensure safeguards compliance with reference to ESMF/PF/IPPF during project planning and implementation;

- Monitor implementation of the ESMF/PF/IPPF including inputs and recommendations from related consultants;
- Conduct ESS Screening on newly planned/ revised project activities, as outlined in ESMF;
- Ensure the project team's understanding of environmental and social safeguards and how to support implementation of the ESMF/PF/IPPF;
- Provide training on safeguards requirements to PMU staff and relevant partners as required;
- Regularly review the above-mentioned frameworks and make amendments as necessary;
- Set up, lead the socialization of and ensure implementation of the grievance redress mechanism including being a point of contact to receive grievances. Oversee the addressing of grievances with assistance from the Community Engagement/Gender Officer;
- Ensure full disclosure of existing and newly developed Plans with concerned stakeholders;
- Carry out regular monitoring and capacity building visits to the project sites;
- Provide inputs to project reports on the status of safeguards compliance and GRM implementation with the ESMF/PF during implementation and any issues arising;
- Coordinate with the Community Engagement and Gender Officer to ensure alignment in implementation of the ESMF/PF/IPPF and the GAP and SEP;
- Participate in monthly calls with the ESS Specialist in the WWF US GEF Agency;
- Undertake any other tasks assigned by the project manager to support the project with respect to E & S safeguard issues.

Qualifications

- University degree in an appropriate field of management, social sciences (Demography, Anthropology, Economics, Development Studies, program evaluation, etc.) or Natural sciences (conservation, environment, environmental anthropology, natural resource management, forest, freshwater, terrestrial ecology, animal sciences, etc.). MSc will be an added advantage;
- Must have at least 5 years of relevant work experience, including professional experience with design and implementation of monitoring and evaluation systems, social and environmental safeguards and project management. A Master's degree in the above-mentioned fields will substitute for 2 years of experience;
- Professional training in Monitoring and Evaluation, and some knowledge of project cycle management (i.e., situation/context analysis, conceptual models, theories of change, monitoring and evaluation);
- With technical knowledge on various safeguards related laws, policies and processes particularly on Land acquisition, Rehabilitation and Resettlement Processes, Kenyan Environmental Laws and Environmental Impact Assessment (EIA) systems
- Experience with practical development and implementation of related result-based management-oriented monitoring system in conservation will be an added advantage;
- Excellent interpersonal and communication skills with the ability to network, and to develop and maintain strong relationships with project staff, stakeholders and beneficiaries;
- Capability to provide guidance on negotiations and conflict resolutions processes;
- Must have at least 2-years relevant experience of the application of environmental and social safeguards to project management, including familiarity with access restrictions and equitable benefit sharing;
- Must have proven ability to manage multiple priorities;
- Strong analytical skills/expertise in analyzing data is required;
- Strong writing skills are required;

- Experience in research methods, designing and implementing tools and strategies for quantitative and qualitative data collection, analysis and production of reports is preferred;
- Experience and expertise using statistical and database software, such as R or Stata, Excel and Smartsheet, is desired;
- ;
- Fluency in written and spoken English and relevant local languages (at least Kiswahili, Kikuyu desired) is required;
- Experience working in a remote rural area will be an added advantage.
- Clean valid driver's license.

TOR: Field Officer - Community Engagement and Gender

Position Title: Field Officer - Community Engagement and Gender

Reports to: Project Coordinator / Sustainable Food Systems Specialist

Location: Naivasha, Kenya

Position Type: Full time position for 2 years with possibility of extension

Background

The WWF GEF Project “Lake Naivasha Ecosystem Based Management” will work at the Lake Naivasha Basin (LNB) level to strengthen integrated natural resources management. More specifically, the project will work in the upper catchment (Nyandarua County) with the Wanjohi and Kianjohu Water Resources Users Associations (WRUAs), and around Lake Naivasha itself, in Nakuru County (under the jurisdiction of the Naivasha WRUA).

The 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’ will be delivered through the following four components: (1) Strengthening the enabling conditions for integrated natural resources management in Lake Naivasha Basin (LNB); (2) Market and financial mechanisms for implementation of the LNBIMP; (3) Improved land management in upper Lake Naivasha Basin; and (4) Knowledge Management and Monitoring and Evaluation.

Major functions

Under the guidance and supervision of the Project Coordinator, the Field Officer - Community Engagement and Gender will be responsible for leading the delivery of the Stakeholder Engagement Plan (SEP), community engagement processes to achieve all the project outputs, and the Gender Action Plan (GAP) for the project. The position will also provide assistance with research projects on the ground; assist in day to day running of the project office; support the coordination of meetings and workshops with communities or other stakeholders in the landscape; implement initiatives to strengthen the communities in sustainable horticulture production and forest landscape management and restoration; liaise closely with communities, traditional leaders, district and provincial offices and relevant government departments to ensure synergy and support for site activities to deliver gender equality and stakeholder inclusion across the project. They will also need to work in close coordination with the MEL and Safeguards

Specialist to ensure transparent, effective and participatory stakeholder engagement and coordination between implementation of the ESMF and related PF and IPPF and the GAP and SEP.

The Field Officer will work in close collaboration with the project teams and implementing partners and external organizations and will report to the Project Coordinator.

Responsibilities

- Coordinate and track implementation of the SEP and GAP, under the supervision of the Project Coordinator;
- Assess knowledge and capacity needs of project staff and partners on stakeholder engagement and gender issues, concepts and mainstreaming at the onset of the project;
- Provide capacity building as needed over the life of the project on the issues mentioned above and on how to support implementation of the stakeholder engagement plan and gender action plan;
- Support the coordination of meetings and workshops with communities and other stakeholders in the landscape;
- Implement initiatives to strengthen the communities in project areas through sustainable resource uses of forests, water resources and wildlife;
- Liaise closely with communities, traditional leaders, district and provincial offices and relevant government departments to ensure synergy and support for site activities;
- Work with the Project Coordinator to design methodologies and implementation plans for the execution of project outputs and activities in close collaboration with technical specialists;
- Work with field teams and implementation partners to build understanding of project processes and technical requirements aligned with the project work plans;
- Record information on field activities and provide inputs to semi-annual, and annual reports on project progress and impact in partnership with the Project Coordinator;
- Provide inputs on the status of project activities to support Results Framework and Work Plan Tracking for the WWF-GEF Project at the end of each project year;
- Provide inputs to the development of project workplans and participate in project management meetings and annual reflection workshops to inform adaptive management of the project;
- Troubleshoot project delivery challenges in collaboration with the Project Coordinator;
- Provide logistical support and technical inputs to project supervision missions and evaluations (by WWF-GEF Agency, NETFUND, WWF Kenya and external evaluators);
- Document project learning and provide inputs to knowledge products with relevant parties;
- Socialize the Grievance Redress Mechanism with communities, acting as a point person for submission of grievances from communities.
- Performs other duties as assigned.

Qualifications and Experience

- A Bachelor's degree is required in social sciences, gender studies, community development, social anthropology, natural resource management or a related field;
- A Master's degree in the above-mentioned fields is an added advantage;
- Must have at least 3 years of relevant work experience of project management, planning and implementation including community mobilization and engagement in Kenya;

- Ideally 2 of those years of experience will be in the execution of natural resource management projects implemented by national/international NGOs/agencies/government;
- Must have experience of gender mainstreaming and women's empowerment, preferably in a natural resource management project setting;
- Knowledge of the institutional and legal framework pertaining to land, forest and water resources management, as well as of relevant policy issues in Kenya.
- Proven leadership, communication, facilitation and stakeholder engagement skills;
- Experience in working with traditional leaders and communities (including with more marginalized groups), and collaborating with multi-sectorial teams as well as government officials;
- Skills in project planning and implementation, monitoring, financing, management and reporting;
- Excellent inter-personal and lobbying skills, including the ability to develop and maintain strong relationships with stakeholders and partners at district and community levels;
- Excellent oral and written communications skills in English;
- Knowledge of local languages (Kiswahili and Kikuyu) is a requirement;
- Excellent conflict management and mitigation skills in local community environments;
- Excellent organizational and logistical skills, and the ability to work in strenuous field conditions in a remote rural setting;
- Must be proficient in use of MS Office programs; expertise using database and Excel preferred;
- Clean valid driver's license and ability to ride a motorbike.

TOR: Project Director – seconded by NETFUND (not on GEF budget)

Background

The WWF GEF Project “Lake Naivasha Ecosystem Based Management” will work at the Lake Naivasha Basin (LNB) level to strengthen integrated natural resources management. More specifically, the project will work in the upper catchment (Nyandarua County) with the Wanjohi and Kianjohu Water Resources Users Associations (WRUAs), and around Lake Naivasha itself, in Nakuru County (under the jurisdiction of the Naivasha WRUA).

The 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’ will be delivered through the following four components: (1) Strengthening the enabling conditions for integrated natural resources management in Lake Naivasha Basin (LNB); (2) Market and financial mechanisms for implementation of the LNBIMP; (3) Improved land management in upper Lake Naivasha Basin; and (4) Knowledge Management and Monitoring and Evaluation.

Key responsibilities

- The project Director is ultimately responsible for the Project and will dedicate 10% of his/her time to leading the project.
- He/she will chair the Project Steering Committee and lead semi-annual virtual meetings.
- He/she will be responsible for endorsing any significant adaptive management decisions as they relate to the strategy of the project, in close consultation with the Program Coordinator / Sustainable Food Systems and the PSC. He/she will also be responsible for any significant troubleshooting that may be required during the course of the project addressing poor performance, budget variances, staff changes, etc.
- He/she will also represent the project externally where necessary and appropriate and where the Program Coordinator / Sustainable Food Systems may not be available.

Annex 6: Site Selection

The large size of the landscape and the diversity in terms of the issues addressed by the project warrants a focus on specific areas within the landscapes where the issues are most apparent. In this regard, a site selection process was completed as part of the PPG stage.

The selection process for the short-listed focal areas for site-based interventions considered a number of criteria considered essential for the project, as follows:

- **Areas where the threats as identified in the project document are most prevalent and impacting on land, water and biodiversity:** For example, the project would focus on sites where agricultural practices are most likely impacting on water flow and quality, causing land degradation etc., or areas prone to erosion (e.g., steeper slopes) where forest degradation due to livestock grazing, encroachment, timber harvesting etc., are causing land degradation and reduced water retention.
- **Potential for successful implementation of project activities:** This involves:
 - o The interest and willingness of communities and other partners to engage in project activities;
 - o The presence of past or existing projects and initiatives on which this project might build; and
 - o Technical and financial viability, e.g. local factors that may influence the technical and financial feasibility of the improved farming practices or the potential for successful restoration or improved management of the ecological values of the sites.
- **Convergence of interests between Government sectors:** The project will build on areas or issues already identified by Government as priorities. This may include e.g. existing reserved areas and community forest areas, water protection areas, agricultural strategies, among others.

Based on the above criteria, the sites selected for on-the-ground intervention include:

- For the agricultural part of the project (Outcome 3.1), the group identified 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 for Lake Naivasha. 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).
- For the restoration work (Outcome 3.2), the group identified 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. The group based itself, among others, on earlier assessments undertaken as part of the Lake Naivasha FLR project. The focus will be on three degraded forest areas: Sofia Beat in Geta Forest Station (200 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).

A map presenting the selected project sites is presented in Figure 5.

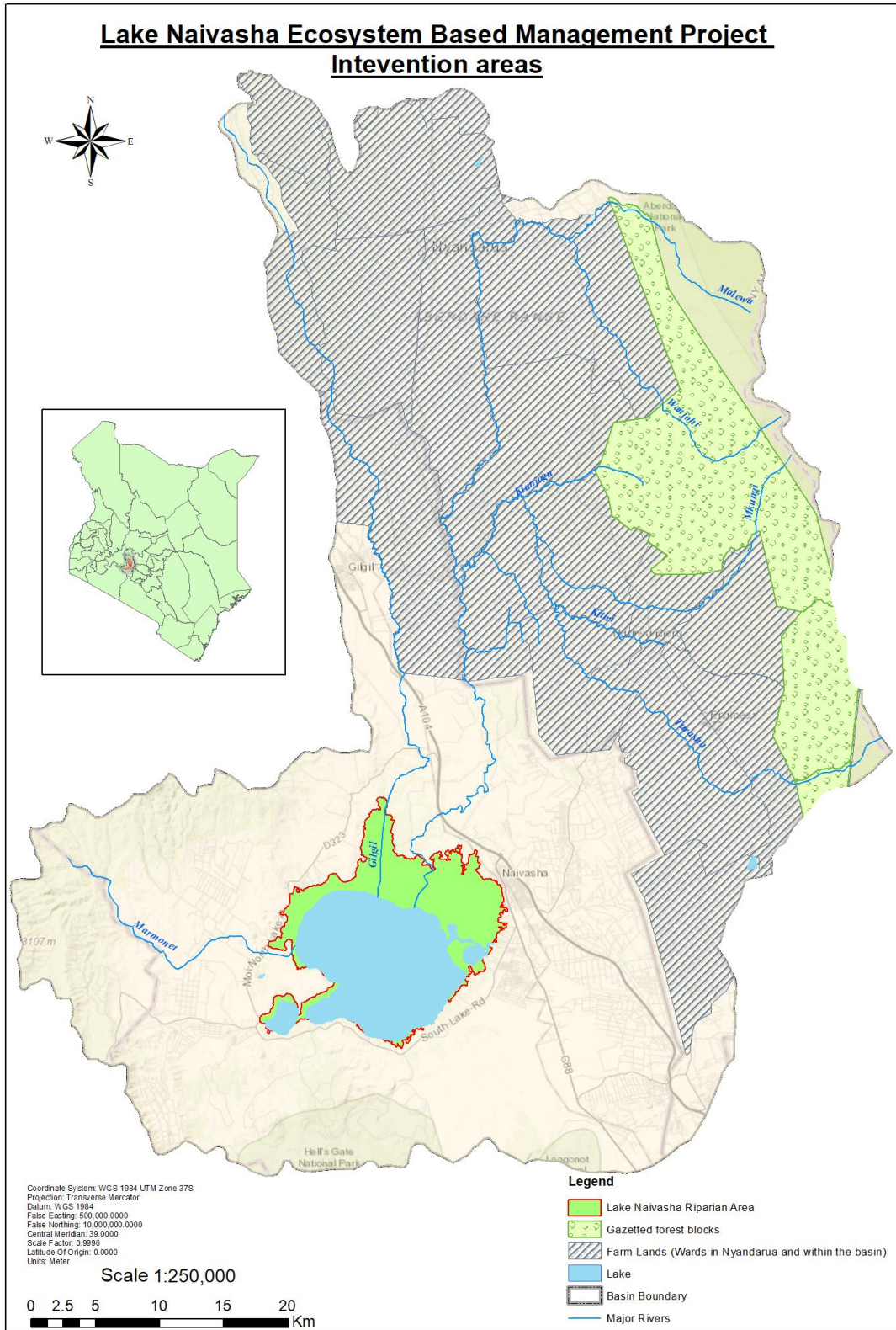


Figure 5 Map highlighting the proposed project sites

Annex 7: Knowledge Management and Communications

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:

Components	Knowledge and communication products
1. Strengthening the enabling conditions for integrated landscape management in Lake Naivasha Basin (LNB)	1.1. Report on key socio-economic trends and developments in the LNB and their potential threats to the environment 1.2. Awareness raising products on the LNBIMP
2. Market and financial mechanisms for implementation of the LNBIMP	2.1. Study into potential mechanisms for ensuring sustainable finance and resource mobilization for implementation of the LNBIMP, including Imarisha. 2.2. PES communications strategy and marketing products 2.3. Report on opportunity/viability analysis and design for the establishment of a central basin investment fund

Components	Knowledge and communication products
	2.4. Marketing products and supporting marketing events for sustainable horticulture products 2.5. Awareness raising materials on the KS1758 certification
3. Improved land management in upper Lake Naivasha Basin	3.1. Report on training needs assessment 3.2. Training manual on sustainable horticulture production 3.3. Code of Conduct for LNB stakeholders, with related awareness raising materials 3.4. Awareness raising materials on PFMPs
4. Knowledge Management and Monitoring and Evaluation	4.1. Inception report 4.2. Basin-wide communication strategy 4.3. Lessons-learnt report 4.4. Semi-annual Project Progress Reports 4.5. 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 meeting.

Screening for climate risks ensures that WWF creates durable projects and programmes in the face of climate change. This internal climate risk screening tool is intended to help you think through climate-related risks at the early stages of project/programme design.

According to the UNFCCC IPCC 1.5 Degrees Report, risk is defined as:

*“The potential for adverse consequences where something of value is at stake and where the occurrence and degree of an outcome is uncertain. In the context of the assessment of climate impacts, the term risk is often used to refer to the potential for adverse consequences of a **climate-related hazard**, or of **adaptation or mitigation responses** to such a hazard, on lives, livelihoods, health and well-being, ecosystems and species, economic, social and cultural assets, services (including ecosystem services), and infrastructure. Risk results from the interaction of vulnerability (of **the affected system**), its exposure over time (to the hazard), as well as the (climate-related) hazard and the likelihood of its occurrence.”*

1. **Which ecosystems are present in your project area?** (These are the natural elements of the **affected system** that are exposed to climate-related hazards.)
 - Coral reefs
 - Coastal
 - Deserts and xeric shrublands
 - Deltas and estuaries
 - Boreal forests and taiga
 - Temperate forests
 - Tropical and subtropical forests
 - Temperate grasslands
 - Tropical and subtropical grasslands
 - Ponds and lakes
 - Mediterranean shrubs and Forests
 - Mangroves
 - Montane/Alpine

- Temperate oceans
- Tropical oceans
- Peatland
- Streams, rivers, riparian
- Seagrass
- Saltmarsh
- Wetlands
- Created forest
- Created grassland
- Created other
- Created wetland
- Other: _____

Priority conservation targets in project area (e.g. specific landscapes or seascapes, freshwater bodies, forests, oceans and reefs, wildlife species, etc.)

Proposed project interventions will take place in both the upper catchment of Lake Naivasha in Nyandarua County, and around Lake Naivasha itself, in Nakuru County. River Kianjogu (in Kianjogu WRUA) and River Wanjohi (in Wanjohi WRUA), in the upper catchment, are the main tributaries of River Malewa, which in turn is 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).

The key values provided by Lake Naivasha Basin (LNB) are globally significant biodiversity, and provision of water and fertile soil. In 1990, 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. The lake ecosystem supports about 400 bird species, and hence is an Important Bird Area. In addition to its importance as home to exceptional biodiversity, riparian land in the lake ecosystem provides myriad benefits, including ecological functions and services such as carbon storage and climate change mitigation, water purification (filtration of sediments and buffer to pollutants), flood control and mitigation.

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. The forest covers over 250,000 ha and one of the main water towers in Kenya.

2. Describe the social and economic elements of the landscape/protected area the project/programme will be working in. (These are the socio-economic elements of the affected system that are exposed to climate-related hazards.)

The upper catchment of the LNB is inhabited by the Kikuyu tribe who are mainly small holder farmers. The Naivasha WRUA is a host to many tribes in Kenya though the Kikuyus are predominant. These communities derive their source of livelihood primarily from agricultural activities, small commercial businesses, fishing, and formal employment with a number being employed in the flower and hotel industry. Lake Naivasha Basin is mainly inhabited by communities who depend on small-scale rain-fed agriculture on the upper side and pastoralism in the lower areas.

People living within the Lake Naivasha watershed are engaging in unsustainable agricultural practices out of necessity. Farming in the region is focused on subsistence production instead of agribusiness to address the nutrition needs of the surrounding communities. Currently the Nyandarua County has the highest percentage of people who have stunted growth due to a lack of nutrition. Detrimental agricultural practices result in lower quality soil and water, and inferior storage technologies which leads to lower quality products, excluding small farmers from the larger commercial markets.

The social and economic elements of the landscape present the following barriers: lack of collective accountability between sectors of water use upstream and downstream, inadequate institutional coordination, limited financial and market incentives for smallholder farmers, lack of capacity for applying sustainable agriculture at community level, lack of extension services, and market opportunities, and capacity for implementing the Water User Associations (WRUAs) and Community Forest Associations (CFAs) management plans.

Kenya is not identified as a Fragile and conflict-afflicted state in the World Bank FY21 List of Fragile and Conflict-Afflicted Situations. 37% of the population of Kenya lives below the poverty rate.

Communities and their main livelihoods in project area

Major relevant industries or economic sectors in project area (e.g. specific commercial agricultural crops, fisheries, forestry, mining, major infrastructure, manufacturing, etc.)

The Lake Naivasha Basin provides a source of livelihood – it has fertile soils for agriculture, freshwater for fishing, employment in floriculture and supports national and local tourism.

Agriculture is a large sector in this area in Kenya, particularly horticulture, with exported flowers making up 70% of the horticultural sector's profits and employing 250,000 people. 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. LNB accounts for more than 50% of the country's cut flower exports. Additionally, the Naivasha area is steadily rising as a conference tourism destination in the country. 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.

3. Which climate-related hazards will affect the project area/landscape over the period 2020 to 2050? (Use data from leading climate change models)

Changes in timing of seasons

Increased rainfall

Decreased rainfall

Drought

Desertification

Flooding

Freshwater flooding

Storm surge

Loss of water source

Heat waves/Hotter days

Cold spells/Frost

Wildfires

Changes in wind

Wind damage

Soil erosion

Coastal erosion

Mudslides/Landslides

Ice/Permafrost melt

- Sea level rise
 - Increased aridity
 - Loss of other ecosystem goods
 - Food and timber productivity
 - Avalanche
 - Biomass cover
 - Ocean acidification
 - Increased incidence/changing distribution of disease
 - Pests
 - Soil erosion
 - Soil Quality
 - Coastal erosion
 - Coastal inundation
 - Coastal saltwater intrusion
 - Water quality
 - Wildfire
 - None
 - Other: _____
- Uncertain or do not know

Future climate 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. **Inter-seasonal rainfall variability** will increase over the next 50 years.

By 2050, the **mean annual temperature** will have risen by 1.68°C, 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. Agriculture is highly temperature dependent, with crop yields in lower elevations predicted to decrease by 20%. Increasing temperatures will also exacerbate the rate of glacial melt, affecting water runoff from Mt. Kenya, located near Lake Naivasha.

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**. Additionally, frost is a common phenomenon in the project-slopes of Aberdares and impact-negative effects on crop production would increase with climate change

4. **Which climate-related hazards have become more frequent or severe and have negatively impacted your project area during the last 10 years? These can be anecdotal or based on collected data.** (These are the climate-related hazards the affected system is exposed to over time.)

- Changes in timing of seasons
- Increased rainfall
- Decreased rainfall
- Drought
- Desertification
- Flooding
- Freshwater flooding
- Storm surge
- Loss of water source
- Heat waves/Hotter days
- Cold spells/Frost
- Wildfires
- Changes in wind
- Wind damage
- Soil erosion
- Coastal erosion
- Mudslides/Landslides
- Ice/Permafrost melt
- Sea level rise
- Increased aridity
- Loss of other ecosystem goods
- Food and timber productivity
- Avalanche
- Biomass cover

- Ocean acidification
- Increased incidence/changing distribution of disease
- Pests
- Soil erosion
- Soil Quality
- Coastal erosion
- Coastal inundation
- Coastal saltwater intrusion
- Water quality
- Wildfire
- None
- Other: Lake Level rise _____
- Uncertain or do not know

Increased temperatures: The temperature in Kenya has been increasing over the past several decades at a rate of .21°C per decade. Increased temperatures can exacerbate drought events as well as create heat stress for livestock and humans. There are temperature thresholds for agricultural crops at which point the crops become less productive. Higher temperatures will also increase the likelihood of vector- and water-borne diseases spreading, Malaria in particular.

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.

Drought and limited freshwater availability will continue to detrimentally affect crop and agricultural yields, breaking down food system causing food insecurity and hunger.

5. **Which of the following impacts have been observed in the project area that you believe may be caused or exacerbated by the climate-related hazards you noted in questions 3&4?** (These indicate how the affected system is vulnerable to climate-related hazards.)
 - a. Community/human impacts due to observed climate-related hazards

- Decline or loss of crop yields
- New or increased number of pests
- Decline in livestock health (death, disease, weight loss, decline in the production of milk and/or number of offspring)
- Increased instances of disease
- Damage to property, equipment, infrastructure (e.g. caused by floods/storms)
- Increased instances of wildlife entering farms/settlements for water, to prey on livestock, or to eat/damage crops
- Increased instances of hunger, famine, poor nutrition, and/or respiratory problems
- Scarcity of pasture for livestock grazing
- Decreased availability of freshwater
- Decreased quality or contamination of freshwater
- Scarcity or loss of firewood access
- Loss or reduction of wild plants/animals used for consumption
- Loss or reduction of wild plants/animals used for medicinal purposes
- Loss of fish availability (fish swimming to lower depths/further out from shore to escape heat, making them more difficult to catch)
- Increase in invasive species
- Decrease in pollinators
- Increased yields
- Opportunity to plant different types of crops
- Other: _____
- Uncertain or do not know

The impacts of climate change continue to threaten ecological systems of the lake basin affecting farming cycles/seasons and in turn, crop production and food security.

Drought and Flooding events have affected the project area. The drought event in Kenya from years 2008- 2011 caused approximately \$12.1 billion in damage and crop/agricultural losses. Since the 1970s, central Kenya has seen a decrease in long-lasting rain events. However, more **extreme flood events** have already led to displacement of local people in the Lake Naivasha Basin, which has been linked to food insecurity.

b. Impacts on biodiversity that could be attributed to observed climate-related hazards

- Fragmentation of habitat, creating restricted movement for wildlife
- Habitat loss due to deforestation or other land clearing/conservation activities
- Habitat degradation from human encroachment, increased human activity and extraction of resources in natural areas including reserves and parks (protected areas)
- Range shift (wildlife moving into an area they previously did not occupy or out of an area they previously occupied)
- Increase or emergence of new diseases affecting plant/animal species
- Mortality/decline in abundance of plants/animal species caused by heat
- Mortality/decline in abundance of plants/animal species caused by floods
- Changes in life cycle events of plants/animal species (phenotypic change?)
- Increase in invasive plant/animal species
- A general decline in population or disappearance of a species in an area
- Other: _____
- Uncertain or do not know

Anecdotal evidence suggests that climate change impacts have led to; (i) a decrease in plant and animal species reproductive success as a result of heat stress and drought,(ii) species may have changed life cycle patterns based on the shifting seasons (iii) floods causing human range shifts has likely led to habitat fragmentation and more human-wildlife conflict, (iv) temperature changes have been linked to an increase in presence of invasive species, which in this ecosystem have caused an imbalance in the lake, for example, water hyacinth has led to dwindling of fish breeding grounds.

c. Additional business sector impacts due to observed climate-related hazards

- Decline in agricultural production
- Decline in energy generation
- Decline in fisheries production
- Decline in forestry
- Damage to infrastructure
- Disruptions in manufacturing
- Disruptions in supply chains
- Disruptions in operations
- Social conflict
- Market change
- Workforce migration
- Regulations due to scarcity of resources or other impacts
- Credit risk
- Raw material price increases
- Increased cost of inputs
- Operational price increases
- Labor availability impacted
- Increase in insurance prices
- Reinsurance impacts
- Other: _____
- Uncertain or do not know

The agricultural sector is being affected as crop yields have been significantly less in the target area. Floods have caused damage to infrastructure and disruptions in supply chains.

6. **How are communities responding to these impacts due to observed climate-related hazards?** (These are the **adaptation responses** to climate-related hazards that can pose additional risk to the affected system.)

a. Agriculture

- Adopting alternative crop practices (crop type, ground contouring, conservation agriculture, farming in new areas, planting earlier/later than usual)
- Increasing application or changing the type of pesticides used
- Increasing application or changing the type of fertilizer used
- Adopting alternative livestock practices (livestock type, new grazing area, grazing in certain areas earlier or later than usual)
- Practicing agroforestry (planting trees on farms to prevent erosion/provide shade)
- Using irrigation practices (where there previously was one, or increased use)
- Other: _____
- Uncertain or do not know

b. Alternative or supplementary income

- Selling assets (property, belongings, livestock)
- Changing livelihoods towards small business practices (selling charcoal, crafts, etc.)
- Hunting animals as a source of income or food
- Relying on fishing as a source of income or food
- Logging
- Land clearing/expansion of agriculture
- Relying on aid from an NGO or government for resources
- Foraging in natural areas (i.e. forests) to gather food/raw materials or doing so more intensively
- Construction of infrastructure (dams, wells, fencing)
- Other: _____
- Uncertain or do not know

c. Resource access

- Traveling further or to new locations to access water

- Traveling further or to new locations to access firewood
- Traveling further or to new locations to access NTFPs
- Traveling further or to new locations to access game/food
- Traveling further or to new locations to access land and soil
- Migrating to new areas
- Other: _____
- Uncertain or do not know

d. Ecosystem and human-wildlife interactions

- Practicing restoration or protection of key landscape/ecosystem services (water catchment, restoration of riverbanks to maintain flood mitigation benefits)
- Killing of wildlife for defensive or retaliatory reasons (posing a threat to life or property)
- Other: the project will assist with the review of the riparian management plan to improve riparian ecosystem functions and deter human-wildlife conflicts due to encroachment and poaching by illegal artisanal fishers_____
- Uncertain or do not know

So far it is understood that crops and croplands within the project area are negatively impacted from climate induced disasters such as flood, drought, erosion, landslides, and extreme temperature fluctuations. However, communities have already started responding by taking measures such as alternative crop practices, installing rainwater harvesting and irrigation infrastructure.

The flooding has also caused people to migrate away from flood-zones and overcrowd in other locations.

Local peoples have turned to illegal activities such as logging and burning of land to create more agricultural pastures, in the efforts to secure alternative livelihoods.

7. **How is the business sector responding to these impacts due to observed climate-related hazards?** (These are the **adaptation responses** to climate-related hazards that can pose additional risk to the affected system.)
- Adding on-site utilities and energy sources
 - Shifting supply base
 - Increasing risk awareness

- Relocating physical assets and operations
- Increasing insurance coverage
- Development of disaster recovery plans
- Shifting patterns of production and sourcing
- Auditing suppliers' activities and plans
- Risk assessment and management shifts
- Financing adaptation activities
- Technology development, transfer, and application
- Efficiencies
- Policy engagement
- Investment in green and grey infrastructure to protect assets
- Other: _____
- Uncertain or do not know

The project will engage in close dialogue with private sector partners during the project development phase and take steps to integrate climatic variability in the design of project interventions.

8. Which of the identified climate-related hazards, impacts, and responses identified in questions 3-7 will have the most implications on the 1) operations and/or 2) sustaining long-term outcomes of your project? If so, how?

The Lake Naivasha Ecosystem Based Management project's objective is to increase the protection of Lake Naivasha's water resources, riparian vegetation, headwater forests and associated ecosystem services to support the local and national economy. In this regard, the project will actually help increase the resilience of the LNB ecosystems, and decrease the vulnerability of its dependent population. Having said some of the responses that local peoples are having to flooding and increased temperature fluctuation are causing threats to the already-stressed ecosystem. For example, land clearing for agricultural expansion and foraging into forests threaten sustainability of the efforts. The project will also face challenges that cause resource use competition (land, water, forest products), as these get more scarce.

**9. What are your primary sources of information on these changes and/or risks?
Please include titles of sources and/or direct links.**

- Peer-reviewed literature or other academic research
- Grey or white literature (i.e. reports from researchers or other NGOs)
- Government reports
- Observations from the field
- Interviews
 - Personal
 - Community/expert interviews
- Multi-stakeholder workshop
- IPCC reports

- World Bank. 2016. Kenya Country Profile
- 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).
- WHO. 2015a. Climate and health country profile, Kenya.
- USAID, 2018: Climate Risk in Kenya: Country Risk Profile.

10. How will your project address these identified climate-related risks to ensure project success?

Current climatic variability and anticipated climate change patterns has been 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.

- We do not know how to mitigate these risks
- We cannot mitigate these risks

11. What technical and institutional capacity, and information, will be needed to address climate vulnerability and enhance project and place-based resilience?

- Technical capacity to address identified climate vulnerabilities and design resilience enhancement measures
- Institutional capacity to address identified climate vulnerabilities and design resilience enhancement measures
- Information on financial implications of the proposed climate vulnerability management options
- Mechanisms for evaluation of the success mechanisms to reduce vulnerability and improve resilience (Monitoring, Evaluation and Learning strategy - implementing and evaluating the selected climate vulnerability management options over the project lifetime and evaluating the projected impact uncertainties beyond that period.

To implement the main mitigation measures as defined under 10, the project would need a mixture of technical capacity (e.g. for the design and roll-out of the training manual); institutional capacity (e.g. for mainstreaming climate change considerations if the landscape management plans), as well as close monitoring of the effectiveness and implementation of these measures.

12. Any additional comments/next steps?

In light of the project's short timeframe (3 years) will make monitoring of the effectiveness of the proposed mitigation measures, post-project follow-up will be required.