Part I: Project Information

GEF ID
11019

Project Type
MSP

Type of Trust Fund
GET

CBIT/NGI
CBIT **No**
NGI **No**

Project Title
Effective Management of Mchinji Ecosystems for Restoration of Upper Bua River Catchment

Countries
Malawi

Agency(ies)
UNEP

Other Executing Partner(s)
Environmental Affairs Department in the Ministry of Natural Resources and Climate Change

Executing Partner Type
Government

GEF Focal Area
Biodiversity

Sector

Taxonomy
Focal Areas, Biodiversity, Influencing models, Demonstrate innovative approache, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Deploy innovative financial

instruments, Convene multi-stakeholder alliances, Stakeholders, Gender Equality, Integrated Programs, Capacity, Knowledge and Research

Rio Markers

Climate Change Mitigation

No Contribution 0

Climate Change Adaptation

No Contribution 0

Biodiversity

Principal Objective 2

Land Degradation

No Contribution 0

Submission Date

6/7/2023

Expected Implementation Start

9/1/2023

Expected Completion Date

12/31/2027

Duration

48In Months

Agency Fee($)

87,543.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
BD-1-1	Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors	GET	300,000.00	4,000,000.00
BD-2-7	Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate	GET	621,508.00	4,198,004.00
		Total Project Cost($)	**921,508.00**	**8,198,004.00**

B. Project description summary

Project Objective

Project Objective: Effective management of Mchinji forest and supporting local government institutions and communities to enhance conservation and sustainable use of Forest resources to maintain and restore biodiversity and ecosystem services in community forests and communal lands

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 1: Forest Management Framework and Capacity in Enforcement of Forest Protection	Technical Assistance	Outcome 1: Effective management of Mchinji forest reserve strengthened through development management frameworks and improving capacity in enforcement for protection of forest reserve.	? Output 1.1: Forest management plan for Mchinji forest reserve is developed and implemented Output 1.2: Law enforcement and collaboration among law enforcement agencies strengthened for Mchinji Forest Reserve	GET	384,008.00	2,200,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 2: Supporting local government institutions and communities to enhance conservation and sustainable use of forest resources to maintain and restore biodiversity and ecosystem services in community forests and communal lands	Technical Assistance	Outcome 2: Improved conservation and sustainable use of forest resources so as to maintain and restore biodiversity and enhance ecosystem services through supporting local government institutions and communities.	? Output 2.1: Ecosystem based IGAs and livelihoods of forest dependent communities promoted Output 2.2 New village forest areas created and natural tree regeneration promoted in community forests	GET	326,500.00	2,800,000.00
Component 3: Knowledge Management (generation, sharing, learning and scaling up)	Technical Assistance	Outcome 3: An effective knowledge management system in place	Output 3.1: A gender-responsive communication strategy to facilitate better understanding of project activities amongst all stakeholders developed and implemented	GET	84,000.00	2,100,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing($)
Component 4: An effective project monitoring and evaluation system in place		Outcome 4: An effective project monitoring and evaluation system in place	? Output 4.1 Project gender-responsive Monitoring and Evaluation system developed to track project progress ? Output 4.2: The project exit strategy developed and implemented Output 4.3: Project management, coordination, monitoring and evaluation is conducted	GET	46,000.00	355,004.00
			Sub Total ($)		**840,508.00**	**7,455,004.00**
Project Management Cost (PMC)						
				GET	81,000.00	743,000.00
				Sub Total($)	**81,000.00**	**743,000.00**
				Total Project Cost($)	**921,508.00**	**8,198,004.00**

Please provide justification

C. Sources of Co-financing for the Project by name and by type

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	Environmental Affairs Department	In-kind	Recurrent expenditures	1,500,000.00
Recipient Country Government	Environmental Affairs Department	Grant	Investment mobilized	750,000.00
Recipient Country Government	Forestry Department	In-kind	Recurrent expenditures	1,500,000.00
Recipient Country Government	Forestry Department	Grant	Investment mobilized	250,000.00
Recipient Country Government	Mchinji District Council	In-kind	Recurrent expenditures	2,498,004.00
Civil Society Organization	Wildlife and Environmental Society of Malawi	In-kind	Recurrent expenditures	1,500,000.00
Civil Society Organization	Wildlife and Environmental Society of Malawi	Grant	Investment mobilized	200,000.00
			Total Co-Financing($)	**8,198,004.00**

Describe how any "Investment Mobilized" was identified

Investment mobilized was defined based on amount of grant contribution from the executing ministry, other contributing government institutions (Forest Department) and civil society (Wildlife and Environmental Society of Malawi). The different stakeholders were consulted on the monetary value of their contribution using market-value prices for the services they will provide. Where 'investment mobilized' has been indicated, it refers to co-financing that excludes recurrent expenditures, as defined in the guidelines. Malawi Government investments mobilized for activities being carried out in the Bua River basin by contributing agencies and ministries are extrapolated in the MTEF project/programme-based budget allocations. Also, Funds that need to be budgeted for annually or grants received from donors are considered as investment mobilized.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNEP	GET	Malawi	Biodiversity	BD STAR Allocation	921,508	87,543	1,009,051.00
			Total Grant Resources($)		**921,508.00**	**87,543.00**	**1,009,051.00**

E. Non Grant Instrument

NON-GRANT INSTRUMENT at CEO Endorsement

Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)

PPG Required **true**

PPG Amount ($)

50,000

PPG Agency Fee ($)

4,750

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)	Total($)
UNEP	GET	Malawi	Biodiversity	BD STAR Allocation	50,000	4,750	**54,750.00**
				Total Project Costs($)	**50,000.00**	**4,750.00**	**54,750.00**

Core Indicators

Indicator 1 Terrestrial protected areas created or under improved management

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
1,966.00	19,166.00	0.00	0.00

Indicator 1.1 Terrestrial Protected Areas Newly created

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
0.00	0.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Indicator 1.2 Terrestrial Protected Areas Under improved Management effectiveness

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)
1,966.00	19,166.00	0.00	0.00

Name of the Protected Area	WDPA ID	IUCN Category	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)	METT score (Baseline at CEO Endorsement)	METT score (Achieved at MTR)	METT score (Achieved at TE)
Mchinji FR	33183	Protected area with sustainable use of natural resources	1,966.00	19,166.00			18.00		

Indicator 3 Area of land and ecosystems under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
3000.00	3000.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural lands under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.2 Area of forest and forest land under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
3,000.00	3,000.00		

Indicator 3.3 Area of natural grass and woodland under restoration

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 3.4 Area of wetlands (including estuaries, mangroves) under restoration

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
13730.00	13730.00	0.00	0.00

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
13,730.00	13,730.00		

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Please upload document(s) that justifies the HCVF)

Title	Submitted

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)	0	0	0	0
Expected metric tons of CO?e (indirect)	1297850	1046590	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)		1,046,590		
Anticipated start year of accounting		2024		
Duration of accounting		20		

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (direct)				
Expected metric tons of CO?e (indirect)	1,297,850			
Anticipated start year of accounting	2024			
Duration of accounting	20			

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
0.00	0.00	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.3 Hydrochloroflurocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.7 Highly Hazardous Pesticides eliminated

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	25,000	25,000		
Male	25,000	25,000		
Total	50000	50000	0	0

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

For indicator 1; sub-indicator 1.2; the project focuses on Mchinji forest reserve which is 19,166 ha large. For indicator 3; sub-indicator 3.2; the project focuses on customary forest cover of 3,000 hectares. For indicator 4; sub-indicator 4.1; project focuses on 13,730 ha of landscapes under sustainable management to benefit biodiversity (Area of new village forests established and under improved management to benefit biodiversity = 11,730ha and 2,000 ha will benefit biodiversity through bee-keeping; agroforestry; fruit tree grafting, commercial tree nurseries and permaculture, making a total of 13,730ha) For indicator 6, sub-indicator 6.1; it was calculated that the mitigation potential of the project interventions is -1,046,590 tCO2e. For the EX-ACT calculations, refer to the attached worksheet. For indicator 11, the project will aim to benefit 50,000 people (25,000 men 25,000 women) as communities living in Mchinji district with direct interaction with Mchinji forest ecosystem. The project will contribute to the country?s National Biodiversity targets under the Aichi Biodiversity target as follows: ? ABT 1: The capacity building initiatives proposed under the project will contribute towards increasing knowledge and awareness of biodiversity conservation and sustainable use for communities around the project area. ? ABT 2: The

project will undertake a biodiversity and ecosystem services assessments which will contribute towards ecosystem evaluation to inform decision-making. ? ABT 3: The promotion of innovative platforms and promotion of sustainable natural resources value chains will incentivize private landowners and communities to conserve their natural resources. ? ABT 5: The restoration of forests will result in reduction of loss, degradation and fragmentation of natural habitats ? ABT 6: The proposed activities in the project will promote application of ecosystem-based approaches and ensure that Malawi?s natural resources are sustainably managed. ? ABT 7: The project will ensure conservation and sustainable use of biodiversity in areas under forestry ? ABT 14: The intervention that will be undertaken under the project will contribute towards providing essential services related to water and livelihoods. Such services will be restored taking into account the needs of local women and community members along the catchment. ? ABT 15: The project will contribute to ecosystem resilience and carbon stocks through conservation and restoration of degraded forest ecosystems and thus contributing to climate change mitigation ? ABT 16: The project will contribute to forest-based value chains consistence with access to genetic resources and fair and equitable sharing of benefits where applicable. The project comes at an opportune time when Malawi is in the process of domesticating the SDGs into its umbrella development frameworks and sectorial policies. The centrality of SDG 15 creates direct linkages between biodiversity and other SDGs in the areas of poverty, food security, water and sanitation, environmental protection and sustainable use of natural resources. Implementing activities towards conservation and sustainable use of biodiversity therefore offers Malawi a chance to realize her potential of creating multiple benefits that will make a direct contribution to achieving these and other SDGs. In addition, this project will help Malawi to meet part of its commitments to restore 4.5 million hectares of degraded and deforested land by 2030 under the Bonn Challenge and African Forest Landscape Restoration Initiative. This commitment has also been made to the Climate Change Convention, as part of Malawi?s contribution towards the global carbon emission reduction agenda under the Paris Agreement. Malawi also aligns itself to the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience which proposes policy measures, strategic actions, cooperation mechanisms and on-the-ground actions that advance land and ecosystem restoration in the region. Malawi identified forest reserves, national parks and wildlife reserves, community woodlands and plantations as some of the areas for potential restoration which the project is also targeting. The In addition, the project will directly contribute to the fulfillment of Malawi Land scape restoration strategy and the National Biodiversity Strategy and Action Plan whose vision is to ensure that by 2050 Malawi?s biodiversity is valued, conserved, restored and sustainably used with full participation of all stakeholders. . The project will directly contribute to the fulfillment of Aichi Targets and will directly or indirectly contribute to all 17 SDGs but in particular: SDG 12 (Ensure sustainable production and consumption patterns); SDG15 (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse LD and halt BD loss) by incorporating SLM into decision making and by conserving / restoring BD in terrestrial production

landscapes. Importantly, the project has been designed to contribute to SDG target 15.3 on Land Degradation Neutrality and the integrated landscape approach being proposed by this project is considered essential to achieve this (and other multiple goals and targets) at the required scale. The project will also contribute to SDG13 (Take urgent action to combat climate change and its impacts). Using the EX-ACT tool, it has been calculated that the project will result in -1,046,590 tons of carbon dioxide equivalents sequestered, due to restoration tree planting, natural regeneration and effective forest management.. ?

Part II. Project Justification

1a. Project Description

PART II: PROJECT JUSTIFICATION

describe any changes in alignment with the project design with the original pif

The final project design is aligned to the original PIF; it preserves its main objective and strategy. The original components and outcomes from the PIF have been retained. However, due to the medium sized nature of the project, some adjustments were made to the targets for outcomes and outputs based on discussions with expert reviewers, project partners, experts and key stakeholders during the project design stage (see Table 2 below). This was aimed at improving the precision of the outputs to best achieve the outcomes and the overall objective.

Table 2. List of changes at CEO approval made to the approved PIF

PIF	CEO	Comments
Output 1.1.1 Forest management plan for Mchinji forest reserve is developed and implemented including assessment of its biodiversity and ecosystem services and values	Output 1.1: Forest management plan for Mchinji forest reserve is developed and implemented	The output is basically the same, except the numbering and reduction in words. This is now more focused and communicates what will be delivered.
Output 1.1.2 Updating of maps, opening of boundaries, establishment of surveillance systems, forest patrols are conducted to support law enforcement for protection of forest reserves	Output 1.2: Mchinji CFR is appropriately protected for effective management and provision of ecosystem services	The original output was not properly formulated and dwelt on the process rather than the deliverable. We have now re-formulated it to communicate what will be delivered by the project.
Output 1.1.3 Capacity of forestry extension officers supported and applied in implementation of forest interventions and provision of forest extension services		This has been moved to component 2 which focuses on capacity issues, and has been absorbed into output 2.3.
Output 1.1.4 Collaborative Forest Management (CFM) mechanism established	Output 2.1: Beekeeping, agroforestry, fruit tree grafting and commercial tree nurseries promoted as ecosystem based IGAs for forest dependent communities promoted	During stakeholder consultations, it was found that CFM is a very costly intervention which would be seriously limited by the modest budget of this MSP. Therefore, it was decided that four income generating activities be promoted in the communities around Mchinji CFR. This will foster conservation of the Mchinji CFR by promoting alternative livelihoods.

Output 3.5 Mid-Term Review and the Terminal Evaluation are conducted		This was removed from the list of project outputs because these are obligatory processes which will be undertaken irrespective of the performance of the project. The stakeholders therefore felt that these are not project outputs, per se.

Three components have been retained, and they focus on BD1-1 (Mainstream biodiversity across sectors as well as landscapes and seascapes through biodiversity mainstreaming in priority sectors) and BD-2-7 (Address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate). In addition, component 3 focuses on knowledge management, monitoring and evaluation, scaling up and dissemination of best practices and lessons learnt. The focus of the project, though at a medium scale, we are convinced will now create impact in an area wider than Mchinji CFR, which is the primary area of intervention.

1a. Project Description ?

1.1. The global environmental and/or adaptation problems, root causes and barriers

1.1.1. Background

Malawi is located in the eastern part of southern Africa between latitude 9?22? and 17?7? south and between longitude 32?40? and 35?55? east. Its total area is 118,483 square kilometers, of which 94,275 square kilometers is land, while 24,208 square kilometers is water. Malawi is a landlocked country bordering Tanzania, Mozambique, and Zambia. The topography of the country is highly varied; the Great Rift Valley runs from north to south through the country, dominated by Lake Malawi, and the landscape around the valley consists of large plateaus at an elevation of around 800?1,200 meters but with peaks as high as 3,000 meters on high mountains e.g. Mulanje. The climate of the country is tropical, but its high elevation means that the temperatures are relatively cool. Lake Malawi is Africa?s third largest lake and the world?s eleventh largest and covers much of the country. It measures about 550 kilometers by 15?80 kilometers and occupies a deep Rift Valley trough that cuts through the country along a north?south line. The lake?s surface elevation is about 474 meters, and its deepest point is 230 meters below sea level. Lake Malawi and the Shire River are part of the Great Rift Valley, and on either side of the rift are escarpments. In the west, the highlands include the Nyika (highest elevation 2,607 meters), Viphya (2,058 meters), and Dedza (2,198 meters) Plateaus; in the east they include the Shire Highlands (1,774 meters), the Zomba Plateau (2,087 meters), and the Mangochi and Namizimu Hills (1,796 meters). The eastern highlands continue northward into Mozambique and Tanzania. Behind the rift-edge highlands the land descends gently to the Central African Plateau, which, at elevations around 1,000 meters, covers the Lilongwe and Kasungu Plains. The country?s lowest elevation of about 37 meters is on the Rift Valley floor at the extreme south, while Mulanje Mountain, an ancient volcanic plug standing on the plateau to the southeast, at 3,050 meters, is the highest point in central Africa.

The great variations in Malawi?s landscape result in wide spatial differences in climate. The vast water surface of Lake Malawi has a cooling effect, but because of its low elevation, the margins of the lake generate long hot seasons and high humidity, with a mean annual temperature of 24?C (75?F). The climate is tropical continental but is significantly moderated by the effects of Lake Malawi, high altitudes, and proximity to the influence of westerly frontal systems that move eastward around the South African coast. There are two distinct seasons: the rainy season (October?April) and the dry season (May?October). The latter is further subdivided into two parts: (1) cool and wet (May?August) and (2) hot and dry (September?October). The average rainfall is about 1,200 mm per annum with the highest rainfall being recorded in Nkhata Bay and Mulanje. Shire valley receives the lowest rainfall (below 900 mm per annum). The mean annual minimum and maximum temperatures range from 12?C to 32?C. Temperatures are highest in the rift valley and along the lakeshore and could be as high as 38?C. The highest temperatures occur at the end of October, but thereafter the rains usher in cool weather. The lowest temperatures are experienced in high altitude areas, particularly the Viphya and Nyika plateau, and the Dedza, Zomba and Mulanje mountains.

As a result of its varied topography and rainfall regimes, Malawi presents a rich mosaic of different habitats. Several attempts to classify the vegetation of Malawi have been made, but according to the classification by White, vegetation in Malawi is represented by three regional centres of endemism: the Zambezian regional centre of endemism, the Afro-montane Archipelago-like regional centre of endemism, the Eastern (Forest) regional mosaic. This classification as modified by Dowsett-Lemaire identifies nine major vegetation types. The most extensive of these are: the miombo woodland, deciduous forests and thickets, evergreen and semi evergreen forests, and Afromontane grassland.

According to NSO (2018)[1][1], over 83 % of the people in Malawi are self-employed in the agriculture sector. The agriculture sector provides more than 50 percent of the country?s gross domestic product (GDP). Agriculture is split into two main sectors in the country namely crop and livestock production. Both sectors depend on rainfall as the main source of water supply because less than 5 percent of arable land is under irrigation. In the past 30 years, Malawi has experienced variability and unpredictability in its seasonal rainfall. High variability in rainfall could imply recurrent drought conditions in lower-rainfall zones (e.g., in the Shire Valley region). Malawi could therefore subsequently experience failure of the more desired food crops and pasturage. These changes are expected to cause many shifts in food production. Most crops are sensitive to changes in climate conditions, including alterations in temperature, moisture, and carbon dioxide levels. Furthermore, major changes in climate influence populations of beneficial organisms and pests and alter their effectiveness in agricultural ecosystems. Although there will be gains in certain crops in some regions of the world, the overall global impacts of climate change on agriculture, especially rained agriculture, are expected to be negative, threatening global food security. These impacts are (1) direct, on crops and livestock productivity domestically; (2)

indirect, on the availability and prices of food domestically and in international markets; and (3) indirect, on income from agricultural production at both the farm and the country levels.

In 2020, cultivated area under irrigation for Malawi was 2.38 %. Area under irrigation increased from 1.95 % in 2001 to 2.38 % in 2020 growing at an average annual rate of 1.16%. (World Data Atlas, 2020)[2][2]. By 2015, the contribution of irrigation to agricultural sector GDP was in the range of 7-12%, and to the economy as a whole of between about 2% and 4%. This represented between US$ 80 million and US$ 140 million or between about US$ 850 and US$ 1,550 per irrigated hectare (Chafuwa, 2017).[3][3]

Historically, Malawi had a dual agricultural structure: the smallholder sub-sector farming on communal land, and the estate sub-sector farming on leasehold and freehold land. The estate sub-sector focus on the production of cash crops, with tobacco presently leading export earnings. Most of these ?estates? were formed during colonial times, were controlled by white farmers, and included large tracts of underutilized land. At Independence in 1964, ownership of the estates passed into the hands of the Malawian elites. The autocratic Banda regime (Independence to 1994) reinforced the colonial-era dual structure of an agricultural sector made up of large estates and smallholders. At that time, agricultural policy was aimed at sustaining the productivity and export income generated on these properties. The conversion of customary land (held by various ethnic groups) to leasehold land used for commercial faming also characterized this period (Chirwa and Chisinga 2008)[4][4].

In Mchinji District , the agriculture sector responds to national and district development policies through various structures at local level including area development committees, village development committees and water users committees (GoM, 2017)[5][5]. The sector enhances public private partnership among its sector stakeholders to ensure increased agriculture productivity for sustainable food, nutrition and income security. Among various interventions to promote agriculture in the district, irrigation farming, agricultural diversification, agro-processing and market development are being focussed on. The district has the potential irrigation area of14055Ha of land and has developed only 1841Ha for irrigation farming with financial support from the Government and in collaboration with development partners, representing 13.1% of the potential area. The irrigation technologies used in the district include motorized pump based, treadle pump based, watering cans, river diversion and solar powered based. This benefitted a total of 15043 farmers across all seven Extension Planning Areas (EPAs); Mkanda, Mlonyeni, Zulu, Kalulu, Mikundi, Msitu and Chioshya (GoM, 2017).[6][6]

In 2020, forest area as a share of land area for Malawi was 23.8 %. Forest area as a share of land area of Malawi fell gradually from 32.2 % in 2001 to 23.8 % in 2020. (World Atlas, 2020)[7][7]. The total forest cover in Malawi is estimated to be declining at the rate of 1.0 to 2.8% annually due to deforestation for charcoal and firewood, settlement and agricultural expansion (MoAIWD, 2014)[8][8] Malawi?s land distribution is highly skewed. An estimated 82% of Malawi?s land is suitable for cultivation: 13% of total land (16% of cultivable land or 1.2 million hectares) is held by estates, and 69% of total land (84% of cultivable land or 6.5 million hectares) is either farmed by smallholders or considered by the government to be available for smallholder farming. The balance of Malawi?s land is protected areas, steep hillsides, and urban areas unsuitable for agriculture. Fifty-eight percent of smallholders cultivate less than one hectare; 11% of these are near landless. Figure 1 below shows agricultural land suitability.

Figure 1: Agricultural land suitability (source: Mungani et.al. 2017)[9][9]

Malawi forests are estimated at 2.6 million hectares (27.2%) of the total land area (FAO, 2019). The total forest cover in Malawi is estimated to be declining at the rate of 1.0 to 2.8% annually due to deforestation for charcoal and firewood, settlement and agricultural expansion (MoAIWD, 2014).

Mchinji Forest Reserve, found in Mchinji District, in Malawi, is one of the protected areas that form the catchment of Bua River (UNDP, 2021)[10][10]. Mchinji District has Mchinji Forest reserve which covers 19,166 ha and Thyolansanu forest reserve which is 2,219 hectares while customary forest cover 16,730 hectares. This project will focus on Mchinji Forest Reserve which was gazetted in 1924 to protect the headwaters of the Bua River. The forest is a miombo woodland dominated by Brachystegia species. It predominantly has rocky soils and sandy clay soils. Rainfall ranges between 862.4mm to 1016.8mm per annum. It has an altitude of 1,160m to 1,750m.

There has been a significant loss in biodiversity in the Reserve in terms of species diversity and richness. The forest reserve is being depleted due to encroachment for illegal settlements and farming (both rain fed and irrigation farming), timber sawing, charcoal production, firewood and poles extraction, wildfires and poaching. The District Forestry Office conducts routine patrols against illegal activities in the reserve and customary land. In most cases, these have been ineffective due to inadequate resources to conduct joint patrols with the Malawi Police and Parks and Wildlife staff for effective management of the reserves. There is also need for these efforts to be coupled with extension services and intensification of activities in community forest areas to reduce pressure on the forest reserves and the number of illegal activities happening in the forest reserve.

1.1.2. Global Significance

Mchinji forest reserve is used as a water source for the Bua River, including several other streams such as Ludzi, Liwerezi, Lusa and Matizi that rise from the forest. The Bua River is an important spawning area for the potamodromous fish species *Opsaridium microlepis* and *O. microcephalus*. Other cyprinids species such *Barbus johnstonii* also use the same river as a spawning ground. Thirty-three fish species belonging to 9 families have been recorded in the Bua River Basin. There are 18 riverine species and 14 occurring in both riverine and lake environments. The family Cyprinidae (18 species) followed by Cichlidae (8 species) and Mormyridae (5 species) dominate the fish fauna. Apart from fish, the river basin harbours other fauna that include grazers (e.g. buffaloes, sables, waterbucks, reedbucks and zebras),

browsers (bushbucks, kudus and grysboks), mixed feeders (e.g. elephant, elands, bushpigs and warthogs) and carnivores (e.g. lions and leopards). The destruction to wildlife habitat has resulted into disappearance of these large animals in most of the basin areas and consequently these large animals are limited to the wildlife reserves area and their long?term survival outside protected areas is problematic due to human pressure. Figure 2 below shows Bua and other rivers coming from Mchinji Forest Reserve.

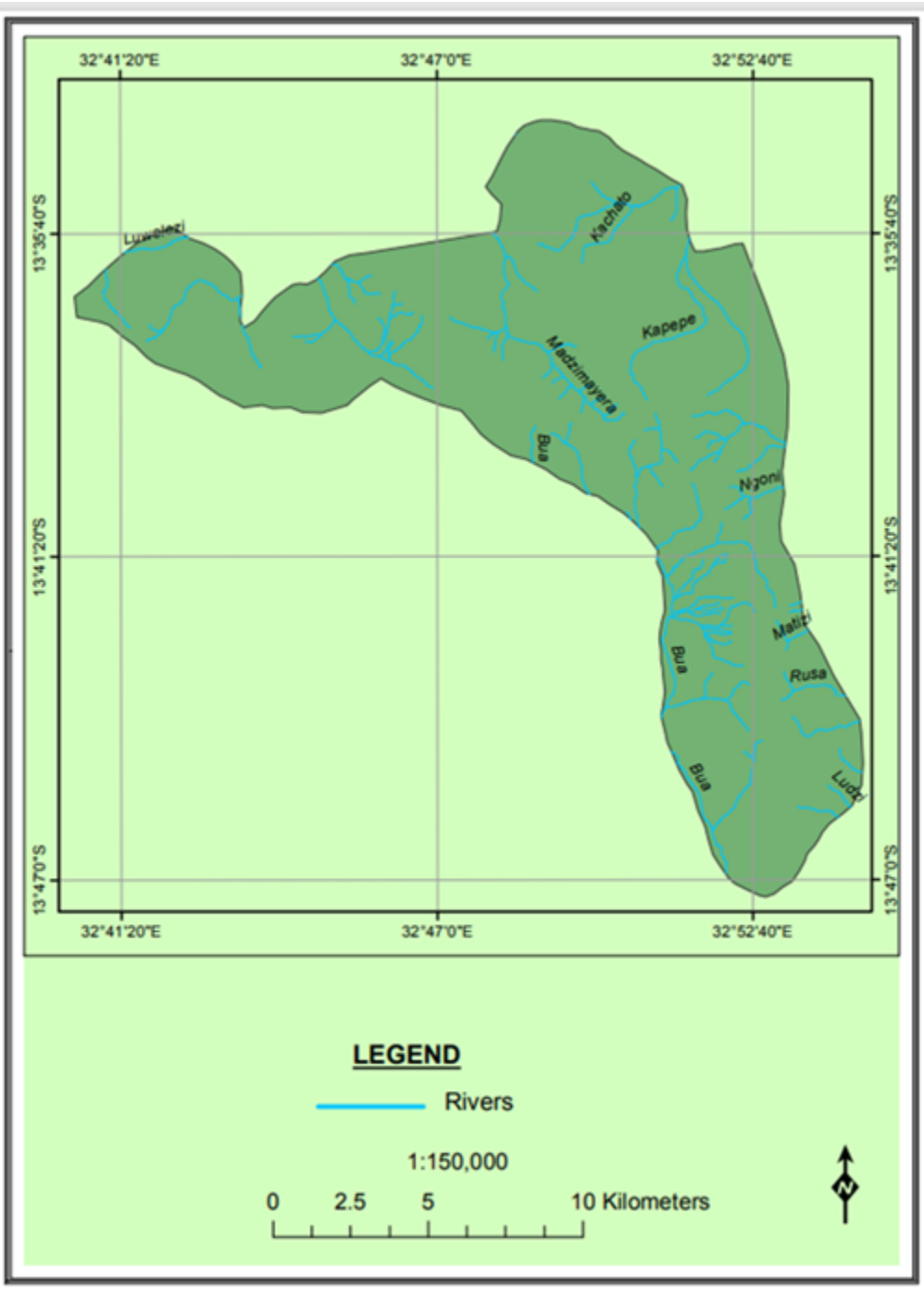


Figure 2: Bua and other rivers coming from MFR

In addition, the forest houses towers of mobile service providers and other institutions including hosting of cultural sites and tourist attraction sites. There are numerous perennial streams arising within the reserve. It is also a habitat for wildlife and provides small-scale irrigation farming through the various rivers that spring from the forest reserve. As a catchment area, the reserve is very important and used for abstraction of water for the people of the district. Central Region Water Board extracts water for the supply of Mchinji boma and other areas through gravity fed systems from Mchinji Forest Reserve. Kamwankhuku is also another source within the forest, where Mchinji Rural piped water has been tapped.

The forest also provides timber, firewood, medicinal plants, fruits and mushrooms and other non-timber income generating opportunities like beekeeping for the community of Mchinji and other surrounding communities in neighbouring Zambia. In addition, surrounding communities benefit from Mchinji Forest Reserve through collection of firewood for domestic use, collection of thatching grasses, for education purposes, for picnic, sight-seeing and trekking and collection of forest biodiversity for scientific purposes. There are few trees of timber value that exist in the forest because of over exploitation which has resulted in isolated pockets in the reserve leaving a lot of pockets suitable for afforestation and natural regeneration.

Mchinji forest is also host to a number for tree species native to the threatened Miombo woodlands, which are the lifeline of the people of central Africa. *Brachystegia spiciformis* and *Julbernardia globiflora* are the dominant tree species in the Mchinji forest. Patches of Terminalia woodland savanna are found on very sandy soils, the dominant species of which is *Terminalia sericea* and associated trees including *Uapaka kirkiana*, *Brachystegia boechmii* and *Parinari curatellifolia*. Figure 3 below shows vegetation map for MFR.

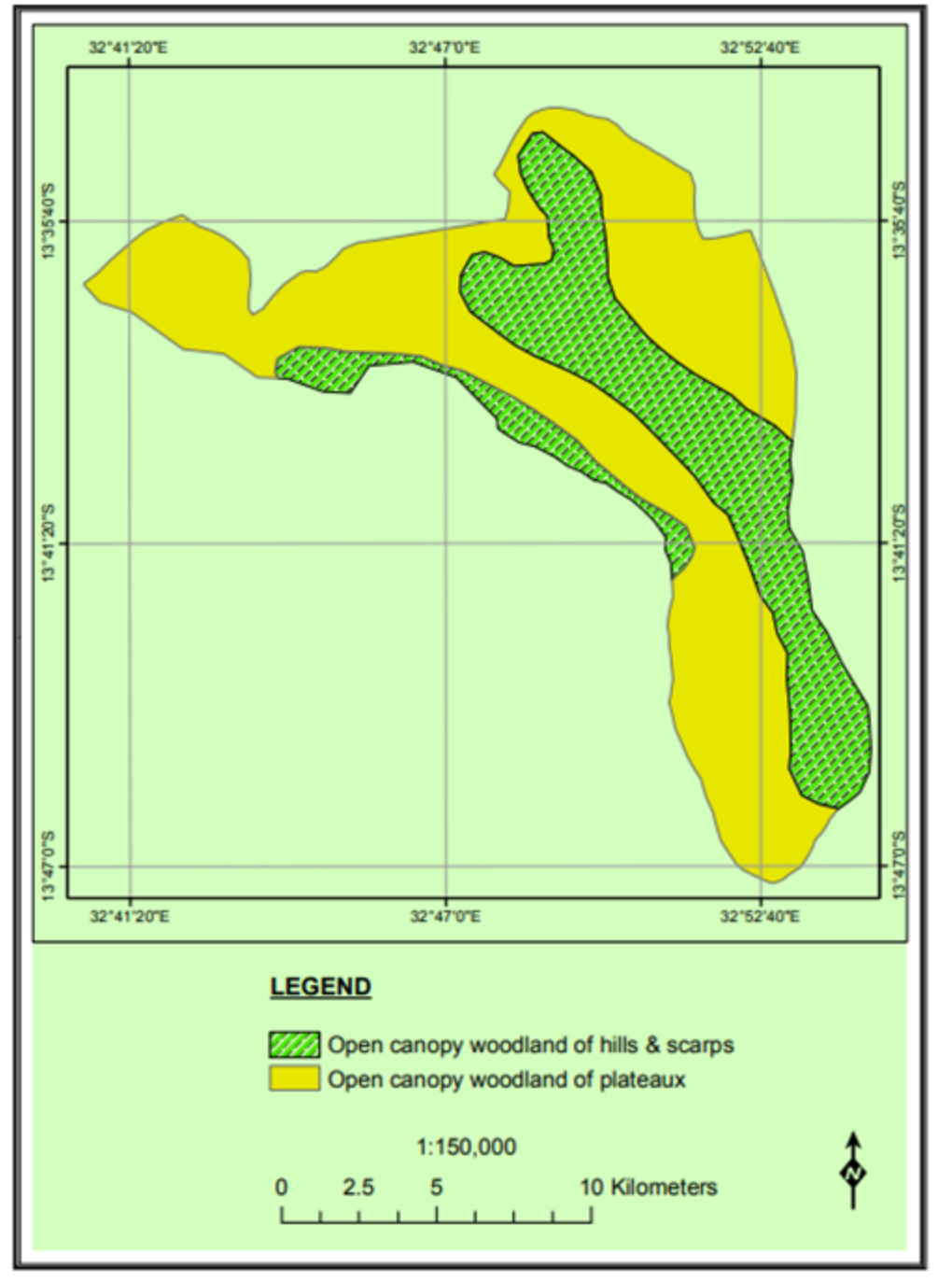


Figure 3: Vegetation map for MFR

1.1.3. Threats to Forest Management and Conservation, Root causes and Analysis of barrier to Forest Degradation

According to Global Forest Watch 2023, Malawi had 1.39 million hectares of natural forest in 2010, extending over 12% of its land area. In 2021, it had lost 14,700 hectares, equivalent to 5.21Mt of CO? emissions.[11][11] This amounts to an average of 1,336 hectares deforested per year. The current and potential future threats to the country?s forests, the causes of this deforestation and forest degradation, as well as the barriers to reducing and eliminating these causes are presented in the table below and described in the following section.

Table 3. Threats, root causes and barrier for forest degradation in Mchinji forest reserve

1) **Threats**	2) **Root causes**	3) **Barriers to address threats and root causes**
? High population growth ? Poverty ? Urbanization ? Inadequate budgetary support from Government	? Agriculture Expansion ? Tobacco Growing ? Bush Fires ? Excessive use of biomass ? Livestock	- Lack of forest management frameworks and low capacity for forest management. - Inadequate support to local authorities and communities for enhancing the conservation and sustainable use of forests - Inadequate knowledge and information (on trends, analyses, human livelihoods, resource use, climate change impact, habitat status, best practices and lessons learned) on forest management.

1.1.3.1. Threats to forest management and biodiversity conservation

Malawi?s forest cover has declined due to a number of reasons, such as, population growth, poverty, infrastructure development and economic activities, tobacco curing[12][12]. These are described below:

a). ***High population growth:*** The human population in Malawi has almost quadrupled since 1900. Malawi?s population was 0.93 million in 1907, 2.05 million in 1945, and 5.5 million in 1977 (Mauambeta, et., al, 2010)[13][13]. Between 2008 and 2018 the population has increased by 1.3 times, which is about 35 % increment. This represents an intercensal annual growth rate of 2.9 percent. At this rate, the population is expected to double in 2042. As noted by UNDP (2021)[14][14], ?*the general trend is that the population growth rate has remained high in Malawi except for 1987 to 1998 when the country experienced mass repatriation of refugees to Mozambique.*? Similar trends are observed for Mchinji District. The population was 602,305 in 2018. Growth rate for the district is at 2.7% (GoM, 2017)[15][15]. The population density for the district increased from 145 persons to 192 per square kilometre between 2008 and 2018, representing 32 % increment. This is slightly lower than the national average density which increased by about 35%. Although this is the case, the increment still poses a threat to conservation of MFR. Of the 602,305 people in Mchinji District, 349,226 (58 %) come from

the 7 Traditional Authorities (TAs) surrounding MFR. Consequently, pressure on the reserve for cultivation, settlement, grazing and other forest based activities should be should be high.

b). ***Poverty:*** Poverty levels in Malawi are severe and worsening according to National Statistical Office (2017)[16][16]. About 25 % of the population is estimated to live in extreme poverty, especially in rural areas where poverty is widespread (Rasmussen, 2018)[17][17]. In 2017, about 74% of households in Malawi reported that they were poor, while 24% reported that they were extremely poor (NSO, 2017). The levels of poverty were higher in rural areas where 41% of households considered themselves as very poor compared to 15% for their urban counterparts (NSO, 2017). About half of the population in Malawi (50.7%) are poor. The poor are categorised into two groups: those that are moderately poor (about 26.2%) and those that are ultra-poor (24.5%). Poverty varies widely across districts in Malawi, but the levels observed are consistent with the regional trends.: The Integrated Household Survey 4 (IHS4) showed that Mchinji district had the highest poverty compared with other districts in central region with 57.6% being ultra poor. Furthermore, 29.4% of the population is poor. The survey further indicated that only 2.1% are rich and 10.9 are at the minimum level of economic well-being. Table 4 below shows the poverty levels of Mchinji compared to the central region and Malawi.

Table 4: Poverty Levels In Mchinji Forest Reserve

Indicator	Malawi	Central Region	Mchinji
Very Poor	35.8	39.9	57.6
Poor	38.5	38.3	29.4
Average	18.7	16.5	10.9
Rich	7	5.3	2.1

Source: NSO (2017

c). ***Urbanization:*** While the Malawi population still remains largely rural, with only 17% of Malawians living in urban areas, the urban population has been increasing rapidly. As of 2018, 16 percent of Malawi's population reside in urban areas, slightly increasing from 15.3 percent in the 2008 census, where 12 percent are in Malawi's four cities of Mzuzu, Lilongwe, Zomba and Blantyre and the remaining two percent reside in town and municipal councils (NSO, 2018)[18][18]. Among the four cities, the greatest increase was in Mzuzu City (44.4 %), seconded by Lilongwe City (27.2 %). Blantyre and Zomba registered a decrease in the percentage of people living in the two cities (-9.8 and -14.3 respectively). By 2022, urban population had increased from 7 % in 1973 to 18 % growing at an average annual rate of

1.96% (World Data Atlas 2022).[19][19] Electricity is erratic in Malawi while gas is expensive. Therefore, the increase in urbanization rates correspondingly leads increase demand for fuel wood most of which is sourced from forest reserves including Mchinji Forest Reserve. It also increases demand for burnt bricks. Deforestation is acute around major cities, bomas and towns in Malawi because of the need to supply burnt bricks to cities. In Lilongwe, for example, the demand for wood for burning bricks has exerted pressure on mango trees in communal areas and indigenous trees in graveyards. Brick burning and use of wood from unsustainable sources is common throughout Malawi, especially at the fridges of cities and towns including Mchinji.

Table 5: Changes in % of the population living in the four Malawian cities (1998-2018)

City	1998	2008	2018	% change
Mzuzu	0.9	1.0	1.3	44.4
Lilongwe	4.4	5.2	5.6	27.2
Zomba	0.7	0.7	0.6	-14.3
Blantyre	5.1	5.1	4.6	-9.8
Average	2.8	3	3	11.8

Source: Adapted from NSO (2018)

d). ***Inadequate budgetary support from Government:*** In general, the operational budget for forest management activities is inadequate. The Forest Department has also been getting less money than the approved budget. The largest spending programs are extension services and conservation and development whilst law enforcement is allocated less. Although the District Forestry offices receive direct funding for forestry management in line with the decentralization policy, the funds are either inadequate or non-disbursed. During the past three years, the DFO has received an average monthly allocation from ORT ranging from MK498,190. 75 to MK575,238.42 (Table 6). This funding is obviously not adequate to effective manage MFR and customary trees. The overall effect of this low funding is that the DFO cannot effectively manage forest reserves and customary forests to prevent illegal activities such as deforestation. The DFO cannot conduct effective law enforcement and extension services; forest boundaries cannot be cleared; nursery establishment and management inputs cannot be procured; field equipment for forest guards including protective wear and uniform cannot be procured; office block, vehicles and motor cycles cannot be maintained resulting into irreparable breakdowns as is the current (2023) situation.

Table 6: Other Recurrent Transactions (ORT) funding 2020/2021 to 2022/2023 financial year

Year	Annual total (MK)	Monthly average (MK)
2020-2021	5,800,000	583,333.33
2021-2022	5,978,289	498,190. 75
2022/2023	6, 902,861	575,238.42

1.1.3.2. Root causes of forest degradation

Understanding the root causes of forest degradation in Mchinji Central Foret Reserve (CFR) is critical to designing strategies to address the problem and enhance biodiversity conservation and supply of ecosystem services. Many socioeconomic and policy-related factors can be considered as being the root causes of forest degradation in the Mchinji forest, including land tenure and ownership of trees and forests, policy and implementation failures and inadequate or poor forest data collection, analysis and dissemination. These are briefly discussed below:

i). ***Agricultural expansion:*** The GoM BEST (2009)[20][20] report presented pessimistic picture about agriculture expansion in Malawi as follows:

> ?Reflecting the fact that 90% of Malawians rely on smallholder agriculture for their livelihoods, 70% of the country?s land area is under some form of agriculture, up from 62% in 1991?.

The same report states that land under intensive agriculture expanded by 630,000 ha, representing 20% increase, while extensive agriculture expanded by 2,852,000 ha, representing 7% increase. The increase in expansion of agricultural land is due to increasing human population at both national and district levels. . With this increase, land holding sizes are shrinking (GoM, 2017)[21][21]. The triple impacts of increasing human population, over-reliance on agriculture for livelihood enhancement and poor agricultural practices such as mono-cropping have heightened agricultural expansion in protected areas such as MFR (Mauambeta et. al., 2010[22][22] and UNDP, 2021[23][23]). By 2021, 60 families had encroached MFR for both agriculture and settlement (UNDP, 2021). In its 2010 progress report, the Department of Forestry indicated that 500 ha was encroached in the Mchinji Forest Reserve. In the same Mchinji encroachment case, it was reported that the farmers who had encroached the forest reserve were issued with farm input coupons by District Agriculture staff without checking the gardens. This case represents a typical case of conflict of policy strategies (Mauambeta et. al., 2010).

Some community representatives interviewed around Mchinji Forest Reserve claim that it is the ?*rich and well to do who are mostly encroachment but they are not taken to task by the Department of Forestry. There is some corruption happening.*?? Communities around MFR claim that the reserve boundary is not clear. In fact, records from Mchinji District Forestry Office show that since 2014 to-date (10 years), the boundary has only been cleared twice: 61 km in 2020 and 42 km in 2021. Communities use unclear boundaries as an opportunity to expand

their agricultural areas into the reserve. Figure 4 is an example of deforestation aimed at expanding agriculture land at Group Village Headman Ndawambe adjacent to Mchinji Forest Reserve

Figure 4: Deforestation to open gardens in Group Village Headman (GVH) Ndawambe Hotspot (Source: UNDP, 2021)

ii). ***Tobacco growing:*** Tobacco is an important cash crop in Malawi as it contributes 35% to the Gross Domestic Product (GDP) and 90% of the export earnings. However, tobacco growing has contributed to deforestation. Tobacco growing has been blamed as the main contributing factor for biodiversity loss. Tobacco growing presses even other demands on forests ? timber for barn construction, poles and twigs for hanging and drying the tobacco; and firewood for tobacco curing.[24][24] Unprecedented expansion of tobacco curing operations, spurred by favourable world market conditions triggered wood demand, 40% of wood consumed in Malawi was for tobacco curing.[25][25] Currently, tobacco curing uses about 1% of the total biomass energy consumed in Malawi, which is 163,340 m3. The law requires that the grower plant 320 tree seedlings every year for eight years for every hectare of tobacco grown. On the other hand, burley tobacco requires 160 poles for every hectare of tobacco grown. However, the problem of non-compliance on having sustainable wood supplies affects most smallholder farmers, who have cited shortage of land as a contributing. Although most tobacco estates have been observed to comply with the requirement of having sustainable wood supplies, the Department of Forestry has reported massive destruction of indigenous forests from government protected forest reserves by tobacco estates. The fundamental problem is that while strict laws are applied for maintaining high standards of tobacco processed leaf, non-compliance of the afforestation law is regrettably tolerated by the responsible regulatory authorities. For Mchinji

District, tobacco cultivation has followed the national trends: are under tobacco cultivation increased from 3,435 ha in 2012 to 9,719 ha in 2017, representing an increase of 182 % (GoM, 2017).

iii). ***Livestock grazing:*** Overgrazing was identified by DoF and communities interviewed as a cause of deforestation. Overgrazing destroys regenerants and causes soil erosion and gullies. The reported cases of an increase in livestock grazing is in part contributed by the corresponding increase in population of livestock that either browse or graze. The increase in livestock numbers is shown in Table 7 for Mchinji District for 2012/2013 to 2016/2017 growing seasons

Table 7: Trends in population of major livestock types in Mchinji District

Livestock Class	2012/13	Average # of animal/hh 2012/13	2013/14	Average # of animal/hh 2013/14	2014/15	Average # of animal/hh 2014/15	2015/16	Average # of animal/hh 2015/16	2016/17	Average # of animal/hh 2016/17
Beef Cattle	77590	7778	81,518	7,824	88243	7,824	88968	7,847	94666	7,847
Dairy Pure	388	158	502	216	663	216	911	347	1237	347
Dairy crosses	827	141	473	141	597	141	881	185	787	185
Goats	230629	29,711	243799	29,711	247239	29,711	269983	27,595	284,155	27,595
Commercial Pigs	4119	378	5643	375	6557	375	9888	375	11957	375
Indigenous Pigs	189036	21239	203674	21,239	223973	21,239	208470	33,939	209054	33,939
Indigenous Chickens	1421238	67688	1,699,629	67,688	1746387	67,688	2235811	69,732	2,565,777	69,732

Source: GoM, 2017[26]

iv). ***Bush fires:*** In addition to the severe problem of deforestation arising from human activities to support livelihoods, bush fires are a great threat to forestry resources. These fires are mostly started by people when they clear nearby fields , smokers who throw cigarettes anyhow , during hunting and honey harvesting. Some do it intentionally for ill intention against conservation of MFR and customary forests. The largest number of fires in Malawi occurred in 1995 when 13,900 hectares of forest land were destroyed in 109 incidences. Besides direct loss of forest cover, forest fires also cause smoke haze, pollution, as w ell as loss of seedlings and biodiversity (Yaron et. al., 2010)[27]. For MFR and the surrounding areas, UNDP (2021) and Department of Forestry

Reports (GoM, 2023)[28][28] show that fires are also a problem in the area. The impacts of these fires in MFR and surrounding areas are similar to those reported by Yaron et. al. (2010) above.

v). ***Excessive Use of Biomas:*** The household sector is the dominant energy user and accounts for 83.2% of total energy consumption. This is followed by the industrial sector (11.9%), with the transport and service sectors accounting for 3.8% and 1.1% respectively. Biomass is Malawi?s main source of energy, mainly in the form of wood. It accounts for an estimated 88.5% of total demand, ranging from 98% in the household sector through 54% in the industrial sector and 27% in the service sector to 5% in the transport sector.[29][29] While much of the demand for household energy in rural areas is met by self-collection, most urban biomass is purchased and practically all biomass for non-household uses is purchased or plantation-grown for own use. This makes biomass the most important commercial fuel in the country, in terms of economic value, employment and energy security. Table 8 below shows national and district energy usage at household levels. From the above table, it is clear that Malawi?s energy balance is dominated by biomass (charcoal, firewood, straw/shrubs/grass) which account for 80% of the total primary energy supply due to, among other reasons, lack of affordable and reliable alternatives. The over-reliance on biomass as a source of energy has implications on survival of trees and forests in Malawi. To this end, GoM is promoting sustainable production and efficient use of biomass. GoM had set a target to roll out 2 million efficient cookstoves by 2020 to reduce biomass consumption. A national cookstoves road map was developed aimed at achieving this target (GoM, 2018).[30][30] For Mchinji District, the situation is the same, most households biomass, mainly in form of charcoal and firewood for cooking and heating.

Table 8: Number of households by main source of energy for cooking and heating

Level	Total	Main source of energy for cooking							
		Electricity	Solar	Paraffin	Charcoal	Firewood	Straw/shrubs/grass	Gas	Other
Malawi	3,984,981	75,267	18,766	6,452	724,864	3,083,678	43,328	1,717	31,900
Mchinji	134,799	564	786	249	12,761	119,148	306	57	928

1.1.4. Gender and deforestation

According to UNDP (2021)[31][31], all gender groups are contributing to deforestation. However, some gender groups contribute more than others. For instance, women and girls collect firewood; men produce charcoal, cut trees for poles and hunt using bush fires; boys burn bushes (causing uncontrolled bush fires) to hunt mice and other wild animals and overgrazing. For firewood collection, community representatives interviewed indicated that men and boys do more damage than women. According to one woman interviewed ?*Men and boys cut big trees and use bicycles to carry them to markets. Women carry head-loads and the firewood is mainly for domestic use*.?

In terms of negative impacts, women and girls are more affected than men and boys. For instance, the adverse effects of firewood and water scarcity are more severe on women and girls than men and women. This is because women and girls are the ones who normally fetch firewood and water while men and boys search for poles (UNDP, 2021)[32][32].

1.1.5. Effects of Deforestation

Deforestation has several negative impacts on livelihoods and environment in Mchinji District. From, Table 9 the greatest impact of deforestation is ?walk long distance to collect firewood.? This is seconded by soil erosion, and then firewood scarcity. The least impact is dwindling fisheries and this is primarily due to habitat destruction as a result of siltation of rivers (Figure 5).

Figure 5: Siltation in GHV Matuwamba Bokola

Source: UNDP (2021)

Table 9: Community perceptions about the effects of deforestation in Mchinji Forest Reserve

Effect	%
Walk long distance to collect firewood	71.7
Firewood scarcity.	38.6
Floods	12
Soil erosion	53.8
Water scarcity for drinking, livestock, irrigation	2.2
Dwindling fisheries	1.6
Strong winds	32.1

Source: UNDP, 2021[33][33]

1.1.6. Barriers to effective forest management and conservation

The long-term solution to the above mentioned threats and root causes is to facilitate a transformative shift from unsustainable to integrated forest management in the Mchinji CFR and surrounding landscapes in order to secure habitat for biodiversity conservation, to maintain a flow of multiple ecosystem services and to support rural development of livelihoods opportunities. However, any such solution must surmount the following barriers:

Barrier#1: Lack of forest management frameworks and low capacity for management Mchinji forest reserve.

Although Mchinji forest reserve is of great importance for the catchment of Bua River, it has no forest management plan. There is no document to guide the sustainable conservation and use of forests and related resources as well as to guide stakeholders on the conservation and restoration activities. Although there have been some interventions in the forest reserves, a lot of work has focused on collecting information on the inventory for population structures of living and dead tree biomass and wood volumes and not much on determining the conservation status of species, valuation of the forest resources and their potential for GHG sequestration. This has resulted in inadequate information that can be used to develop the management plans and also inadequate information to determine the biodiversity potential

in these forest reserves and the levels of threat. In addition, there is low capacity of the district staff, both in skills and equipment to effectively enhance enforcement of national laws and regulations in the protection of forest. This has been worsened by lack of updated maps and clear boundaries as well as surveillance systems which are important for effective enforcement of laws that regulate protected areas. There is therefore a need to develop a management plan for the forest reserves coupled with the strengthening of forest officer to enhance enforcement and management of the reserve. This will ensure effective management of the reserve and its continued role as a catchment for Bua River.

Barrier#2: Inadequate Support to local authorities for enhancing the Conservation and sustainable use of community Forests to maintain and restore biodiversity and ecosystem services

While central forest reserves are managed by the central government, community forests and communal lands are managed by local government and local community institutions. Community based forest management (CBFM) for the well-being of the people of Malawi is a central theme of Government policy. Recent reports show the extent to which timber and non-timber forest products produced by small and medium forest enterprises contribute to income generation. The National Forest Programme has as one of its 12 key strategies ?Support for community-based forest management: recognizing a broad range of village institutions and developing their capabilities, along with those of extension staff, for collaborative management?

Poverty and deforestation and forest degradation are closely linked. According to the World Bank Report (2018), poverty could be both the ?cause? and ?outcome? of deforestation. It is a ?cause? because forest-dependent people around the world go to the forests to clear or degrade them is that they are poor and lack alternative sources of income. Forests are their only source of livelihood. Poverty can be an ?outcome? of deforestation. Deforestation can lead to people losing access to the very products and services that they are dependent on. Lack of alternative livelihood options and low agricultural productivity exacerbate the situation by creating the demand for clearing more forests.

The solution to the poverty-deforestation nexus is to create livelihood options away from forests and improve agricultural productivity so that less land is needed for producing food enough to feed the same or increasing number of people. These reduce pressure on forest resources, which in turn makes conservation and sustainable management of forests easier. Coordinated policy measures that go beyond forest and agriculture sectors, and most importantly their effective implementation are needed to break the vicious cycle between poverty and deforestation.

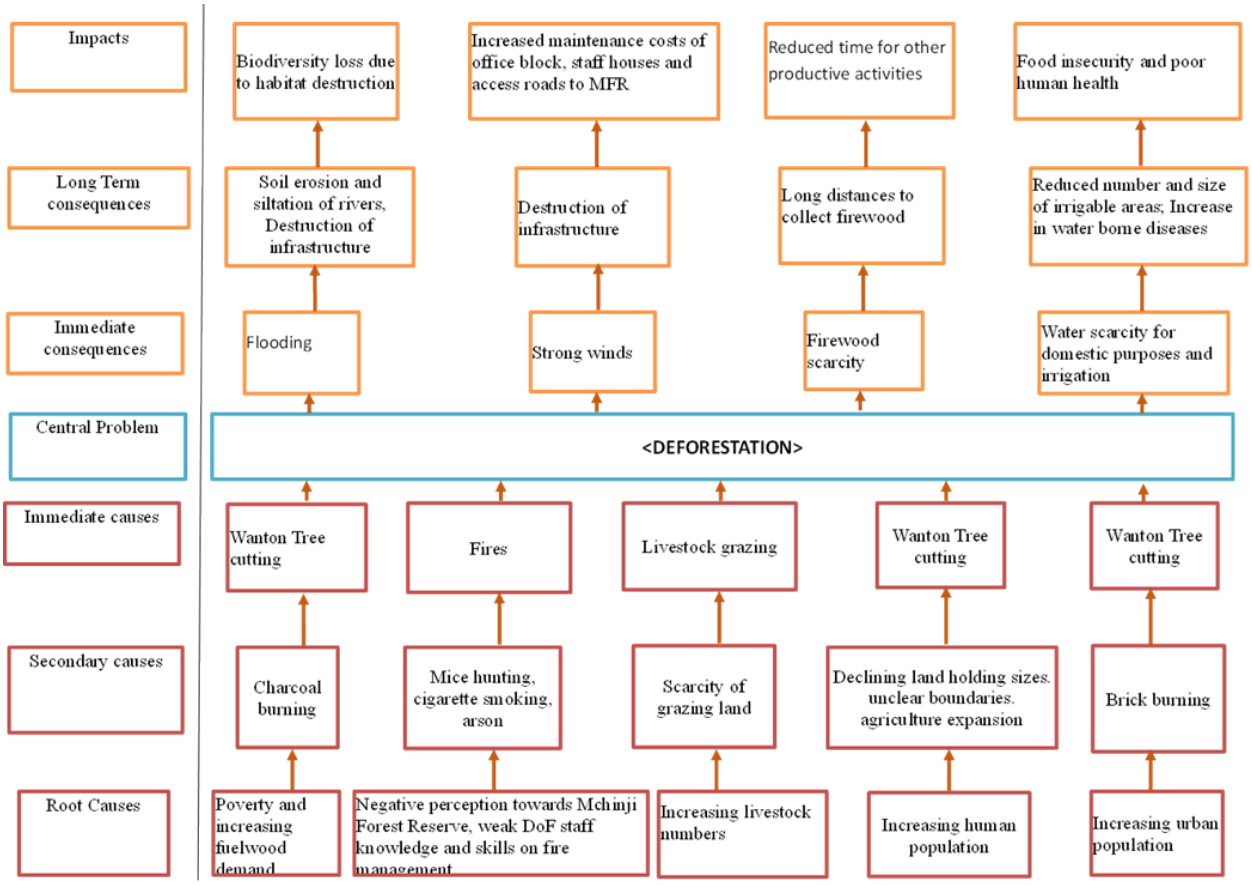
The decentralization process has meant that local authorities are to be fully involved in the management of their natural resources, the reality on the ground is that many of these local institutions struggle for a

variety of reasons, most notably lack of regular engagement with communities and poor support of district officials, lack and/or inadequate capacity/training/skill set. Where community forest management is working there have usually been some common elements ? but these have rarely been given adequate consideration in further attempts to develop Community forests elsewhere.[34][34] There is a need to harmonize capacity at a local level, among districts and government departments to develop solutions that build effective institutions for community forest establishment to improve the status of biodiversity.

Barrier #3: Inadequate knowledge on forest and biodiversity management approaches at national and district levels

There is significant knowledge and skills gap on the state of forest and biodiversity management approaches at the national and local levels in Malawi. In the Mchinji district, documentation of best practices and lessons learned are sparse, poorly maintained and/or collected with inadequate technical expertise, resulting in incomplete records and of poor quality. Information on trends, analyses, human livelihoods, resource use, climate change impact, species and ecosystems conservation status, best practices and lessons learned is not usually documented. This is compounded by lack of related decision-support and communication tools and insufficient data sharing across sectors (such as agriculture, environment, gender, etc.), on national, regional or district-level issues that are of common interest. There are very weak and inadequate coordination arrangements of programmes between government, private sector and civil society due to diversity of funding mechanisms, poor communication and inadequate consultations. The weakness of the information and knowledge base needed for planning and decision making has, therefore, hampered effective institutional performance. Thus, there is need to ensure a resilient Mchinji forest reserve through gender-responsive actions guided by knowledge, technical capacity and information shared on best practices.

Figure 6: Problem tree



1.2. Baseline scenario and any associated baseline projects

1.2.1. Baseline scenario

Malawi?s population of 14 million people is 81% rural and 19% urban. Malawi is one of the more densely populated countries in Africa, with an average of 103 inhabitants per square kilometer; population density is highest in the south and central regions. Malawi?s total land area is 94,100 square kilometers, of which 49% is agricultural land. Approximately 2% of Malawi?s cropland is irrigated. Agriculture ? especially tobacco, tea, and sugar ? currently contributes more than 80% of the country?s export earnings (World Bank 2009a; World Atlas 2010; Chirwa 2004; Chirwa and Chisinga 2008). Approximately 30,000 farms are of relatively large scale (10?500 hectares) and focus on the production of cash crops, with tobacco presently leading export earnings. These ?estates? were formed during colonial times, were controlled by white farmers, and included large tracts of underutilized land. At Independence in 1964, ownership of the estates passed into the hands of the Malawian elites.

The autocratic Banda regime (Independence to 1994) reinforced the colonial-era dual structure of an agricultural sector made up of large estates and smallholders. At that time, agricultural policy was aimed

at sustaining the productivity and export income generated on these properties. The conversion of customary land (held by various ethnic groups) to leasehold land used for commercial faming also characterized this period (Chirwa 2004; Chirwa and Chisinga 2008; Holden et al. 2006). Forest land comprises 36% of the total land area. Nineteen percent of the country?s total land area is protected. Deforestation is occurring at an annual rate of 0.9% (World Bank 2009a).

Malawi?s land distribution is highly skewed. An estimated 82% of Malawi?s land is suitable for cultivation: 13% of total land (16% of cultivable land or 1.2 million hectares) is held by estates, and 69% of total land (84% of cultivable land or 6.5 million hectares) is either farmed by smallholders or considered by the government to be available for smallholder farming. The balance of Malawi?s land is protected areas, steep hillsides, and urban areas unsuitable for agriculture. Fifty-eight percent of smallholders cultivate less than one hectare; 11% of these are near landless. The country?s 30,000 estates have between 10 and 500 hectares. In 2004, approximately 11% of the population was landless (Chirwa 2004; Chirwa and Chisinga 2008; GOM 2002; Adams 2004; World Bank 2009b). Customary law governs land allocation, land use, land transfers, inheritance, and land-dispute resolution related to Malawi?s customary land. The 2002 Land Policy recognizes the authority of customary law and traditional authorities and calls for incorporation of the traditional authorities into the land-administration structure (Chirwa 2008; UNEP/UNDP 2001; GOM 2002).

The land act of 2016 designates land as public or private, with ?public land? meaning ?land held in trust for the people of Malawi and managed by Government, a local government authority or a Traditional Authority and includes land gazetted for national parks, recreation areas, forest reserves, conservation areas, historic and cultural sites.? This definition implies that Mchinji Forest Reserve is public land whose title is held by the government. The land act of 2016 deals with land access, use and disposal issues. The law categories land into public land with public land including government and unallocated customary land used for benefits of a whole community. Private land is composed of freehold land, leasehold and customary estates. The act also outlines the procedures for acquisition of customary land for public utilities and the conversion of customary land to registered land. In this project, both public and private land. The land policy of 2002 on the other hand ensures tenure security and equitable access to land and facilitates the attainment of social harmony and broad based social and economic development through optimum and ecologically balanced use of land and land-based resources. The policy presents the fundamental measures and processes to minimize and possibly eliminate the most constraining land problems and bring progress and prosperity to the country. Guiding principles of the national land policy include secure land tenure, sustainable land management, productive and efficient land use, land administration, vulnerable groups, institutional frameworks for land management, land information systems and will all be applied where relevant in the implementation of the project. The management of forest resources is increasingly becoming the right and duty of local people within the policies and laws of the country under customary land and forest reserves. However, the combined impact of widespread poverty, dependency on subsistence agriculture and wood-based energy has resulted in forest destruction on both customary and public land. Village Forest Areas (VFAs) are held in trust by the traditional authority (TA) for common use by the community living in an area of customary land; however, restrictions on harvesting from VFAs sometimes leads to encroachment onto government forest areas for wood fuel and charcoal making

However, the effective implementation of these policies in the case of Mchinji CFR is hampered by lack of a management plan for the forest reserve and inadequate capacity of the district forest staff to ensure effective enforcement of the legislation. The District Forest office works with local institutions including village natural resources management committees (VNRMCs) and youth clubs to implement activities in community forests and ensure conservation and sustainable use of government forest reserves where necessary.

Mchinji Forest Reserve is dominated by Brachystegia species such as *Brachystegia floribunda, Brachystegia spiciforms, Brachystegia bomeii, Brachystegia utilis, Brachystegia microthyrsa* and Brachystegia *longifolia.* Other tree species visible in the forest reserve include: *Uapaca kirkiana, Julberdenia paniculata, Terminalia sericea, Pericorpsis angolensis, Burkea africana, Pterocarpus angolesis, Bridelia micratha, Annona senegalensis,Diplorrynchus condylocarpin, Darbergia melanoxylon, Bauhinia thonningii, Parinari curatellifolia, Anisiphylla momifela, Ficus capensis, Flacourtia indica, Syzigium cordatum, Zizyphus mucronata, Pseudolachnostylis maprouneifolia, Combretum molle, Vitex doniana* and faurea species. Animals that are found in the forest reserve include birds, hare, tortoise, antelope, hyenas, snakes.

There has been a significant loss in biodiversity in the Reserve in terms of species diversity and richness. The forest reserve is being depleted due to encroachment for illegal settlements and farming (both rain fed and irrigation farming), timber sawing, charcoal production, firewood and poles extraction, wildfires and poaching. The District Forestry Office conducts routine patrols against illegal activities in the reserve and customary land. In most cases, these have been ineffective due to inadequate resources to conduct joint patrols with the Malawi Police and Parks and Wildlife staff for effective management of the reserves. There is also need for these efforts to be coupled with extension services and intensification of activities in community forest areas to reduce pressure on the forest reserves and the number of illegal activities happening in the forest reserve.

As indicated in section 2.3, the major challenge to Mchinji Forest Reserves is deforestation due to several factors including enchorachment, fires, increasing fuel wood demand leading to high levels of charcoal production and firewood. Baseline scenarios for deforestation in MFR, according to community perceptions, are indicated in Table 10.

Table 10: Community Perceptions on deforestation trends in MFR

Parameter	**2000**	**2010**	**2020**
Forest areas	Better	Less	Least
Degraded forest	Better	Less	Least
Natural forest (HHs/VFA)	Better	Less	Least
Standing/planted trees on a farm	Better	Less	Least
Woodlots	Better	Less	Least

Source: UNDP (2021)

From the above tbale, it is clear that status of forests and trees has changed from better to least berween 2000 and 2020. Although deforestation is a general threat to MFR and surrounding customary lands,

some areas are more affected than others. The areas affected more than others are regarded as hotspots. UNDP (2021) identified three hotspots around MFR and these are presented in Table 11.

Table 11: Hotspots around MFR

Hotspot	Illegal activity	Intensity		
		Low	Medium	High
Bua river source (Ndawambe)	Encroachment and charcoal production		X	
Liwelezi River source (Kapezi and Mzenga)	Encroachment and charcoal production			X
Chikuta	Encroachment and charcoal production			X

Source: GoM, 2017.

The illegal activities presented in this table are classified in low, medium and high intensity levels and the possible reversal solutions. Mchinji District Forest Office (DFO) uses the National Forest Policy (2016), Forest Act (1997) and Forestry Amendment Act No 7 of 2020 to enhance sustainable utilization and management of forest resources for the benefit of future generations.

1.2.2. Associated baseline projects

The project will identify and demonstrate practical, self-sustaining forestry and biodiversity management interventions in forest reserves and community forests, while simultaneously building the capacity of national and local-level institutions for management and sustainable use of ecosystems. It will have as its central aim management of forest and biodiversity in Mchinji district for the management and restoration of Mchinji forest ecosystem and services that it provides. The priority interventions considered for support under this project are consistent with existing government programs and policies and will be implemented including the National Biodiversity Strategy and Action Plan as well as the Bua River Ecosystem Restoration Management Plan through existing structures at national, district and local levels, while supporting the district development framework in the identified district.

Target 6 of Malawi?s National Biodiversity Strategy and Action Plan aims at ensuring at least 50% of degraded terrestrial habitats are restored and protected by 2025. The Government of Malawi through Environmental Affairs Department with support from UNDP recently developed Bua River Restoration and management Plan as one of the actions towards achievement of this target. The Restoration and Management plan has mapped out all the priority hotspots and areas requiring interventions. The

Restoration Plan was preceded by a detailed baseline analysis of the ecosystem, the socio-economic factors of the catchment and a detailed interactive mapping tool to visually present the hotspots and areas that require interventions. The Restoration and Management plan has proposed an investment cost of Twenty-Five Million USD in a phased approach. The plan has prioritized a number of areas that this project proposal seeks to address.

Both the Malawi Vision 2063 and Malawi Growth and Development Strategy (MGDS) III recognize that Malawi must promote integrated and sustainable rural development in order to achieve its development potential and goals. Malawi has a strong policy base regarding climate change, including its National Adaptation Plan of Action (2006, updated 2015), the National Resilience Strategy (2017), Intentional Nationally Determined Contributions (INDCs; 2015), and the National Climate Change Management Policy (2016). In addition, its National Adaptation Plan (NAP) process is well under way, with a stocktaking report and Roadmap produced in 2016, and a NAP Framework in 2020. Awareness is present in communities thanks to national and project-led campaigns.

There are a number of interventions that this project will draw synergies with. This project will coordinate with these projects to ensure synergies are generated. Coordination will be mainly through exchanging lessons learned and sharing technical expertise where necessary. A summary of these projects is presented in the tables below:

Table 12:Current GEF Projects to upscale, synergise with or draw lessons from

Lead Institution	Project name	Brief Description	Duration	Cost (US$)	Funding agency	Synergy/Complementarity with the proposed project
Department of Forestry	Transforming landscapes and livelihoods: A cross-sector approach to accelerate restoration of Malawi?s Miombo and Mopane woodlands for sustainable forest and biodiversity management.	The development of objective is to ?Improve livelihoods and economic diversification of rural communities in two productive landscapes of the Upper Shire River Basin of Southern Malawi by promoting best land management practices and green value chains for key agriculture and woodland commodities.? The project addresses deforestation and loss of livelihoods in Balaka, Mangochi and Ntchue through a landscape approach	2021-2026 (5 years)	6,350,459	GEF/FAO	This project and the one being proposed here both have a broad aim of forest conservation and livelihood enhancement. During project design, the current proposal used some information from component 3 (e.g. knowledge management) of the landscape project. The two project will share lessons, experiences and best practices. The combined results of both project will potentially help to improve national regulations and policies to better manage forests.

Department of Fisheries	Malawi-climate resilient and sustainable capture fisheries, aquaculture development and watershed management project	The project purpose is to contribute towards poverty reduction through improved fish commodity value addition and increased consumption, strengthened nutritional security, and build climate resilience in Malawi	2020-2024	4,416,210	GEF	Sub-component 2 of this Fisheries project is about Ecosystem-based Fisheries & Watershed Management. Under this subcomponent, the project will pilot community-based soil and water conservation and agroforestry in several watersheds including Bua River whose source is Mchinji Forest Reserve, a focus of the project being proposed here. The two projects are going to compliment each other, share experiences and best practices. Design of the Mchinji Forest Reserve Project took cognissance of the gaps in the Fisheries Project

Table 13: Non_GEF current and phased out projects outside Mchinji to draw lessons from

Lead institution	**Project**	**Brief Description**	**Duration**	**Cost (US$)**	**Co-Financier**	**Synergy/Complementarity with the proposed project**
Total Land Care	Sustainable Land Management (SAMALA)	The overall objective of the project is to support the Malawi government to address land degradation. The central objective is to contribute to the restoration of degraded landscapes to support sustainable livelihoods.	2022-2027 (5 years)	4,700,000	Irish Aid and Government of Flanders	The project approach (of restoration and livelihood enhancement) will be replicated in Mchinji Forest Reserve. While the two projects continue being implemented, they will drawn lessons from each other to achieve a much bigger impact for Malawi ? restoration

Ministry of Water and Sanitation	Malawi Watershed Services Improvement Project (MWASIP)	The project objective is to increase the adoption of sustainable landscape management practices and improve watershed services in targeted watersheds.	2020-2026 (6 years)	157,000,000	World Bank	Mchinji Forest Reserve is a catchment area for several rivers including the Bua River. Some of the sustainable landscape practices of this project will be applied to the GEF project proposed here. The added value is that the GEF project will be the only one in Mchinji Forest Reserve to use the MWASIP approach in the district
Press Agriculture Limited	Commercial Reforestation	The project promoted tree planting to provide alternative sources of fuel wood for curing flue cured tobacco	2016-2022 (5 years)	1,500,000	Press Trust	In Mchinji, one of the major causes of deforestation is charcoal production . The proposed GEF project drew lessons from Press Cane Limited on its tree planting efforts. During design phases, an aspect of ??Commercial reforestation 'was borrowed and has been applied to the project proposed here. Being the only one of its kind in Mchinji Forest Reserve, there is an inherent added value when Commercial Reforestation will be applied

Japan Tobacco International (JTI) Leaf Malawi	Live Barns and Bamboos	As the wooden poles traditionally used to construct tobacco barns are attacked by termites, they need to be replaced regularly, leading to deforestation. This problems has been solved with the concept of the ?live barn? ? a structure of living trees which support the curing poles and remain in place for many years. Bamboos are fast growing and can be used for tobacco curing-saving trees	Continuous since 2015	33,000/year	Japanese Agency for International development (JICA)	An important lessons from this project is bamboo propagation to replace trees as source of firewood. The project GEF project will therefore also facilitate planting of bamboo to provide quick firewood, upscaling the work of JTI.
Tetratech	Modern Cooking for Healthy Forests (MCHF)	The purpose of MCHF is to promote sustainable energy options in Malawi in order to sustainably maintain forest cover and reduce land based emissions.	2016-2021 (5 Years)	1,200,000	United States Agency for International Development (USAID) and the United Kingdom Foreign, Commonwealth and Development Office (FCDO)	EAD will draw lessons from MCHF on possible sustainable livelihood options applicable to communities around Mchinji Forest Reserve for possible uptake through several avenues including awareness raising, This will be like upscaling MCHF project to Mchinji.
Ministry of Natural Resources	Malawi Youth Forest Restoration Programme	The project aimed at planting trees on 25,000 hectares of degraded land and fund the natural regeneration of a further 100,000 hectares.	2015-2020 (5 years)	7,000,000	Malawi Government	On some of the community fields and the reserve itself, there are pockets of natural regeneration. The proposed project will use lessons from the Malawi Youth Forest Restoration Programme to shape some of the interventions

World Vision	Improved forest management for sustainable livelihoods or Farmer Managed Natural Regeneration (FMNR) Programme	The project aimed to enhance livelihoods of forest dependent communities through improved commercialization of small-scale forestry development.	2015-2021 (6 years)	12,000,000	European Union	As above
USAID	Protecting Ecosystems and Restoring Forests in Malawi (PERFORM)	The objectives of the project were: REDD+ (Reducing Emissions from Deforestation and Degradation) readiness is advanced; Low-emissions land use opportunities are increased in targeted geographies; Low-emissions development capacities are improved; Pathways for sustainability are instituted; Country Development and Cooperation Strategy priorities of integration and institutional strengthening are advanced	2014-2019 (5 years)	5,000.000	USAID	The proposed project in Mchinji will draw lessons from the PERFORM Project to assess the potential of a REDD+ project for Mchinji Forest Reserve.

The Clinton Development Initiative (CDI)	Trees of Hope	Trees of Hope project uses an agroforestry land-use systems approach to address deforestation and help combat climate change. CDI incentivizes agroforestry and generates smallholder income by facilitating access to carbon finance.	2007-2012	Not indicated	USAID	The GEF project proposed here will not implement carbon financing initiatives, However, lessons on agroforestry from CDI helped to shape the direction of the proposed project in the agroforestry theme

Besides projects described in the table above, the participation of local producers in green value chains is also being promoted by several development projects including One Village One Project OVOP funded by JICA, JANEEMO agroforestry initiative funded by the Scottish government aiming at strengthening the organizations capacity in production and marketing. Local producers Innovation Platforms (IP) in southern Malawi (e.g. Balaka IP) is improving sustainable production and loan and market access for poor smallholder farmers through collaboration with relevant actors, such as the District Assembly, departments under the Ministry of Agriculture (DARTS, DLRC, DCP, DoI, DAES), research centers (e.g. CIAT, CIMMYT, LUANAR), NASFAM, the Agriculture Commodity Exchange (ACE), and the media.

At district level, Government of Malawi has set up the District Forestry Office mandated to manage forestry resources in forest reserves, customary and private lands. The government recruited staff, provides funding via Other Recurrent Transactions (ORT), office space and equipment including vehicles and motor cycles. The DoF manages MFR through: (1) Controlled collection of forestry products through issuing of government forestry permits for dead wood on bicycles and headload; (2) Monitored access to collection of non timber forest products (Honey, fruits, Mushroom, edible caterpillars and traditional medicine amongst others; (3) Law enforcement through, routine and camping patrols;(4) Promotion of natural regeneration in degraded areas.

There are some donor funded projects supporting conservation of forestry resources in the district. There are currently two ongoing projects: Climate Smart Public Works Programme and Bua River Ecosystem Management Plan Project (BREMP). Climate Smart Public Works Programme started in July 2022 and is expected to phase out in 2024. The programme is funded by the World Bank (US$1,204,385) through

the National Local Government Finance Committee. The project aim is to address land degradation, biodiversity loss, and climate change. The project focuses on integrated watershed management (IWM) covering sub- projects such as land resource conservation, afforestation, environment and road infrastructure sustainable livelihoods amongst others. The project is implemented by Mchinji district council (Forestry, Land resource, Environment, Public works, Water, Community development) and targets 18154 beneficiaries across the district. The main project activities are: Re-afforestation, management of natural regeneration, enrichment planting, boundary maintenance of VFA?s, land resource conservation,

The Bua River Eco-system Management Project (BREMP) started in 2019 and will phase out in 2023. The main project activities are The project is funded by UNDP to the tune of US $2,500,000. The project targets 5336 beneficiaries. Re-afforestation, management of natural regeneration in degraded areas, enrichment planting, boundary maintenance of VFA?s, land resource conservation, Fish farming, beekeeping, formulation of riverine sub- committees within the hot spots in compliance with standards and guidelines, facilitating formulation/review of Village Forest Areas Management Plans. This project is implemented by Mchinji District Council (sectors of Water, Forestry, Land resource and Fisheries, Public works)

Two projects phased out two years ago and these are Malawi youth re-afforestation programme and Tobacco levy. Over the past 3 years, these projects have contributed to tree planting efforts presented in Table 14 below:

Table 14: Current and phased out donor funded projects supporting MFR

Year	# of Trees planted	Area (Ha)	Tree survival	Survival rate (%)	Project
2020	2,356,196	942.48	1,842,545	78.2	Malawi Youth Forest Restoration Programme (MYFRP) and Tobacco Levy
2021	2,500,000	1000	2,137,500	85.5	Bua river restoration and ecosystem management project, Tobacco Levy
2022	3,000,000	1200	2,700,000	90	Bua river restoration and ecosystem management project
Total	**7,856,196**	**3142.48**	**6,680,045**	**87.28**	

Source: District Forestry Office Reports

During the project period in the target sites, the MCHF project will provide technical backstopping and training to participating institutions in delivery of forestry services and sustainable use of forestry resources in targeted areas and support in Regulatory and enforcement frameworks and that is here its investment will be. Despite the fact that most policies express GoM?s commitment to private sector development, yet there is limited engagement with the private sector and limited private sector participation in forestry investments, agricultural commodity marketing.

1.3. Proposed alternative scenario with a brief description of expected outcomes and components

The proposed project aims at improving conservation and restoration of forest resources thereby sustaining ecosystem services and rural livelihoods through sustainable use of forests and biodiversity. The project goal is to enhance conservation of ecosystems that provide critical goods and services for rural livelihoods in the Bua river basin. The project objective is ?to enhance effective management of forest ecological and biological resources to maintain the supply of important ecosystem services to contribute to the Bua River ecosystem restoration and sustainable livelihoods of surrounding communities?. The project will focus on the Mchinji forest reserve which covers the highest area of the Bua river catchment. While routine reserve management activities such as foot patrols, anti-poaching and fire control vigilance will continue to be strengthened, the project will identify and implement priority monitoring, management and capacity building activities, such as intensified law enforcement to allow natural regeneration of biological resources and monitoring of key species. These priority activities will be presented in the management plan which will be developed.

Baseline conditions, targets, monitoring milestones and risks related to the Project Objective are described in the Results Framework (Appendix 4), the Work plan and Timetable (Appendix 5), Key Deliverables and Benchmarks (Appendix 6) and the Costed M&E Plan (Appendix 7). The project objective will be achieved through the key inputs under four targeted Components (see Section 3.3 below for details). The four project components are inter-related and will lead to sustainable management of Mchinji forest reserve, the community forests and communal lands and improved knowledge management.

The intervention logic for the project is premised on the understanding that resources will be deployed to implement the interventions (activities) to deliver outputs which in turn will lead to certain institutional and behavioral changes (outcomes) at the intermediate level provided that the assumptions and certain pre-conditions governing project implementation hold true. At the lowest level of the theory of change (Figure 7), necessary and sufficient interventions will be deployed to deliver outputs. The key assumptions underpinning this level of the theory of change is that there is political will for integrated landscape management, interest and commitment from the local communities. The next level of the theory of change, shows that outputs will lead directly to the delivery of the project outcomes, namely: (a) Outcome 1: Effective management of Mchinji forest reserve strengthened through development management frameworks and improving capacity in enforcement for protection of the reserve. (b) Outcome 2. Improved conservation and sustainable use of forest resources so as to maintain and restore biodiversity and enhance ecosystem services through supporting local government institutions and communities, and (c) Outcome 3. Outcome 3: An effective project monitoring and evaluation system in place.

The underpinning assumption here is that government is fully committed to the conservation and sustainable use of Mchinji forest resources. The outputs are deemed as sufficient and adequate to deliver the stated outcomes if the following assumptions are true: (i) Stakeholders are willing to cooperate in the project; (ii) Local communities are cooperative; (iii) Information dissemination pathways are readily available for awareness creation. It is anticipated that delivery of the project objective will lead to the delivery of the anticipated project impact which is ?Effective management of Mchinji forest and supporting local government institutions and communities to enhance conservation and sustainable use of Forest resources to maintain and restore biodiversity and ecosystem services in community forests and communal lands?.

In order to achieve the stated impact, factors/conditions (impact drivers) are necessary for the project to move from outcomes to delivery of impact: (i) target stakeholders exhibiting continuous commitment to integrated landscape management approaches; (ii) continuous engagement and ultimate ownership/buy-in of project activities by stakeholders; and (iii) project partnerships and personnel with key institutions/policy champions to drive political will necessary for policy change are stable.

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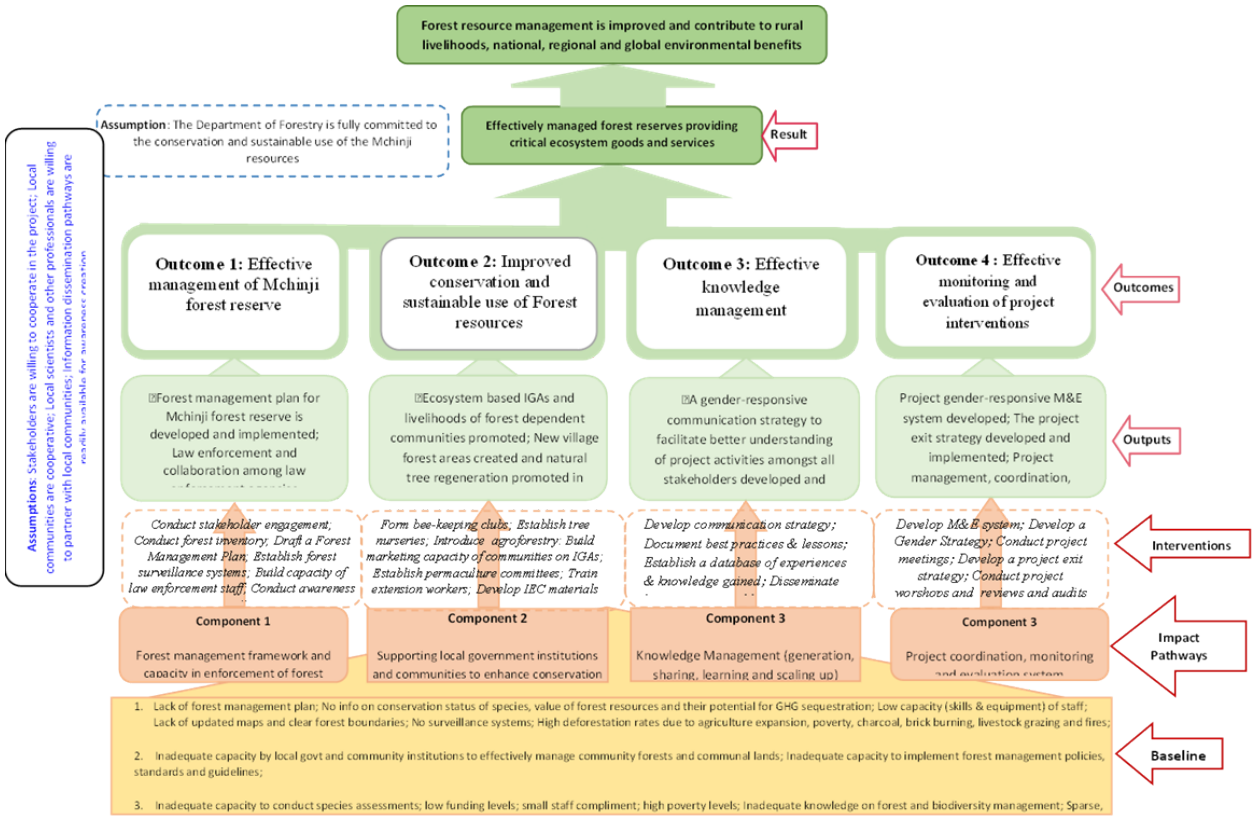
in of project activities by stakeholders; and (iii) project partnerships and personnel with key institutions/policy champions to drive political will necessary for policy change are stable.

Figure 7. Theory of Change



1.3.1. **Project components and expected results**

The project will undertake sustainable forest management and restoration of degraded forests and communal lands around Mchinji forest reserve in the Bua river basin. The project interventions will be implemented in Mchinji district. The project's focus is to undertake sustainable forest management planning, including mainstreaming of gender considerations in forest management and conservation. New village forests will be designated to enhance conservation and also alleviate pressure on the Mchinji forest reserve. In addition, local capacity will be built, especially in local government management systems, environmental protection and forest management. In summary, by the end of the project:

? A forest management framework and capacity in Enforcement of forest protection will be in place and under implementation;

? Local government institutions and communities will be capable and actively enhancing conservation and sustainable use of forest resources, and thereby maintaining biodiversity and ecosystem services in community forests and communal lands.

? Degraded forests and fragile community forests and communal lands will have been set on the restoration path towards restored ecosystems and actively providing ecosystem goods and services;

? Best practices and lessons learned will have been documented, shared and actively utilized by relevant sectors to implement sustainable forest management at national and local levels.

This will be achieved through the following project components, outcomes and outputs:

Component 1: Forest Management Framework and Capacity in Enforcement of Forest Protection.

This component will aim at effective management of Mchinji forest reserve and strengthening the capacity of reserve staff in management and law enforcement. The component will be achieved through one outcome and 2 outputs below:

Outcome 1: Effective management of Mchinji forest reserve strengthened through development management frameworks and improving capacity in enforcement for protection of forest reserve

The National Forest Landscape Restoration Strategy (MNREM 2017) defines specific restoration objectives related to forests including community forests and woodlots and forest management. The loss of forest cover and hence loss of biodiversity and ecosystem services in Mchinji Forest reserves has resulted in loss of forest products such as mushrooms, wild fruits, firewood and poles, environmental problems like climate change, soil erosion, rivers siltation and gully formation among others. Challenges faced include lack of management plans to guide forest reserve activities, inadequate extension support services, high cost for purchasing inputs, low survival of trees from afforestation and forest fires. The project will thus ensure that capacity of extension services is enhanced, management plans are developed, and capacity is built for officers to ensure effective management of forest reserves. This outcome will be achieved through 4 outputs.

Assessment of biodiversity and ecosystem services and values for Mchinji forest reserve will be conducted and the results of which will be used to inform the development of the Forest management plan for Mchinji forest reserve. There will be updating of maps, opening of boundaries and establishment of surveillance systems. The project will support conducting of forest patrols to support law enforcement for protection of forest resources. In addition, Capacity of forestry extension officers will be supported and applied in implementation of forest interventions and provision of forest extension services.

Output 1.1: Forest management plan for Mchinji forest reserve is developed and implemented

The project will develop a future proof gender responsive management plan which will, inter alia, 1) foster participation of women, youth, persons with disabilities and other vulnerable groups including women by creating awareness, building capacity and instituting inclusive tracking mechanisms; 2) set quotas to ensure inclusion of women, youth and persons with disabilities in leadership structures; and 3) mainstream gender and social inclusion activities in the forest management plan to ensure the needs, priorities and interests of all gender categories are addressed or considered.

The main activity is ?Develop and implement a Management Plan for Mchinji Forest Reserve? which will be done through through sequention activities described below.

Activity 1: Form an inclusive inter-disciplinary Core Planning Team

This team will be responsible for planning and development of a management plan from production of terms of reference up to and including approvals. In the first place, a small team will be appointed by Environmental Affairs Department based on expertise in development of conservation area management plans. This small team will be charged with the responsibility of developing gender sensitive terms of reference and appointing a bigger planning team that will spearhead the process of developing a management plan. The rationale for such a bigger inclusive team is that the management plan to be developed will require data on current and historical data and trends on various aspects of Mchinji Forest Reserve including floral and fauna biodiversity, physiography, climatology, surrounding land-use practices.

The formation of the core team will observe policy recommendations which promote at least 50% women (National Gender Policy), 30% youth (National Youth Policy) and 5% persons with disabilities (National disability mainstreaming strategy and implementation plan) representation in leadership and governance structures.

Identification of the team members and development of terms of reference will take place in the 3rd month of project implementation while inauguration and induction will take place in the 4th month.

Activity 2: Review existing legal instruments of gazettement and other documents

The Department of Forestry, Lilongwe University of Agriculture and Natural Resources, Museums and Monuments, Websites and other sources will be consulted for legal and other documents about the Mchinji Forest Reserve. These documents include National Forestry Act and Policies, regulations, and previous management plans (if any) about the reserve. This review is intended to obtain information required about legal status of the reserve, history of its establishment, the reasons for its gazettement,

physiography (Climate, Hydrology, Topography, Soils, and rocks), maps with boundaries and surrounding land-use practices as well as the extent to which gender and social inclusion issues will be considered. Any gaps from literature review will be filled through focus group discussions and key informant interviews, targeting forestry officers (retired and current) and community leaders. This will be done in the 6th month of project implementation. Key informant interviews and focus group discussions represented by all gender categories (including women, youth and persons with disabilities) will be guided by a gender-sensitive questionnaire which will be pre-tested before administration. In the 8th month of the project, all this information will be collated into reports.

Activity 3: Review the past and current status, management, biodiversity and ecosystem services

The source resources consulted under activity 1 will provide additional documents. In particular, reports, published and unpublished, about the reserve will be obtained from these sources for information on the following areas: past, current and trends about biodiversity status of the reserve; ecosystem services, that is provisioning such as fruits, regulating such as soil erosion control, cultural such as ceremonial and ancestral sites and supporting services such as nutrient recycling; management systems focusing on strengths and weaknesses of law enforcement, community engagements and outreach, research and development, coordination mechanisms with other institutions. Literature review will be done during the 5th month of the project. Where gaps exist in literature review, key informant interviews and focus group discussions involving men, women and the youth will be conducted in the 7th month of the project.

Activity 4 Conduct stakeholder engagement on management and protection of the forest reserve

This activity will seek views from stakeholders on how they would want the reserve to be managed. The first step in this activity will be stakeholder mapping and analysis, using the Power-Interest-Grid, to identify levels of interest and influence on management of the reserve. The second step will be to prepare a gender sensitive checklist to guide discussions with stakeholders. This checklist will seek further information, besides that obtained from literature review, on management challenges facing the reserve followed by strategies, actions and activities on how these can be resolved, by whom and resource requirements. Efforts will be made to consult all relevant social groups including politicians, the academia, the media, women, youth, women and people living with disabilities. Activity 4 will be done in the 3rd month of project implementation.

Activity 5: Conduct forest inventory, biodiversity and socio-economic assessment

The management plan will require information on several aspects, notably, fauna and flora, hydrology, soils, geology as well as socio-economic aspects of the people within a five kilometre zone around the reserve. Faunal biodiversity data on small mammals, large mammals, birds, reptiles, insects and amphibians will be collected. Floral biodiversity data will include woody plants, grasses and shrubs. Socio-economic data will be collected on demographic factors, agriculture, forestry and other

land-use practices, income sources, energy sources, the role of women and the youth in natural resources management and general livelihood interventions.

To collect information suggested above, relevant technical expertise will be identified. For instance, to collect data on birds, there will be need for an ornithologist and for vegetation, a botanist will be needed. Identification of the experts will be done in the 3rd month of project implementation. The experts will develop data collection tools that will be circulated to the core planning team for review and endorsement. If the experts will not have the necessary data collection and analysis tools and equipment, the project will procure them from relevant sources. Identification and development of data collection tools will be done in the 3rd month of the project while procurement will be done in the 3rd month of the project.

Following identification of experts, and development of data collection tools and procurements, the next step will be forest resource inventories, biodiversity assessments, social and economic assessments to be conducted from the 5th to 12th month of project implementation.

Activity 6. Draft a future proof and gender responsive Forest Management Plan

Community awareness on gender equality, social inclusion and women empowerment will be duly considered in the management plan. All the aforementioned gender categories, including men, will therefore participate in development and implementation of the Forest Management Plan. This will ensure that the needs, interests and priorities of all gender groups are taken into consideration or addressed. In addition, deliberate efforts will be made such as setting of quotas for women, youth, persons with disabilities and other vulnerable groups? representation in structures that will lead the development and implementation of the forest management plan. A gender specialist will work with the forest plan development team to ensure that all gender and social inclusion issues are incorporated in the forest management plan.

As much as is applicable, the Mchinji Forest Reserve Management Plan will draw from in form and structure from other forestry management plans in Malawi. In many of the existing management plans, the following structure is embedded: acknowledgements, preface, executive summary, introduction and background subdivided into scope and purpose of the plan, history of plan preparation, planning context (alignment to international, regional, national and local policies, strategies and regulations) and structure of the plan; description of the forest reserves; strengths, weaknesses, opportunities and threats; strategic goals and objectives of the management plan; Five year work plan and budget; monitoring and evaluation; appendices.

A facilitator, experienced in development of management plans will be engaged to facilitate a 5-day workshop to draft the management plan. This workshop will involve specialists who participated in data collection. Each specialist will be assigned a chapter to draft. Data collected under activities 2 to 5 above will be analysed and summarized. The facilitator will finally consolidate work by individual specialists into one draft management plan. The draft management plan will be developed in the 9th month of project implementation.

Activity 7. Conduct an inclusive stakeholder validation of the draft Forest Management Plan

A 3-day workshop will be conducted to validate the draft management plan. The participants in the workshop will be identified based on their experience in natural resources management. During the workshop, draft management plan will first be presented to stakeholders who will discuss it in plenary. The draft plan chapters will further be reviewed by the stakeholders in small groups, followed by plenary presentations and final consolidation of stakeholder inputs to produce a final management plan.

Activity 8. Facilitate approval and signing by the Director of Forestry

The draft management plan will be submitted to the Director of Forestry to consider for approval.

Output 1.2: Law enforcement and collaboration among law enforcement agencies strengthened for Mchinji Forest Reserve.

Effective protection of Mchinji CFR will lead to a reduction in illegal activities, notably encroachment, settlement, fires, deforestation and grazing, leading to improved forest coverage. With respect to gender and social inclusion, there will be 4 deliverables as follows: 1) A gender responsive and social inclusive recruitment process and procedures, 2) Demarcation of boundaries that does not infringe on the rights of women, 3) Establishment of camp sites, guard houses and office buildings that safeguard the dignity of females and persons with disabilities and promote their access to such structures, and 4) Awareness campaigns on conservation of natural resources that recognize the gendered differences between men and women in terms of access to resources and their accrued benefits.

The main activity under output 1.2 is ?*conduct effective law enforcement*? so that it suppresses deforestation within MFR and the surrounding areas. Effective law enforcement will be achieved through the following sub-activities:

Activity 1: Establish forest surveillance systems, including forest patrols

Currently, forest surveillance and patrol systems are weak. The surveillance systems heavily rely on human observations which are time consuming. For example, detection of encroached areas of the reserve is mainly based on foot patrols. A quicker and more effective way would be to use unmanned

aerial vehicles (or drones) to do the mapping and generate both baseline and follow-up data to depict trends. The data generated will be used to plan patrols. For example, if the data shows that there is a lot of deforestation a certain location, the patrols may have to focus in that area. The project will support field patrols in a number of ways including provision of fuel, field equipment and uniforms which will be procured following approved Government of Malawi and GEF procurement regulations.

Since there is currently no drone pilot at district level, the project will send 2 rangers and 1 senior staff member to the African drone and Data Academy to acquire basic skills in data capture and analysis within a period of 2 months. The project will also procure a drone following recommended Malawi Government and GEF procurement procedures and guidelines.

In relation to gender, the project will create awareness and build capacity of staff doing surveillance and patrols as well as communities including women, youth and persons with disabilities on the dangers of gender based violence and any other form of abuse, referral systems and redress mechanisms. All staff on surveillance and patrols will be required to sign and adhere to a code of conduct on mandatory basis. The gender experts will guide on gender and social inclusion in relation to surveillance and patrols.

A key deliverable of this activity will be enhanced surveillance systems and improved patrol performance.

Activity 2: Sensitize magistrates and judges on benefits from Mchinji Forest Reserve, Forestry policy, Act and the associated charges

The rationale for this activity is that currently, the magistrates and judges are not as conversant with the National Forestry Policy and Act as amended. Due to this knowledge gap, the offenders are often given less deterrent punishments by the judges, further perpetuating mismanagement of the forest reserves. Sensitization will be done through a 2-day workshop involving at least 10 members drawn from the police (general duties, magistrates, prosecutors) and the judges in the country. During the workshop, the Department of Forestry will present key highlights of the National Forestry Policy and Act, efforts by the department of forestry to conserve trees and forests, challenges faced and proposed solutions. A work plan with shared tasks between the police, judges and the Department of Forestry will be developed. Another form of sensitization will be field visits to Mchinji Forest Reserve hotspot areas such as cultivation sites, charcoal kilns and illegal settlements within the reserve. Through such a field visit, the police and the judiciary will appreciate the levels of challenges and threats faced in management of the reserve which will strengthen the levels of collaboration and coordination in addressing them.

Activity 3: Demarcate and open up forest boundaries

Mchinji Forest Reserve boundary is overgrown with vegetation since it is not cleared. Furthermore, the boundaries have been encroached for over 10 years. The dualistic nature of the boundary being overgrown with vegetation and encroachment at the same time, makes it difficult to trace the original boundary. The Department of Forestry will seek the services of the Surveyor General to retrace the boundary. Before the retracing exercise, there will be sensitization and planning meetings involving relevant stakeholders including communities from both Malawi and Zambia within a 5-kilometer zone

around the reserve. During the retracing exercise, among other aspects, the Surveyor General will map out and geo-locate the original boundary and areas encroached for cultivation, settlement or graveyards. The Surveyor General will then produce a map showing original boundary and areas encroached.

Following production of a map, a 2-day workshop will be held involving Department of Forestry, Department of Lands, Ministry of Justice, the police, judiciary, politicians, senior traditional leaders from both Malawi and Zambia. During this workshop, the Surveyor General will present the mapping report clearly showing original boundary and areas encroached. At this workshop, the Ministry of Justice will lead the discussions, and create awareness on what the law says about public lands like Mchinji Forest Reserve. From this workshop, resolutions will be drawn on how to handle encroachment which has been in existence for more than 10 years, in some areas of the reserve.

Having agreed on the original boundary during the workshop mentioned above, there will be need to plant concrete beacons around the forest reserve. Boundary planting will be led by the Surveyor General accompanied by community representatives and Department of Forestry. Spacing of beacons will depend on terrain and straightness of the boundary. For example, if the boundary is straight, there will be fewer beacons than where the boundary is meandering.

Activity 4: Build capacity of law enforcement staff to upscale and sustain forest law enforcement performance system

Compared with the Department of National Parks and Wildlife, the capacity the law enforcement staff in Department of Forestry is weak. According to the SADC Law Enforcement and Anti-Poaching strategy (2016), an effective law enforcement system should have four program areas namely: field level protection of wildlife resources; legislation and judicial processes; wildlife crime and illegal trade; integrating people and nature into conservation and development processes; sustained trade in and use of natural resources. resources; and legislation and judicial processes. Within these program areas, training and capacity building will be done on wildlife prosecutions, wildlife investigations, intelligence gathering and ranger based monitoring and evaluation of illegal forest activities.

To make the sessions cost effectiveness, the project will organize training of trainers sessions of senior frontline staff who will then train junior officers including forest guards and forest assistants not only in Mchinji Forest Reserve but other reserves as well in Malawi.

Component 2: Supporting local government institutions and communities to enhance conservation and sustainable use of forest resources to maintain and restore biodiversity and ecosystem services in community forests and communal lands

This component seeks to address the major drivers of loss of community forests and their impacts on biodiversity loss and the wellbeing of the communities. Currently, there is high wood demand for energy considering the dependency on fuel wood which leads to loss of species diversity and degradation of habitats. The main source of energy for firewood is mainly community forests which are generally

unmanaged. Presently, the distance for communities to collect firewood ranges from 1 km to 5 km and in worst cases, people spend about 5 hours to collect firewood (BREREMP, 2021). Restoration of community forests and opening up new community forest will reduce the amount of time women spend on firewood and traveling for firewood. This will in turn free up time for communities to focus on other livelihood enhancing activities. In addition, the growing population pressure is increasing environmental pressures and stress on the natural resource base. Agriculture, which is the most representative land use in the area is a major driver of the continued pressure on natural resources as expansion of agricultural areas continues in dambo areas and natural forests. The restoration activities in community forests and areas will focus on tree planting, assisted natural regeneration, enhancing management of existing individually owned natural forests, village forest areas, trees on farm and agroforestry. This will in turn enhance efforts to address deforestation and forest degradation by reducing pressure on natural forest reserves and restore ecosystems for the conservation of Bua River.

Under this component, the project will also support ecosystem based Income Generating Activities in a bid to reduce poverty blamed for catalyzing charcoal production and other illegal harvest of forest resources from Mchinji Forest Reserve.

Outcome 2: Improved conservation and sustainable use of forest resources so as to maintain and restore biodiversity and enhance ecosystem services through supporting local government institutions and communities

This outcome highlights ecosystem based income generating activities to increase household income for rural communities surrounding Mchinji Forest Reserve and establishment of village forest areas. The IGAs that the project will promote are bee-keeping, agroforestry, fruit tree grafting and commercial tree nurseries and permaculture. New village forest areas will be created in communal lands and natural tree regeneration will be promoted in community forests to improve the conservation status of threatened species therein. It is estimated that approximately 3,000 hectares of forest will be restored and 13,730 hectares will be placed under improved management practices under this component.

Output 2.1: Ecosystem based IGAs and livelihoods of forest dependent communities promoted

The Situation Analysis Report (2023) identified poverty and weak livelihoods (such as food insecurity) as one of the driving factors to deforestation. Alternative sources of livelihoods to deforestation are therefore proposed in this project. The report also identified potential IGAs including bee-keeping; agroforestry; fruit tree grafting, commercial tree nurseries and permaculture.

There will be three activities to meet output 2.1: Conduct sensitization meetings about IGAs and livelihoods around the reserve and get community buy-in;. promote bee-keeping; promote fruit tree grafting and commercial tree nurseries; promote agroforestry practices; build community marketing skills. These activities which will later be rolled on to national level as an impact of the project and their essential steps are described below:

Activity 1: Conduct sensitization meetings about IGAs and livelihoods around the reserve and get community buy-in.

From the Situation Analysis, the IGAs which community representatives demanded are the ones they are familiar with. However, there could be some completely new and innovative IGAs which community members are not aware of. Therefore, there will be need for sensitization meetings to introduce and/or identify new IGAs. A team of district staff, led by the District Forestry Officer, will first develop key awareness messages targeting all gender categories including women, youth and persons with disabilities and then conduct the sensitizations around the reserve. During the sensitization, communities will also be asked about their willingness to participate in suggested IGAs. They will also be asked to propose new IGAs and livelihood interventions that would consider needs and interests of all gender categories.

Activity 2: Promote bee-keeping

Bee-keeping is one of the most successful IGAs in Malawi. Demand for honey is already available in super markets and local traders in the country. Most of the beekeeping is done in clubs or cooperatives in the country. This is important for pooling resources, standardization of prices for honey and other bee-products. This activity is therefore an opportunity for national level intervention by the project, whereby capacity building and all promotional activities for beekeeping by the project will be leveraged upon by other beekeeping clubs in the country. For Mchinji Forest Reserve, currently, there is only one club. The following are key steps to promote bee-keeping:

Step 1: Facilitate formation of bee-keeping clubs

To form a club, community members will be invited to one venue within the village settings. The DFO will explain the purpose of the meeting and the expected outputs. Criteria for selection of club members will then be developed, followed by voting for the positions of chairperson, vice chairperson, secretary, vice secretary, treasurer and committee members. Deliberate efforts will be made to include women, youth and people living with disabilities in the committee as well as ensure that as many as possible join this income generating activity for their economic empowerment. The committee will be requested to develop their own local management plan for bee-keeping.

Step 2: Build capacity of bee-keeping clubs on bee-keeping and management

A facilitator from the Department of Forestry (which is already into bee-keeping) will be identified to lead capacity building sessions which will be through training and learning visits. For training, the facilitator will prepare a training plan and content which will be shared with competent project staff for review. Ideally, the training should cover apiary site identification and management, hive installation and inspection, enhancing colonization of the hives, harvesting, processing, packaging, labelling, marketing and challenges. The trainer will ensure that the training content is designed to address the needs and interests of women, youth and persons with disabilities across the country and value chain by identifying gender and social inclusion issues in the bee keeping value chain and mainstreaming the strategies to address them in the training modules. Following the review, a 5-day training session involving all

committee members will be conducted, after the training, an action plan will be developed to guide next activities including procurements, identification and verification of apiary sites. For learning visits, clubs? members will visit at least one successful bee-keeping club to learn more about apiary more about what the training offered. A checklist of learning points will be prepared in advance before the visit.

Each bee-keeping club will be provided with bee-hives of the Kenyan Top-Bar type; bee-suits consisting of cloves, protective boots and veil; smokers, buckets, panga knives, bee scrapers, plastic bottles of 500 ml well labelled, comb brushes, sheets of white filtering cloth, sera (to attract bees to the hives).

Procurement of the above items will follow the Malawi Government and GEF procurement regulations and procedures. Ideally, in Malawi, a minimum of three quotations will be sourced from reliable suppliers for review and final selection by the procurement committee.

Activity 3: Promote fruit tree grafting and commercial tree nurseries

This activity will be achieved through two steps as follows:

Sub-activity 1: Build capacity of existing village natural resources management committees on fruit tree grafting techniques and commercial tree nursery establishment and management

The Department of Forestry will facilitate training and capacity building of village natural resources management committees that will be involved in tree nursery establishment and management activities. There will be two separate training sessions, targeting all gender groups: the first one will be general nursery establishment and management and the second one will be for grafted fruit trees. Each session will last five days and will involve 30 participants. The facilitator from Department of Forestry will prepare training plans, content and methodology including a module on gender mainstreaming in natural resources management which will be reviewed by experienced foresters and gender experts. At the end the training session, a work plan with responsibilities well shared among men, women and the youth will be developed.

Sub-activity 2: Establish tree nurseries including those of grafted fruit trees

Nurseries will be established within the villages for ease of management and monitoring by the villagers themselves. There will be two separate sets of nurseries: one for grafted fruit trees and the other one for other seedlings certified by Forestry Research Institute of Malawi (FRIM).

Land will be cleared and fenced against livestock. The site will also be closer to a reliable water supply for easy watering. To effectively establish these nurseries, communities will he provided with startup inputs that will include watering cans, shovels, polythene tubes, seeds, shovels, hoes, garden folks and rakes. All the nursery sites will be geo-referenced for ease of tracking and mapping. Sensitization meetings will be conducted to encourage and mobilize communities including women, youth and persons with disabilities to actively participate in establishment of tree nurseries. Attempts will be made to include fast growing trees for firewood and other domestic purposes.

Activity 3: Promote Agroforestry Practices

Agroforestry is defined as ?agriculture with trees and animals?. It is the interaction of agriculture and trees, including the agricultural use of trees. This comprises trees on farms and in agricultural landscapes, farming in forests and along forest margins and tree-crop production. Agroforestry involves a wide range of trees that are protected, regenerated, planted or managed in agricultural landscapes as they interact with annual crops, livestock, wildlife and humans. Agroforestry can occur at a variety of spatial scales (e.g., field or woodlot, farm, watershed) in different ecosystems and cultures. When properly applied, agroforestry can improve livelihoods through enhanced health and nutrition, increased economic growth, and strengthened environmental resilience and ecosystem sustainability. The district has well qualified staff on agroforestry practices. Community members are also already aware about agroforesrry practices but they luck knowledge and skills of how to manage the practices. To fully achieve activity 3, two steps will be followed as follows:

Step 1: Introduce and/or upscale agroforestry practices at community level

The agroforestry model suggested for this project is one that will involve arable crops and trees. The project will procure agroforestry seeds and seedlings that are suitable for the areas around Mchinji Forest Reserve. Seedlings from the seeds procured will be raised in at least 20 nurseries around the forest reserve.

The final step under this activity will be planting and management of the seedlings in various areas including homesteads, schools (as demonstration sites), customary and private lands. This final step will ensure that households with vulnerable gender categories such as female headed and youth headed households and those with persons with disabilities benefit from these seedlings by planting them in their homesteads.

Step 2: Build capacity of community members on agroforestry practices

The training will be facilitated by district staff who underwent a TOT session. The staff will develop a training plan, gender sensitive content and training methods. These will be reviewed by the project staff to check depth of the training materials and relevance. The training will target 20 community representatives per session consisting of an equal proportion of men and women. The youth and people living with disabilities will also partake in the training. There will be simultaneous training sessions around the forest reserve by those who had undergone a ToT session. At the end of the community training, an action plan on how to introduce and/or upscale agroforestry practices around Mchinji Forest Reserve. After the training, 30 community representatives, will go for a learning visit at the nearest and most successful agroforestry site. Selection of these community representatives will be guided by a gender responsive criteria developed through a participatory process during the training.

Activity 4: Build marketing capacity of target communities

Often, the major challenges communities participating in IGAs face is limited exposure to lucrative markets for their projects especially women whose limited access to market information and gender roles

which limit their mobility freedom acts as barriers to their ability to participate in these viable markets. Vendors use this opportunity to swindle communities by offering low prices for the products. To ensure producers get fair prices, attempts will be made to identify off-takers of the IGA products.

The project will facilitate capacity building sessions and create market linkages through organizing buyer-seller meetings where communities will interact with potential off-takers such as supermarkets. A 1-day meeting with potential off-takers such as supermarkets will be convened. At this meeting, the communities will present IGAs activities being implemented to generate interest from off-takers. The presentation will dwell much on estimated annual quantities of IGA products from the communities. The off-takers interested to buy from communities will go into contractual agreements with the communities via the Department of Forestry. This meeting will be preceded with a 1-day orientation of communities on how to conduct market research to build their capacity so that they can continue engaging potential off takers even beyond the project life for sustainability.

Activity 5: Promote permaculture and food forests:

Permaculture food forests are intentionally cultivated forest gardens. They contain native and cultivated plants which provide yields for humans and ecological functions. This will bring innovation in the project and allow for an innovative approach to use forests as sources of food and livelihood at household level. Essential steps for activity 5 are as follows:

Step 1: Identify a local NGO to spearhead implementation of permaculture and food crops.

This step will be fulfilled by sourcing applications from local NGO?s experience in permaculture and promotion of food forests at household level.

Step 2: Build capacity of local communities on principles and practices of permaculture and food forests.

The identified NGO will conduct a series of training sessions of the target communities. The sessions will be home based to reduce costs.

Activity 6: Establish a champion of extension workers to upscale and sustain IGAs

In any community, the extension delivery system is the one that directly and strongly interacts with the forestry activity system. Failure of the extension delivery system will lead to collapse of the forestry conservation efforts. The current situation is that extension workers from various sectors and institutions do not function as a unit to conserve Mchinji Forest Reserve. For this reason, the project will facilitate establishment and capacity building of such a bloke charged with conservation of the reserve, among other functions.
The bloke will undergo training to build its capacity to upscale project interventions beyond the project lifespan. This bloke will collaborate with extension workers from other like minded projects projects. It will also lead upscaling and sustaining output 2.2 which has been described below.

Output 2.2 New village forest areas are created and natural tree regeneration is promoted in community forests

Currently, there are 26 Village Forest Areas within a 5-kilometer zone around Mchinji Forest Reserve. These cover about 524 hectares. Creation of new village forest areas is one of the activities proposed by the Bua River Ecosystem and Restoration Plan (UNDP, 2021)[35][35] which includes Mchinji Forest Reserve. The District Forestry Officer already identified potential and prospective village forest areas (VFAs). The District Forestry Officer. The main activities under outout 2.4 are: to develop new village forest area; promote permaculture. To avoid scattering, these activities will be done in the same locations, simulating a concept of a *cluster village*.

Activity 1: Identify a local NGO to spearhead establishment of village forest area in selected communities.

Experience from other projects in Malawi has shown that engaging a local NGO to co-manage conservation projects is the most successful approach. In view of this, the project will identify a local NGO based in Mchinji District. The local NGO will be identified using the prevailing GEF and Government of Malawi Procurement Processes.

Land proposed for VFAs, including the boundaries, will be geo-referenced and mapped for ease of locating and tracking in future. For the mapping exercise, a drone will fly over the proposed sites to generate aerial maps. Furthermore, there will also be biodiversity assessments in the proposed sites to generate baseline data on abundance and distribution of flora and fauna in the identified land. For each proposed VFA, the DFO will facilitate a series of meetings with community representatives to develop a management and a monitoring and evaluation plan. Both plans will contain specific objectives, activities, time frames, responsibilities and resource requirements. The proposal will then be submitted to the Department of Forestry for approval.

Activity 2: Adopt/designate the new village forest area, including its boundaries, conservation objectives, detailed management and monitoring plan

The proposed sites will finally be designated as VFAs. The District Commissioner will append his signature, affirming district commitment to support the new VFAs. Community representatives for respective new VFAs, will also countersign. The District Forestry Officer will keep record of all the processes leading to designation of new VFAs. The Office will also keep maps clearly showing boundaries and coordinates.

Activity 3: Facilitate establishment of an all-inclusive VFA committees

The DFO will lead in the establishment of VFA committees through 1-day meetings. This committee will consist of men, women and the youth using quotas stipulated in the project gender and targeting strategy. During these meetings, positions and their roles will be discussed. This will be followed by

participatory development of the criteria for one to be considered for positions of chairperson, secretary, treasure and committee member will be developed in a participatory manner. Identification of committee members will be done through a secret voting process.

Activity 4: Conduct training and capacity building of community representatives on forest management

The DFO will develop and/or adopt existing training materials for a 3-day training of the committee identified under activity 5. This training will focus on management of regenerants, trees on farm, fire control, gender mainstreaming and social inclusion, monitoring, evaluation and reporting. Besides training, community representatives will visit at least two successful village forest areas to have a practical feel of how sound management should look like.

Activity 5: Procure and distribute start-up material

Using recommended procurement procedures, the project will procure start up materials including panga knives, hoes, seeds, seedlings, watering cans and polythene tubes. The project will ensure using the gender and targeting strategy that women, youth and persons with disabilities access these resources and accrued benefits.

Component 3: Knowledge Management (generation, sharing, learning and scaling up)

Outcome 3: An effective knowledge management system in place

Reconciling forest management and conservation and responding to the immediate threats of biodiversity loss and forest degradation that increase climate change impacts require extensive knowledge generation, sharing, learning and scaling up among stakeholders. Although there have been some efforts to understand forest management and biodiversity conservation in Mchinji, the best practices and lessons learned have been barely disseminated to all stakeholders. As such, there is a significant knowledge and skills gap on sustainable forest management due to limited documentation and sharing of best practices and lessons learned. Although, the District Forest Department exists to champion the sharing and upscaling of best practices and lessons at district level, this institution alone is not adequate and is further hampered by the low capacity in the monitoring and evaluation systems which are not very adept to forest management. This, therefore, hampers planning and critical decision-making which and, in turn, renders scaling up sustainable land management practices ineffective.

The project will generate lessons learned and good practices for wider adoption, replication, leveraging and dissemination of forest management actions and knowledge networks. This outcome will be achieved by delivering on four gender-responsive outputs and activities: (i) a communication strategy to facilitate better understanding of project activities amongst all stakeholders developed and implemented, (ii) best practices and lessons learned documented and disseminated with equal participation of stakeholders. This outcome will complement the quantitative reporting by documenting success stories, and provide other inputs as contributions to the annual and periodic progress reports as and when required or due.

Output 3.1: A gender-responsive communication strategy to facilitate better understanding of project activities amongst all stakeholders developed and implemented

The project will engage the services of a local non governmental organizations with relevant capacity to lead the development and implementation of the gender responsive communication strategy through a competitive procurement process at the onset of the project. The development of the gender responsive communication strategy will be participatory and will involve a situation analysis to identify gaps in terms of knowledge, attitudes and practices (KAP) related to communication to be addressed by the strategy whilst linking it to the project goal and objectives. The analysis will commence by conducting a desk review of key project documents, policies and strategies for clear understanding of project activities and targeted audience especially the power dynamics that either include or exclude certain groups of people such as women, youth, persons with disabilities and other vulnerable groups including men. A Strength, Weakness, Opportunity and Threat (SWOT) analysis will complement the document reviews to appreciate the environment in which the strategy will be implemented which will also focus on existing gender and social inclusion dynamics. The Local NGO in collaboration with key stakeholders including Ministries, Departments and Agencies (MDAs) will incorporate the findings from the situation analysis into a draft communication strategy which will be reviewed by relevant stakeholders including women, youth and persons with disabilities to come up with a zero draft. The strategy will contain categories of targeted audience, messages to be communicated, activities to disseminate the messages, channels for disseminating the messages, key performance indicators for the strategy and lead stakeholders for each activity or output. The strategy will also include knowledge products, strategies for branding and visibility, publicity, audio and visual. The district information officer shall ensure that the local NGO is supported and is able to achieve the aspirations of the project guided by the communication strategy in collaboration with other relevant stakeholders. .

Activity 1. Conduct stakeholder consultations to capture and document views, perceptions and recommendations for effective project implementation

Consultative meetings will be conducted led by the Director of planning and development on a quarterly basis at district level with all relevant stakeholders including departments of gender, disability and youth to ensure that strategies for effective project implementation for youth, persons with disabilities and other vulnerable groups like women are developed. At community level, Gender responsive participatory appraisals and a gender analysis will be done at the onset of the project activities which will provide information on the development of the project gender and targeting strategy. This document will guide the project on targeting mechanisms that will seek to achieve the project goal whilst addressing the needs and interests of women, youth, persons with disabilities and other vulnerable groups including men. The processes will also inform the monitoring and evaluation system of the project through development of indicators that will measure progress on gender mainstreaming and social inclusion. Village level project action plans will be developed on annual basis based on the findings from these consultative meetings which will ensure ownership by the communities for project sustainability. A district project implementation and support team (DPIST) comprising relevant technical experts will be formed headed by the Director of Planning and Development in Mchinji District Council with the Environmental District Office being the secretariat to this team. This team will facilitate community engagements from time to

time to ensure that all categories of people including women, youth and persons with disabilities present their views and perceptions on project implementation.

Activity 2. Develop a project communication strategy

The Local NGO recruited for knowledge management and communication will ensure within the second quarter of the project implementation the development of the communication strategy commence with a participatory situation analysis or a KAP study on documents and processes governing key aspects of forest management that will identify key issues to be addressed by the strategy. A desk review on selected project related documents, policies and strategies will be done for clear understanding of project activities and targeted audience. A review of the project focus areas to identify areas for potential knowledge creation or generation will be done. Key stakeholders including MDAs will incorporate findings from the situation analysis and the document reviews into a draft communication strategy.

A knowledge storage and sharing framework which will also be part of the communication strategy will also be developed showing logical sequence of objectives, outcomes, outputs, baseline data, output targets, frequency of evaluation, tools for measuring performance and lead person or stakeholder. Similarly, this framework will be reviewed by all relevant stakeholders including women, youth and persons with disabilities. This process will be done during the commencement of project activities at the time of developing the project knowledge management and communication strategy. The knowledge management and communication local NGO will take lead in ensuring this activity is conducted timely and effectively.

Stakeholder meetings will be held at district and national levels to validate the draft communications strategy. These stakeholders will be categorized into primary, secondary and tertiary targeted audience of the strategy where primary audience will be the project beneficiaries whilst secondary audience will be individuals and groups that influence patterns of behaviors for the project beneficiaries who in this case are the primary audience. Finally, the tertiary audience or target will be the general public, policy makers, legislatures, media, GEF and other development partners. The DPIST and other relevant departments including youth, gender and social welfare as well as representatives from the district disability forums will be engaged in the validation meetings at district level. The needs, key messages, activities, channels, key performance indicators, lead stakeholders for each audience or targeted group will be validated. The project Knowledge management and communication local NGO will lead in the validation processes of the drafted communication strategy for vetting of the same by the project technical committee which will comprise directors for relevant departments. Feedback from these validation and vetting meetings will be incorporated into the draft communication strategy within the second quarter of the project implementation period.

The zero draft communication strategy will be submitted to the Director of Environmental Affairs for feedback and subsequent approval. The Director will include a signed statement (Preface or Foreword) in the communication strategy to show support and ownership of the strategy

Activity 3. Disseminate the communication strategy to all project stakeholders (government and non-government).

The project through the PMU and the knowledge management and communication local NGO will produce copies of the communication strategy through a competitive procurement process of a printing services service provider but priority should be government printing service providers. In the event that services from these institution may not be readily available, then the project will follow all procurement procedures to engage a private service provider for printing services. Where possible the strategy will be translated into Chichewa, a local language widely spoken in Mchinji. With support from the department of disabilities and other organizations of persons with disabilities, the strategy will be made user friendly for persons with various forms of disabilities. Dissemination meetings at national, district and community level will be conducted where all gender categories and all relevant stakeholders will be made aware of the communication strategy and its contents despite having participated in its development. Local government structures at community level will be oriented on the strategy with representation from women, youth and persons with disabilities. IEC materials will be developed to support the dissemination of the communication strategy such as posters, fliers, leaflets and brochures.

Activity 4. Document best practices and lessons in a collaborative process through structured and unstructured processes

The Knowledge management and communication local NGO will develop a knowledge management plan which will be part of the communication strategy that will ensure mechanisms and structured approaches for capturing lessons learnt, new knowledge and opportunities for enhancing partner approaches, interventions and activities throughout the Programme life cycle. The Local NGO will facilitate capacity building through trainings on the knowledge management system especially how to document good practices, success stories and lessons learnt. These documentations will be in a form of video documentaries, radio programmes and case studies or success stories, knowledge directory and knowledge repositories. The knowledge management NGO in collaboration with other project specialists will facilitate the collection of success stories and documentation of good practices for the production of a project newsletter, radio and Television programmes on regular basis be it monthly, bimonthly, quarterly and annual basis. Regular field visits will be done to engage the project beneficiaries including women, youth and persons with disabilities to track progress on the implementation of the project to ensure best practices and success stories and lessons are identified and documented.

Activity 5. Establish a database using appropriate hardware and software for storage and processing of the experiences and knowledge gained from project implementation

The project Knowledge management and communication local NGO will hold consultative meetings with relevant experts on knowledge management and communication. These experts will identify user friendly hardware and software for storage and processing experiences and knowledge gained from project implementation for learning purposes across the country. For instance, the project may explore the use of digital library and website with appropriate devices for collecting data and feeding the software. These may be designed in such a way that even women, youth and persons with disabilities and other vulnerable groups including men may access and effectively use them for informed decision making. This meeting will be done during the commencement of project activities.

The district M&E and the knowledge management and communication local NGO will be the administrators of the database which will be linked to a server so that stakeholders can input or store best practices and lessons into the database upon online approvals by the administrators. The consultants and other key relevant stakeholders will be oriented on the process and procedure on access and utilization of the database. Restrictions will be put to ensure no one abuses the system.

Activity 6. Disseminate or share the selected best practices and lessons to relevant stakeholders in various platforms

Some documentations of good practices, successful stories and lessons will be disseminated in a form of video documentaries and television programmes which will be broadcasted through the national and private television stations. The media from renowned TV stations will be engaged in televising special programmes showcasing success stories, best practices and lessons learnt. The same will also be broadcasted through radio programmes on the national and community radio stations. The knowledge management local NGO in collaboration with other project specialists will facilitate the collection of success stories and documentation of good practices which will be included in a project newsletter produced on a quarterly basis. Radio and television interviews will be conducted during open days or field days with relevant stakeholders to showcase products or outputs from the implementation of the project. A website for the project will be designed besides using the existing environmental affairs department official websites for sharing best practices and success stories. Measures will be put in place to ensure that these platforms are accessible by not only men but also women, youth, persons with disabilities and other vulnerable groups. Exchange visits or learning routes will be promoted to ensure that there is cross learning and participation of women, youth and persons with disabilities will be enhanced. Direct engagement meetings with stakeholders including project beneficiaries will be conducted whilst traditional media channels such as songs and theatre for development will also be used to disseminate lessons, best practices and success stories especially on gender mainstreaming and social inclusion including those that involve women, youth and persons with disabilities which will be prioritized to enhance mindset change in the project area, nearby communities and the country at large. Publicity of knowledge management products will also be enhanced through use of IEC materials such as leaflets, brochures, factsheets and posters whilst branding and visibility for the project will be inform of GEF and government logos on all printed materials, sign posts, banners, website and press releases.

Activity 7. Conduct hands on training for key stakeholder staff in the use of the hardware and software for storage and processing of the experiences and knowledge gained from project implementation

A digital library and a project website will be established by an IT expert where various knowledge products will be stored and accessed by relevant key stakeholders. A training of key national level and local stakeholder staff will be done on how to access and use the digital library as well as the website to either input or use even processing information on best practices, success stories, case studies, lessons, pictures and even reports. The knowledge management local NGO will take lead in ensuring that this training is done before the commencement of the project activities. In addition, existing government software like the marketing mobile application will also be exposed to the stakeholders for them to be able to access and use marketing information on agriculture.

Component 4: An effective project monitoring and evaluation system in place

Outcome 4: An effective project monitoring and evaluation system in place

Monitoring and evaluation will be an important aspect of this project to monitor project progress and achievement of objectives. Pathways to improve performance will be designed accordingly. The and inform processes to improve or maintain existing performance

Output 4.1 Project gender-responsive Monitoring and Evaluation system developed to track project progress

The process which will be participatory will produce the M&E framework, gender responsive indicators, logical framework, data collection and analysis tools, the information management system, studies that include gender analysis and annual work plans and budgets. The process will also involve regular review meetings by different stakeholders at different levels to ensure that project goal, objectives and activities are continuously tracked to assess progress.

Activity 1. Develop an interactive gender responsive Monitoring and Evaluation system

Monitoring and evaluation will be undertaken at different levels to support effective implementation, maintain the Programme?s focus and direction, and provide information for addressing constraints and ensuring delivery of outputs. GEF will undertake monitoring, evaluation and supervision/implementation support at least twice per year to assess the status of implementation with respect to Project objectives and outputs. GEF will also provide technical assistance to support implementation. The strategy will be to establish an iterative process for identifying issues and problems to ensure that the Programme focus is maintained and expected outputs are achieved. The Project will engage a project manager doubling as an M and E specialist on a full-time basis who will have direct responsibility for monitoring and evaluating the administrative, financial, technical, socioeconomic and environmental elements of Project implementation. The project M &E System will be integrated into the Environmental Affairs Department and the local government M&E systems. The M&E system will be designed to meet the information needs of Project management, Government, GEF and other stakeholders.

The Monitoring and Evaluation consultant will lead the gender responsive M&E system. The project will develop a logical framework based on a theory of change agreed upon by all stakeholders. The logical framework will have gender sensitive indicators that will be tracked to ensure achievements of project goal, objectives, outputs, outcomes and activities. Monitoring will be built around the Logical Framework at activity level (progress with implementation of planned activities and expenditure compared to budgets). The project will identify stakeholder groups to be involved in the planning of the M&E process including what will be monitored, how and by whom. The process will involve negotiation, contestation and collaborative decision-making among various stakeholders. The M &E system for the project will ensure that there is Inclusion of gender sensitive targets and indicators for monitoring and reporting on the project. Simple and user-friendly data collection, data entry, data processing and analysis tools and reporting guidelines well disaggregated by gender, age and disability will be developed in consultation with relevant stakeholders to support compilation of monthly, quarterly, annual and activity

reports. Disaggregated data will reveal inequalities within vulnerable groups which would result into interventions that address the needs of the different social groups in a community.

Standard forms and formats will be made available to ensure consistency in the way data is recorded. These tools are needed at each of the four levels of the logical framework (activities and resources; outputs; outcomes and impact) and will include:

- Standard formats for submission of financial returns on at least a monthly basis;
- A spread-sheet, database or accounting software to enter data and produce financial summary information (tables, graphs);
- Standard forms, based on the AWPB, to record progress and expenditure for each planned activity on a quarterly basis, and standard computer-based formats or templates to enter such data in a consistent manner, to facilitate consolidation;
- Standard forms to record results, in terms of activities completed and specific outputs produced, which will be the basis for physical progress summary information, and standard computer-based formats or templates to enter that data consistently; and
- Standard forms and computer-based formats or templates to enter data on project resources, in particular registers of assets and contracts.

The Project M&E consultant will establish a management information system (MIS), using dedicated software to collect data from various levels. The MIS database will be aligned to the project Logical Framework gender sensitive Indicators agreed upon by all stakeholders in line with the National M&E master plan indicators. Web-portals for easy viewing would be considered, if deemed relevant by service providers and beneficiaries.

Gender analysis will be incorporated at baseline, mid-term and end term project studies as an ideal approach to analyze project data with a gender lens. Data collection will include the use of both quantitative and qualitative gender analysis methods and tools that are disaggregated based on gender. Quantitative methods can include: community surveys; interviews; and observations. Qualitative methods can include various participatory learning methods using visual, interviewing and group tools and exercises. Through the collection of the information on the set indicators, communities will measure their progress in project implementation including short, medium and long term impacts. Case studies on the impact of the project on women, youth and persons with disabilities will be done for knowledge sharing and lessons learning.

M&E will also focus at documenting progress in improving ecosystem services, resilience and linkages to food security using the following assessment tools; Land Degradation Surveillance Framework (LDSF), Ex-Ante Carbon Balance Tool and Diversity Assessment Tool (DATAR). Data analysis which is often thought of as a rather mechanical and expert-driven task, this Gender responsive M&E will actively involve various categories of program stakeholders in the critical analysis of successes and constraints and the formulation of conclusions and lessons learned.

Regular planning and review meetings especially monthly and quarterly at both community and district will be done with participation of women, youth, persons with disabilities and other vulnerable groups including men enhanced. At national level, quarterly and annual review meetings will be held. The M&E consultant will also facilitate quarterly project technical committee and project steering committee meetings to ensure progress of the project is adequately tracked. The project will conduct regular supervisory visits at all levels to provide technical backstopping to project implementers besides ensuring that the project does not perpetuate gender inequalities but rather contribute towards transformative gender and social inclusion approaches.

Programme planning will be an on-going and participatory process with gender and socially inclusive Annual Work Plans and Budgets (AWPBs) forming the backbone of the planning. The AWPBs, together with the Logical Framework?s quantified results-based indicators, will be the basis for monitoring the project. Training will be given to the relevant stakeholders in the preparation of AWPBs. The Project Coordinator will oversee the AWPB process and ensure that all stakeholders are fully involved. The project M&E consultant will be responsible for coordinating the preparation of AWPB and its consolidation, finalisation and submission to GEF. The project Financial Management Assistant will provide costs, incorporation of the financing plan and disbursement arrangement. The PMU will use the lists of procurement items from the different implementing agencies to prepare the procurement plan. AWPB will include, among other things, a detailed description of planned Programme activities by component during the coming Programme Year, a procurement plan and the sources and uses of funds, based on the respective work plans and budgets prepared by each of the relevant stakeholders.

After the EAD Director?s approval of the AWPB, the draft AWPB will be submitted to GEF for its comments and provision of No Objection, not later than sixty days before the beginning of the relevant Programme Year. The project?s annual planning and implementation cycle will be aligned with GoM?s main planning cycle.

Activity 2. Develop a gender responsive dissemination plan to support operationalization and scaling up of the M&E system

The Knowledge management and communication local NGO in collaboration with the M&E consultant as well as other key stakeholders will draft a knowledge management and communication plan using a planning matrix detailing logical sequence of knowledge management products, activities to be implemented under that product, performance indicator and targets,, objectives of these activities, media through which that product will be disseminated, timelines or deadlines, individuals or stakeholders who

will take lead and feedback mechanisms. The plan will be reviewed by all relevant stakeholders to assess if it addresses the interests, rights and needs of all stakeholders especially women, youth, persons with disabilities and other vulnerable groups including men. The dissemination plan will be designed to be user friendly for all these gender categories after incorporating their feedback on the draft and the dissemination approaches will be tailor made for the primary stakeholders who include women, youth and persons with disabilities taking into account the existing inequalities so that all gender categories have access to project information. An M&E framework for the communication strategy will also be drafted just like the knowledge management and communication plan also showing logical sequence of objectives, outcomes, outputs, baseline data, output targets, frequency of evaluation, tools for measuring performance and lead person or stakeholder. Similarly, this framework will be reviewed by all relevant stakeholders including women, youth and persons with disabilities. The final product together with the knowledge management and communication plan will be incorporated into and form an important element of the Knowledge management and communication strategy. These processes will be done before the commencement of project activities during development of the project knowledge management and communication strategy.

Activity 3. Develop a gender and targeting Strategy

At the onset of the project, a designated gender focal point shall lead in the participatory development of the gender and targeting strategy for the project in collaboration with the district gender officer, district youth officer and the district community development officer who shall form a gender and social inclusion team at district level. This shall be informed by the project gender mainstreaming engagement and action plans. The document shall guide social inclusion in the project and ensure that women, youth, persons with disabilities and other vulnerable gender categories including men participate and benefit from the project. The strategy shall also be informed by the gender analysis that shall be done at baseline study. Subsequent period reviews of the strategy shall be done to track progress on gender and social inclusion in the project. The draft strategy after validation by relevant stakeholders shall be vetted and signed by the director of EAD.

Activity 4. Conduct annual and bi-annual project (PMU, PSC and Technical Committee) meetings

A PMU will be instituted at under the EAD to manage the implementation of the project. The Director of EAD will be responsible for overseeing PMU operations. The PMU led by a project coordinator will be holding besides quarterly management meetings, quarterly and annual meetings in collaboration with all key departments. These meetings will be organised to review annual work plans and budgets biannually and to develop them before the onset of the new financial year. These meetings will be done providing enough time for approvals to avoid project implementation delays.

A Project Steering Committee (PSC) comprising senior representatives of implementing government Ministries will be providing policy and strategic oversight of the project. The PSC will meet biannually but may meet as often as required to provide guidance to the portfolio implementers where need be. Amongst the mandate of this committee will be providing strategic direction through policy guidance to implementers in line with government agenda. In addition, The PSC will be approving the AWPBs before they are sent to GEF for final approvals as well as ensure effective inter-Ministerial coordination for proper implementation of the different Programmes/Projects in the portfolio. Furthermore, the committee will be meeting to review lessons learned from implementing the Project activities and use such lessons to improve the overall portfolio performance.

A Project Technical Committee (PTC) will be established composed of senior representatives of key ministries and private sector partners involved with implementing programmes funded by GEF and will perform delegated duties from the PSC. The PTC will meet on a quarterly basis but may meet whenever urgent issues requiring the attention of the committee. The committee will meet to:

? Monitor and review progress in Project activity implementation, including the receipt, review and approval of progress reports;
? Review, comment and recommend to PSC acceptance of Annual Work-plans and Budgets (AWPB), progress and financial reports, and other formal documents;

Activity 5. Conduct project implementation and performance reviews

Regular planning and review meetings especially monthly and quarterly at both community and district levels will be done with participation of women, youth, persons with disabilities and other vulnerable groups including men enhanced. At national level, quarterly and annual review meetings will be held. The M&E consultant will also facilitate quarterly project technical committee and project steering committee meetings to ensure progress of the project is adequately tracked. The project focus on gender and social inclusion will be to ensure that the project does not perpetuate gender inequalities but rather contribute towards transformative gender and social inclusion approaches.

Output 4.2: The project exit strategy developed and implemented

Programme exits strategy refers to a plan explaining how the program intends to withdraw its resources while ensuring that achievement of the programme goals is not jeopardized. The goal is to ensure sustainability of the impacts after the programme ends and consolidation of the gains registered while safeguarding the interests, needs and priorities of all gender categories including women, youth, the elderly and persons with disability. With regard to this project all stakeholders will ensure that practical and sustainable measures are put in place clearly on how project activities, outputs, and outcomes will be phased down (gradual reduction of program activities, utilizing local communities/beneficiaries to sustain program benefits while GEF in collaboration with EAD deploys fewer resources), and when appropriate, handed over (phase over) program activities to local institutions or communities under the

guidance of the Environmental Affairs Department and the local government who will maintain/continue the project activities and outputs once funding has stopped for sustainability.

The focus will be on community capacity building on implementation of the activities so that the services provided can continue through local structures. The emphasis will be on ensuring that the communities including women, youth and persons with disabilities have the capacity to be resilient to shocks and changes in the political and social environment. In addition, ownership and value the communities place on the project activities by the targeted beneficiaries and all relevant stakeholders will also be a key focus. All this will form components of the project exit strategy which will be developed and implemented in a participatory manner with all the stakeholders involved. The process of development and implementation of this strategy will recognize women, youth and persons with disabilities and other vulnerable groups including men as key stakeholders whose needs, rights and interests are addressed in a sustainable manner hence their participation at all levels of strategy development and implementation will be emphasized. In this regard an exit strategy will be developed mid-way implementation period in order to ascertain the capacities and commitment of local institutions to continue with the implementation of the activities.

Activity 1: Conduct consultations with staff, local communities, beneficiaries and other relevant stakeholders on which outcomes are to be sustained after project closure.

At mid-term review of the programme, consultative meetings at national, district and community levels will be done to assess the capacities of the local stakeholders and institutions to continue with the implementation of the activities. At this point, emphasis will also go to identifying the project gains or impacts for all gender groups so that appropriate interventions can be drawn to ensure continuity after cessation of funding in support of project activities in the area. Key outcomes and outputs for a set of implemented activities will be mapped which will form basis for an exit strategy. The following will be assessed and establish the extent to which the structures and stakeholders are ready to carry on with the implementation of the activities:

? Extent to which community led programmes or interventions are implemented such as construction of conservation structures, nursery establishment, and community based M&E etc.

? Community groups mobilized and prepared to continue addressing the needs of the women, youth and other vulnerable gender categories with regards to forest management and increased biodiversity

? Forest and biodiversity conservation knowledge and skill at a sufficient level (in a large enough number of community members) to be shared with others over time.

? Community groups and members linked to Community Based Organizations, Civil society organization, private development practitioners and government agencies for continued guidance

? Sufficient number of programme beneficiaries deriving livelihoods from sustainable strategies such as intensification in farming, off-farm income generating activities etc.

? Sufficient number of programme graduates mandated to share their experience and knowledge with fellow community members.

? Number of self-sufficient households; number of dependent and partially dependent households; ratio of dependent households to self-sufficient households

? Maintenance and use of community assets, ensuring ongoing contribution of community assets to food security and sustainable management of forests and forest resources

Activity 2: Using a participatory approach, develop a project exit strategy

Key project implementers will initiate the process of participatory planning for an exit strategy where all relevant stakeholders including women, youth, persons with disabilities and other vulnerable gender categories will be adequately consulted. The process will ensure that the rights, needs and priorities of the different gender groups will be adequately safeguarded to ensure commitment to implementation and ownership of the proposed exit strategies and process. A gender responsive planning matrix will be used:

QUESTIONS: **What is the programme objective?** **What parts of the program and which of its outcomes does the community want to sustain?**			
COMPONENT	**KEY QUESTIONS**	**GUIDING PRINCIPLES**	**CHALLENGES**
1. Plan for Exit from the earliest Stages of Program Design	How will we ?phase-down? our program? Will we ?phase out? activities or hand them off to a local actor? What is the appropriate time line? How will we know we are on track for phase out? What indicators or benchmarks will we use? How will we monitor them? What are the specific action steps to reach the benchmarks?	Flexibility; consider all vulnerable gender groups and the entire continuum of beneficiaries Ongoing program review and revision Transparency: esp ecially regarding program limitations and funding cycle Participation: include all relevant stakeholder including EAD and Local council official in Mchinji	Balancing firm commitments with flexibility as conditions change; sometimes planning is necessary although future funding is uncertain Allowing adequate time to develop capacity, while working within the program funding cycle Responding to the dynamic needs of vulnerable gender groups, individuals and communities

2. Develop and harnessing Partnerships and Local Linkages	With what types of organizations should we partner? What will our partners bring to the partnership? What can we offer? How will the partnership prepare for exit? How can the partnership help facilitate a successful exit?	Diversity: other program inputs may be needed Complementarity: consider all possible partners, build in coordination and referral as it is critical when serving vulnerable gender groups Clear and common goals	Aligning the needs and objectives of diverse stakeholders including women and other vulnerable group Supporting local partners without building dependency Increased numbers of ?role players? in areas of gender and social inclusion; more time needed to identify, select and build partnerships
3. Build local organizational and human capacity	What capacities are needed? What capacities already exist? What indicators will we use to monitor progress in building these capacities?	Build on existing capacity whenever possible Sponsoring organizations and partners model appropriate organizational & individual behaviors Create environments that support new behaviors and skills Monitor progress	Designing a monitoring system to track capacity building Providing appropriate, sustainable incentives Retaining experienced staff in program areas.
4. Mobilize local and external resources as an Exit Strategy	What inputs will we need to maintain services? Who can provide these inputs? To what extent are they available locally? Externally? Which benefits of the program can be sustained without continued inputs? To what extent can the benefits be sustained without ongoing inputs?	Continue to progress toward sustainability, e.g. refresher courses for staff and community members of all gender groups Generate / procure? resources locally where possible Increasingly, bring external resources under local control Advocate for long term needs of vulnerable communities and individuals	Difficulty in finding adequate or available local resources Sources of other funding may not buy-in to all of the original program?s objectives Resisting the tendency to cover a lack of sustainability by simply finding a new donor to fund inputs Sustaining program impacts among women, youth and other vulnerable groups

5. Stagger phase out of various activities	What are the key elements of the program? Which elements are dependent on others? What is the graduation and exit plan and timeline for the program components? How will it be implemented? How will it be monitored?	Flexibility; the logical sequence for staggering phase out of various activities may change once activities have been implemented	Sufficient time in program cycle to start seeing the impact of activities other than direct food distribution in order to effectively transition to them when food distribution is ended
6. Allow roles and relationships to evolve and continue after exit	What types of ongoing support would be most useful (e.g. advice, mentoring, TA) How will such ongoing support be funded when the project finishes?	Prevent slippage of programs results by reentering if necessary	Availability of funding for ongoing support Availability of program staff who can focus sufficient time and energy on ongoing support in an area where a full program doesn?t exist

The project technical and Monitoring & Evaluation consultant will lead the participatory process of developing the project exit strategy where all relevant stakeholders will be consulted. This will involve defining the exit strategy in terms of objectives, key components, criteria, stakeholders and key activities. A bulk of content in the strategy will come from the answers for questions in the Planning matrix above. The following questions will assist stakeholders to frame the strategy, identify activities, assign responsibilities, draw up a timeline, select benchmarks and develop a monitoring plan:

With whom: Internally, within the NGO or consortium, the stakeholder group will need to reconvene.

The task: Given the timeframe / funding cycle of the project, answer the following questions in order to develop the Exit Strategy and to plan specific exit activities

a) What should the strategy achieve? (This will help in constructing the objectives?)

b) What Exit Strategy do we propose for this program or specific components of the project?

c) What will be the overall criteria for exiting?

d) What exit activities (as different from program activities) need to be implemented to meet the exit criteria of the Exit Strategy and to achieve the objectives?

a) Identify partners, stakeholders and other vulnerable gender categories and their roles the exit activity and when.

b) What are benchmarks for measuring the implementation and results of *each* exit activity?

c) Decide who should monitor each benchmark and when to monitor them.

d) Developing the budget for the Exit Strategy.

e) Include the costs for each exit activity, and for monitoring.

The following exit strategy activity plan matrix will be used:

EXIT ACTIVITY	**Who will do this?**	**When in the project cycle will this be done?**	**How will it be monitored? WHAT benchmarks will be used to monitor the activity?**	**Who will do the monitoring and when?**	**Budget: what is the cost of this activity?**
1.					
2.					

A flexible timeline will be key to the success of the Exit Strategy and sustainability of the whole plan. Therefore, all relevant stakeholders will be engaged using focus group discussion and other relevant participatory methods to develop a practical timeline for the strategy. It is highly recommended that the timeline of this strategy will plot alongside this project?s implementation timeline. This will help to easily establish the linkage of various steps in the exit plan with those of the program implementation plan. The following key elements will be given attention in coming up with a realistic timeline for the strategy:

? Need to continuously reassess the current situation or position and measure progress towards the benchmarks.

? Linkage of the strategy activities with other partners and stakeholders, such as the government or CSOs

? Inclusion of advocacy (i.e. for further donor support or government participation) as a component in the Exit Strategy

? Which partners have been identified to participate in this process and their flexibility with proposed timeline of interventions in the strategy? How will you maintain contact, and support phased-over activities after exit?

? How will you maintain contact, and support phased-over activities after exit?

? Wherever possible, use of local partners in collecting monitoring information to lessen external support in such endeavor over time.

? Raising awareness on the Exit Strategy plan with project staff, as well as project partners and their staff and all relevant stakeholders including the marginalized groups.

Activity 3: Implement the exit strategy (at the earliest outset of project implementation)

The M&E consultant supported by the Technical experts will take lead in the implementation of the exit strategy where all stakeholders including civil society organizations, community members of all gender groups and government agencies will adequately be engaged in the process. The implementation of the exist strategy will be informed by the processes outlined as follows:

? Planning Matrix - An Exit Strategy Tool

? Defining the Exit Strategy and Planning the Exit Activities

? Developing and Implementing a Flexible Time Line

Output 4.3 : Project management, coordination, monitoring and evaluation is conducted

Activity 1. Recruit Project management unit

The project shall recruit a project management unit consisting of project manager, Project Finance Management and administration Specialist, and the project Monitoring and Evaluation Specialists. The three member project management unit will be headed by the project manager who will be supported by the project coordinator who shall be seconded by the environmental affairs department as a project focal point or desk officer. The director of environmental Affairs will be the overall authority of the project as the Project Director also seconded by the EAD. At district level, the District Forestry Officer shall be the site coordinator supported by the Environmental District officer. A team at district level, shall be set consisting of technical experts on environment, biodiversity, land resources conservation, judiciary, forestry and other relevant departments and it shall be called the district planning and implementation support team (DPIST). This team shall hold planning and implementation support visits to the project area and the Director of planning and development shall head this team whilst the site coordinator shall provide secretarial services.

Activity 2. Conduct a project inception workshop

The Director of EAD in collaboration with Department of Forestry and GEF, will organize an inception workshop at the onset of the project involving all stakeholders of the project with a primary objective of achieving consensus of what the project is hoping to achieve ? a collective understanding. The participants will be oriented on procedures governing the project, activities and clarify roles and responsibilities for all the stakeholders; establish working methods and management for smooth and efficient planning, implementation and monitoring of project activities as well as discuss project time line. The workshop will focus on the following deliverables:

- ? Stakeholders getting to know each other and how they relate to the project
- ? Statement of work, project scope, timeline, and deliverables.
- ? Mechanisms for tracking progress/milestones and communicating them
- ? Tools and methods to be used in the implementation of the project activities
- ? Potential project Risks and mitigation measures

Activity 3. Procure project equipment

The project shall procure computers i.e laptops and mobile phones for the PMU and a desktop to support staff with data and information generation and storage. In addition, the project shall procure and install a server to support internet services and online management project data and information. Other computer accessories such as LCD projectors and a multipurpose printer and photocopying machines shall also be procured. Office furniture such as office desks, file cabinets and chairs shall be procured to support staff work in a conducive environment for the success of the project.

Activity 4. Conduct Audits and Financial Monitoring

The project shall be financed through the EAD and these funds will not be comingled with other funds. A designated and operational account handling GEF funds shall be opened at national level. Under designated account, funds will be deposited in the designated bank account as an initial advance from GEF. Subsequent transfers will be done through submission of replenishments backed by supporting documentation as spelt out in the Letter to the Recipient. Mchinji district council will be required to open a project specific bank account to receive activity tagged cash advances to be retired before subsequent

releases; or in busy seasons at most 3 unretired imprest advances may be held in one by a given advance holder.

The project will use International Public Sector Accounting Standards (IPSAS) cash accounting as a basis of preparing monthly, quarterly and annual financial statements with an off the shelf accounting package to compliment IFMIS on aspects specific to Project financial reporting. IFMIS system may not be able to produce the required Project financial outputs, the IFMIS report will be posted in simple accounting package for the project to be able to produce the required reports. The project financial management specialist will be have total responsibility in collaboration with the EAD financial management specialist of overseeing the financial management aspects of the project. An appropriate chart of accounts will be produced for the Programme which will allow for all Programme activity expenditures to be captured and produce useful information necessary for monitoring purposes.

At District level, no complex accounting is foreseen, apart from justifying activity tagged advances given to them. Thus simple manual vote books (Malawi GP form 114) will suffice. The posting of the project accounting software will be centralised within the PMU.

At the PMU, a simple off-the shelf accounting package will be used to facilitate project specific financial reporting, in accordance with a project specific chart of accounts. The posting of the Project specific accounting package is actually a detailed further analysis of the IFMIS outputs for the project.

The project finance management and administration specialist under the oversight of the EAD finance management specialist, will be responsible for the accounting function of the project, including consolidation of PMU and district accounts, issuance of annual financial statements, periodic financial reporting and overseeing the arrangements for audits, in accordance with GOM?s procedures and GEF?s audit guidelines. Mchinji district council will second specific staff to manage the accounting requirements at their level. These will be required to share information with the Financial Controller as part of a cascaded replenishment system.

The budgeting of the project will essentially plan, control and utilise Project resources for the attainment of the desired objectives in a given time frame aiming at: (i) providing a basis for better planning; (ii) evaluating the performance of the Project; (iii) enabling the Project to tackle corrective actions on overruns and any budget disparities; (iv) providing a basis for comparison of funds flow with estimates; and, (v) providing a basis for utilisation of scarce resources. The project will use the GOM budgeting system which is IFMIS based but will require an off the system modification for the AWPB to align with project components, expenditure categories and activities.

Auditing of the operations of the project will be done in accordance with the Public Audit Act (2003), International Organisation of Supreme Audit Institutions (INTOSAI) and GEF guidelines for Project audits. The National Audit Office (NAO) shall be responsible for the audit of the financial statements relating to the Project. In the event that the NAO chooses to appoint external auditors to audit the financial statements relating to the Programme, such appointment shall be carried out in accordance with the procedures and criteria set forth in the Fund?s ?Guidelines on Project Audits (for Borrowers? Use)? as may be amended from time to time, and shall be subject to the prior approval of GEF. The GOM shall have the financial statements relating to the project audited each fiscal year by such auditors in accordance with International Standards of Auditing and the GEF Guidelines on Project Audit. EAD Audit Unit, under the supervision of the Central Internal Audit Unit, will be responsible for providing the internal audit function to the project. Their audit reports will be made available to Ministry of Environmental Affairs and Ministry of Finance, Planning and Economic Development and, if required, to the Fund. In order to improve accountability at the district assembly levels, the Ministry?s Internal Audit Unit will visit and report on the activities undertaken by Mchinji district council at least twice a year; if needed, the project will allocate resources in every AWPB to facilitate the Unit?s provision of the internal audit function.

Activity 5. Conduct mid-term and terminal review assessments

Gender analysis will be incorporated at mid-term and terminal project evaluation as an ideal approach to analyze project data with a gender lens. Data collection will include the use of both quantitative and qualitative gender analysis methods and tools that are disaggregated based on gender. Quantitative methods will include: community surveys; interviews; and observations. Qualitative methods will include various participatory learning methods using visual, interviewing and group tools and exercises. Through the collection of the information on the set indicators, communities will measure their progress in project implementation including short, medium and long term impacts. Case studies on the impact of the project on women, youth and persons with disabilities will be done for knowledge sharing and lessons learning.

Activity 6. Conduct final project closure workshop

The project will organise a project closure workshop which will comprise representation of all stakeholders where a project completion report will be presented. The report will be compiled through a consultative process with reference to the baseline, mid-term and terminal studies. The report will be based on whether the project activities have led to the desired higher-level results to ascertain the extent to which project goal and objectives have been achieved. Furthermore, the workshop will be held to

assess the extent to which women, youth persons with disabilities and other vulnerable groups have been able to improve their livelihoods from the project interventions.

1.4. Alignment with GEF focal area and/or Impact Program strategies

The proposed project is designed to contribute to the GEF goals of biodiversity focal areas. The proposed project will contribute to the GEF biodiversity focal areas: BD-1-1 Mainstream biodiversity across sectors as well as landscapes through biodiversity mainstreaming in priority sectors) and BD-2-7 (address direct drivers to protect habitats and species and Improve financial sustainability, effective management, and ecosystem coverage of the global protected area estate). The project will also contribute to SDG 15. The project will aim at improving conservation and restoration of Mchinji forest resources thereby sustaining ecosystem services and rural livelihoods through conservation and sustainable use of forests and biodiversity. The project will focus on the Mchinji forest reserve which covers the highest area of the catchment which will contribute to ecosystem restoration and achievement of Aichi Biodiversity targets. Updated biodiversity information for the reserve will be collected with a comprehensive biological inventory to be financed by the project. While routine reserve management activities such as foot patrols, anti-poaching and fire control vigilance will continue to be strengthened, the project will identify and implement priority monitoring, management and capacity building activities, such as intensified law enforcement to allow natural regeneration of biological resources and monitoring of key species. These priority activities will be presented in the 5-year management plan to be developed under the project, the proposed project will also contribute to the GEF biodiversity focal area strategy and the synergetic implementation of multiple objectives and in particular SDG 15.

1.5. Incremental/additional cost reasoning and expected contributions from the baseline

Mchinji forest Ecosystem Restoration is not yet effectively addressed in Malawi in terms of Habitat Specific Restoration Plans, professional capacity and active management to enhance restoration efforts and measure impact on biodiversity, climate change mitigation and land degradation reduction. Although some activities have happened in some areas, not much has happened in Mchinji and there is little reference material to effective enforcement or implementation of management activities. Although the NBSAP and reports to the CBD outline some interventions on ecosystem, restoration, none of them points to Mchinji.

Project interventions will strengthen implementation of existing policies especially through development of forest management plans , development and implementation of habitat and species-specific restoration plans, improved coordination between various sectors especially at the local level. The project will also develop capacities of extension officers and environmental officers to effectively assess, implement and monitor activities, will increase knowledge base on ecosystem restoration and reduce over-dependency on natural resources through livelihood promotion.

Without GEF project support, 1) effective forest management at national, district and community levels will continue to be faced with challenges. Without enhanced enforcement of protection of forest reserves and enhanced forest management the activities happening in the forest reserves that have led to its degradation and loss of biological diversity will continue to affect the ecosystem services that forests provide. 2) the Forest Department and District Forest Offices will continue to struggle in undertaking their tasks to manage the forest reserves effectively and timely. Without enhancing the capacity of Forest Staff and communities their will remain a capacity gap that is needed for enhancing forest protection and management.

With GEF support, their will be enhanced protection of the forest reserves through updating of maps and boundaries including promotion of surveillance and increased patrols. This will result in restoration of

respect for laws and regulations and enhanced enforcement of regulations. This will in turn result in an improved reduction of forest crimes and illegal forest activities. The capacity of forest extension officers and other staff will be enhanced to enable them undertake forest duties effectively. This will result in improved implementation of forest extension services.

The incremental benefits will be: (i) Reduced Pressure on forest reserves resulting in reduced deforestation and degradation; (ii) Restoration of biological diversity in the forest including improved species conservation status; (iii) increased resilience of forest-dependent communities.

The focus on community forest areas will allow the community forests to be improved providing essential services for the communities and good catchment for Bua River. The assessment of the value and status of the species in these forests will enable the understanding of the conservation status and what actions and which species should be prioritized in restoration and conservation efforts. The enhancement of natural regeneration will improve the conservation status of the species and hence improve the ecosystem services that are provided by these ecosystems to the communities. This will also enhance greater understanding and awareness amongst the community on the importance of community forests and species habitats that are existing in the area as well as their contribution to the bigger Bua River Ecosystem.

The critical community forest Areas habitats will be safeguarded and restored, and species therein will thrive, and their populations will increase. A well-managed community forest area will have improved ecosystems that can play a vital role in providing essential ecosystem services to people and the environment. When managed in collaboration with nearby communities, local economies benefit from the community forest areas through directly benefiting communities in firewood and non-timber forest products. The restoration of forest land and the increased area of forest under improved land management practices will lead to an increase in forest carbon stocks and reduction in GHGs emissions and climate change mitigation. A well-managed community forest reserve will mean that communities will now depend on their forests and not conduct illegal activities in protected areas as they will get their basic energy and forest needs from their forests areas. Women and girls will not have to travel long distances to fetch firewood and microclimate will improve resulting in reduced climate related diseases. Finally, the managed community forests will protect watersheds that ensure a clean water supply among many other benefits to environment and human wellbeing.

1.6. Global environmental benefits

The project will deliver global environmental benefits through improved management of the forest reserve leading to species conservation in the Bua river basin. Efforts to scale up biodiversity conservation in Mchinji district will be attained through restoration of degraded communal lands and along riverine areas and also in which capacity building of district governments and local structures for community biodiversity conservation. Reforestation of degraded communal lands and along riverine areas will result in biodiversity enrichment and the species re-colonisation.

The project will deliver global environmental benefits through improved management of the forest reserve leading to species conservation, hence making the project aligned with BD2.7. In addition, global environmental benefits will extend beyond the forest reserves as efforts to scale up biodiversity conservation in the area will be attained through components 2. This project will reduce biodiversity loss and increase biodiversity conservation potential of the forest reserve in Malawi. It is targeting areas of high biodiversity value where deforestation and degradation persists as an ongoing threat but where conventional exclusionary measures are neither socially acceptable nor operationally viable.

Mchinji Forest Reserve is one of the protected areas that form the upper catchment of Bua River which is an important tributary to Lake Malawi, a world heritage site that has the most diverse species of any fresh water lake in the world. Bua River is specifically an important breeding ground for potamodromous fish species like *Opsaridium microlepis* (Tweddle, 1982) which is currently an endangered fish species (Kazembe et al., 2006) and also endemic to Lake Malawi. Additionally, the river harbours a diverse and unique species, habitats and ecosystems (Allan and Flecker, 1993, including thirty-three fish species belonging to 9 families that have been recorded. Mchinji Forest reserve, the catchment of Bua contains a number of important tree species including several tree species like *Prunus africana* and *Pterocarpus angolensis* among others. By addressing the direct drivers to protect habitats and species the project will reduce pressures on Mchinji forest resources and increase resilience in the wider River basin

1.7. Innovativeness, sustainability and potential for scaling up.

Innovativeness: The methodology of using the Management Effectiveness Tracking Tool (METT) to track Protected Area Management Effectiveness (PAME) and to inform management decisions will be applied for the first time in the Bua Basin landscape. The equipment, devices and intervention strategies that are proposed for adoption by the Forestry department at both national and state levels and at the site level are innovations in the national context. Innovation will also be infused in the training and capacity building methods that the project will promote.

Sustainability: The overall sustainability of the project results will be supported by embedding capacity into the institutions and entities that need and can make good use of strengthened abilities and resources. Capacity building will strengthen the on-going ability of law enforcement and protected area agencies with jurisdiction over species and their habitats, and of rural communities dependent on natural resources for their livelihoods, to continue to carry out activities that can benefit wildlife, forestry and ecosystem services. Building good policies, strong legislation and the capacity to implement them will establish the enabling environment for Protected Area Management Effective (PAME). Securing alternative development pathways that rely on a resilient and healthy wildlife stock and forestry resource base that benefits communities will reduce the incentives for rural populations to engage in illegal harvesting of forestry products or destructive ecosystem management practices. The project will seek to create stable

situations on the ground where there is proper enforcement along with local communities engaged in conservation-compatible activities that generate local benefits while generating global environmental benefits.

Potential for scaling up: The proposed project will address capacity building for staff within the department of Forestry on Protected Area Management Effective (PAME), managing information systems, monitoring; training on implementing monitoring, enforcement; and training on PA management for staff at the targeted PA sites, which together will allow for best practices and lessons learned through national and on-site enforcement activities to be easily and be widely up-scaled to overall national forest management operations. The Project will catalyze different innovations that can be deployed at speed and scale across other sites.

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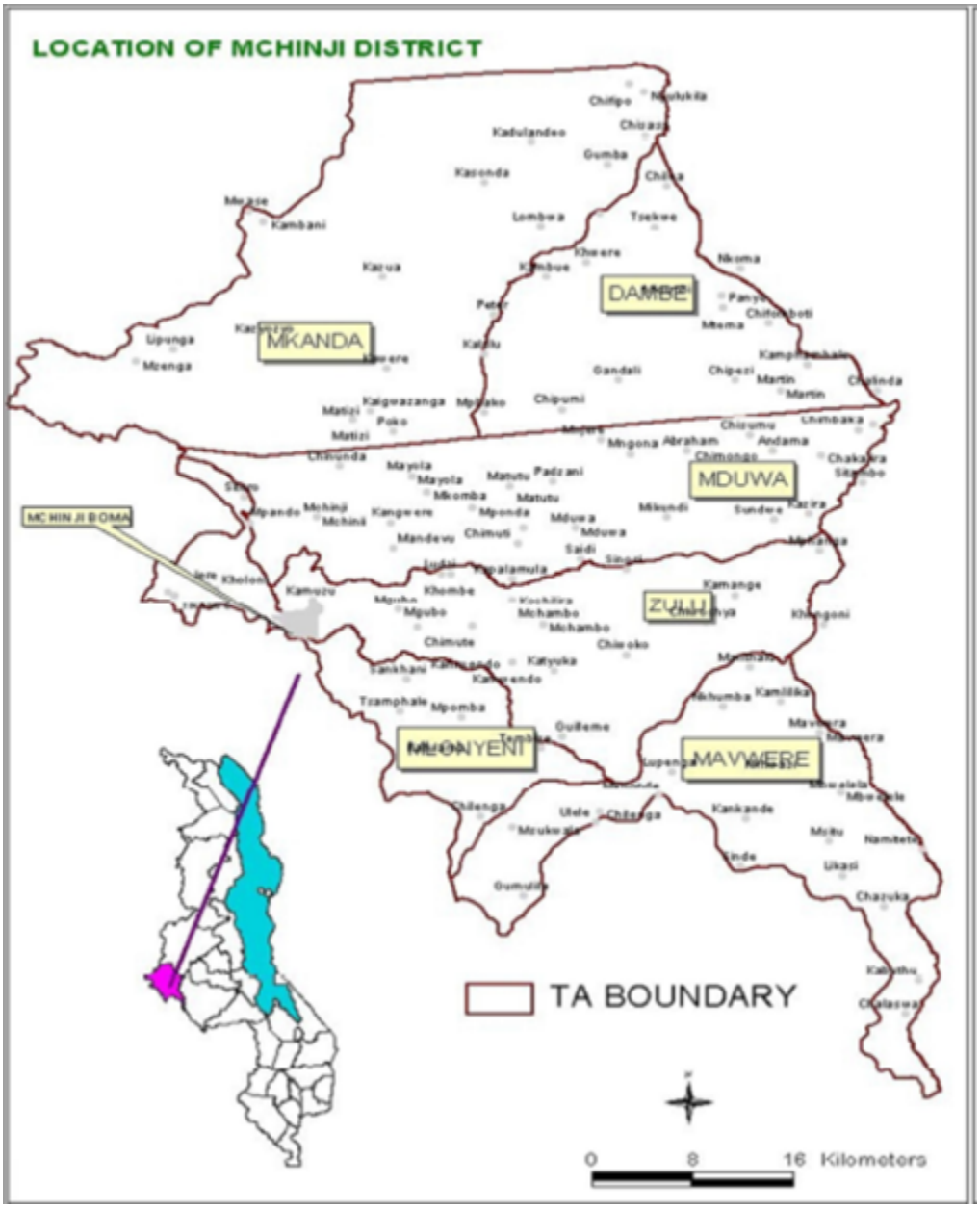
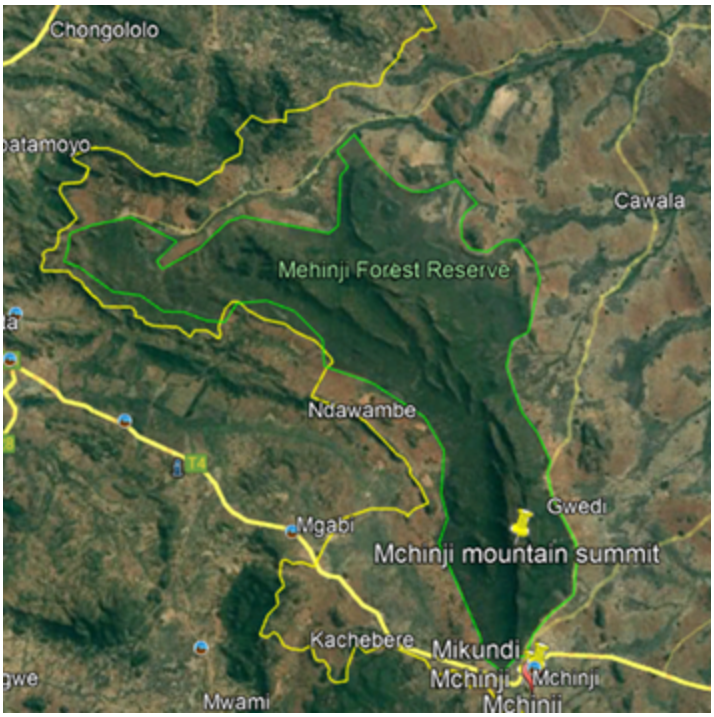
1b. Project Map and Coordinates

Please provide geo-referenced information and map where the project interventions will take place.

The coordinates are Latitude:-13.67557
, Longitude: 32.85732

The superior administrative division is Central Region.





1c. Child Project?

If this is a child project under a program, describe how the components contribute to the overall program impact.

Not Applicable

2. Stakeholders

Select the stakeholders that have participated in consultations during the project identification phase:

Civil Society Organizations Yes

Indigenous Peoples and Local Communities Yes

Private Sector Entities Yes

If none of the above, please explain why:

Stakeholders and Stakeholder Engagement

Stakeholder participation across a range of sectors is critical in ensuring the success of the project. In order to garner support for proposed interventions the project will work with local governments, village chiefs and established NGOs, as well as local communities living around Mchinji Forest reserve, who will be major beneficiaries of the project. National institutions will play a critical role in providing in-kind and financial support for the project, and the support of government ministries and their respective departments and agencies, especially with regard to the implementation of strategies and action plans, is also essential.

A number of stakeholders have been consulted to develop the project, including those involved in the implementation of the Bua Management Plan and those working under the GEF Steering Committee. This is to ensure that there is no duplication in efforts and also make sure that the project tackles the relevant priorities for government as outlines in the management plan. Officials from Mchinji district council have also been consulted and have provided relevant information for the development of the project. The consultations have also extended to project coordinators of other projects like the Sustainable Drylands management project and National climate resilience project and the Invasive alien species management project among others to identify areas of synergies and linkages.

Table 15 below provides a list of relevant stakeholders and their functions.

Table 15. List of stakeholders that were consulted and their roles in forest management

Stakeholder	**Role or Function**
Ministry of Local Government	Lead in development of project through VDCs and ADCs
Environmental Affairs Department	Involved coordination, facilitation and providing advisory role in implementation of natural resources management, biodiversity conservation and climate change management activities
Department of Disaster Management	managing disasters at community level
Malawi Drought Recovery and resilient Project	Promotes use of solar energy in irrigation
Forestry Department	Management of Forest Reserves, enhancing landscape restoration activities, Formation of Village Natural Resource Management Committees (VNRMCs) in all areas. Committee that promote tree planting and management of natural resources
Malawi Police	Law enforcement
Ministry of Agriculture	Soil and land management
Department of Lands	Land administration and governance
District Fisheries Office	Promote sustainable fish farming and in
FAO	Promotion of irrigation and rain-fed farming
FOCCAD-Foundation for Community and Capacity Development	Disaster relief management
TAPP- Trustees of Agriculture Promotion program	Tree planting, provide farmers with livestock and promote farmyard gardens
World Relief	Train farmers in nutrition and provide livestock and training in hygiene and sanitation
Trees of Hope (Clinton Development Initiative)	Promote tree planting and livestock production

AICC- African Institute of Corporate Citizenship	Promote drip irrigation
Total Land Care	Promote water conservation measures including tree and vetiver planting and promotion of energy saving stoves
World Vision	Drill community boreholes, construction of dams and tree planting
Plan Malawi	Promote modern agricultural technologies, farmer field school and promotion of irrigation and rain fed farming
National Small Holder Farmers Association of Malawi (NASFAM)	Support farmers in agricultural commercialization, tree planting and forest management.
CRECOM (Radio Committees)	Formation of radio listening clubs and investigating issues in the community
Nkuyu Youth Club	Nursery management and tree planting
Tobacco companies (JTI-Japanese Tobacco International, Alliance one, Pyxus Limbe Leaf and small extent Premium Tobacco)	Promote tree planting and support forest management
African Park	Tree planting and forest management and focus on protecting wildlife reserves
Care Malawi	Promotion of savings and loan and livelihoods
Farmers? World	Promotion of irrigation farming and distribution of farm input and club level

Please provide the Stakeholder Engagement Plan or equivalent assessment.

see the details in the attached Stakeholder Analysis and Engagement Plan

Stakeholder Engagement plan

ID	Project Phase	Engagement Activity	Objective	Targeted Stakeholders	Timeframe

1	Project Preparation Phase	Consultation meetings at national, district and community level	Collect views on the design of the project, environmental and social risks, restoring ecosystem, livelihood measures, mitigation measures, grievance redress mechanisms, Stakeholder engagement plan etc	**National Level:** Ministry of Lands Housing and Urban Development Ministry of Agriculture Environmental Affairs Department (EAD) Ministry of Gender, Children, Disability and Social Welfare (MoGCDSW) Forestry Department **District Level:** Forest Department Mchinji District Agriculture Office District Agriculture Extension Coordinating Committee (DAECC) **Community Level** Farmer Based Organizations NGOs Government Projects Local leaders ADCs VDCs VNRMCs	January to June, 2023
2	Project Implementation Phase	Project inception meetings at National, district and community levels	Present the approved project design and orient district level stakeholders on their roles and responsibilities in the project implementation	District Executive Committee and its Subcommittees, NGOs working the project impact area, Mchinji Police, Mchinji District Agriculture Office, Forestry Department, Judiciary	TBD

		Community sensitisation and mobilisation meetings	Sensitise and Mobilize local development committees and community members and prepare target communities for project implementation, determination of PAPs, identification of vulnerable groups, and preparation of ESMPs and the GRM	ADCs, VDCs and VNRMCs, Frontline staff from Forestry, Agriculture, Community development, , Community Policing groups	TBD once project approved
		Project implementation monitoring and supervision meetings;	Provide and obtain updated information that can support on project performance	Department of Forestry (DoF), National Herbarium and Botanic Gardens of Malawi, Department of National Parks and Wildlife, Forestry Research Institute of Malawi, Malawi University of Science and Technology, Lilongwe University of Agriculture and Natural Resources, University of Malawi (Chancellor College-Biology Department), Department of Surveys, Department of Land Resources Conservation, ADCs, VDCs and VNRMCs, Community Policing groups	TBD once project approved

		Project review meetings	Obtain feedback periodically on project implementation, monitoring and evaluation through review meetings	Department of Forestry (DoF), National Herbarium and Botanic Gardens of Malawi, Department of National Parks and Wildlife, Forestry Research Institute of Malawi, Malawi University of Science and Technology, Lilongwe University of Agriculture and Natural Resources, University of Malawi (Chancellor College-Biology Department), Department of Surveys, Department of Land Resources ConservationMinistry of Gender, Children, Disability and Social Welfare (MoGCDSW), EAD, Forestry Department	TBD once project approved
3	Project Close Out Phase	Project phase out meetings	Develop and orient stakeholders on the project exit strategy	Project beneficiaries ADCs, VDCs and VNRMCs Ministry of Agriculture EAD Forestry Department	TBD during project implementation

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated, and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

The EAD, UNEP and all proposed project partners have adequate experience of work in Malawi. As such, they have an on-going relationship with the communities in the country. The PMU and project implementing partners will, nevertheless, undertake continuous stakeholder engagements at various levels (see next paragraph below) in order to promptly: (i) identify, capture and adequately address stakeholders? concerns and potential risks; (ii) further and properly consult groups and peoples whose lives might be affected by the project to verify and assess the significance of any impacts and device mitigation measures; and (iii) ensure equitable and gender- balanced and sensitive participation of the affected groups and communities in the development of mitigation measures, decision making processes, and in the monitoring and evaluation of project implementation. The scale and intensity of stakeholder engagement will be commensurate to the concerns expressed or expected from stakeholders and the magnitude of potential risks. Engagement strategies will be tailored to individual stakeholder groups to

reflect their concerns and their rights to land and natural resources will entail awareness- raising and capacity-strengthening activities.

Stakeholder engagement will be at different levels: (i) National; (ii) Regional; (iii) District; (iii) Village; and (iv) Community. All categories of stakeholders (Central and district Government entities, CSO, PSO, traditional institutions, etc.) will be consulted. Targeted tools such as; (i) Gender mapping; (ii) Transect walks / Landscape Analysis; (iii) Timeline and Trends Analysis; (iv) Livelihood Analysis; and (v) Problem and Solution Matrix will be employed. A Gender-Responsive approach focusing on the development of women as leaders and decision makers will be employed. Gender analysis will be carried out to make sure that women benefit from greater livelihoods diversification, including non-forestry activities. At least one gender responsive decision-support tool and participatory gender analysis processes will be applied to identify intervention pathways that unlock the barriers that currently prevent women from participating in decision making and equitable benefit sharing.

The project will put in place mechanisms for internal controls and enforcement of compliance reinforced by participatory monitoring and evaluation (M&E), and feed-back mechanisms from external parties. This will include establishing participatory M&E frameworks and public disclosure requirements to assure public access to relevant information about the project and mechanisms to capture concerns or grievances related to the project?s lack of compliance. The engagement process will ensure their meaningful consultation in order to facilitate their informed participation on matters that affect them directly, proposed mitigation measures, the sharing of development benefits and opportunities, and implementation issues.

The premise of the project is based on cost efficiency. Addressing the drivers and barriers that currently impede sustainable forest management will enhance biodiversity conservation and ecosystem functionality and livelihoods. With the planned restoration activities at community level, the degraded forest will be restored for biodiversity conservation, ecosystem services and carbon stocks for mitigating climate change. In so doing, greenhouse gas emissions will be mitigated /sequestered, the loss of HCVFs will be halted which will result in controlled soil erosion, aquifer re-charge and, sustainable food crop production and improved food security.

The multi-stakeholder participation, including by vulnerable groups (e.g. women, youth, elderly, disabled) will be a cost-effective measure, as it will contribute to (a) equitable access to and control of productive assets and resources; (b) increased participation and leadership in decision-making processes by these groups; and (c) equitable sharing of economic benefits coming from the sustainable forest management. Secondly, the project will establish a Gender Platform to promote and mainstream gender concerns so as to contribute to social, institutional and environmental sustainability.

Cost-effectiveness will also be achieved by the intent of the project to strengthen the institutional and governance systems that will enable the effective implementation of Mchinji forest management plan by: a) upholding the tenure rights and security of land rights holders, b) incentivizing and coordinating sustainable forest management practices and activities, and c) encouraging multi-stakeholder participation and interactions to create synergies and leverages. Existing structures networks will be strengthened in governance, law enforcement and compliance monitoring to improve the regulatory environment.

Finally, the project will provide many experiences and lessons to share with other similar areas of Malawi, regionally and globally, enabling scaling up and uptake of sustainable forest management practices and policy for greater global environmental and livelihood benefits. Best practices and lessons learned will be documented and shared for wider adoption, replication, leveraging and dissemination through country (national), regional and global platforms and knowledge networks. The experiences and lessons will be replicated in two ways, first by applying them in processes, consultations in similar activities elsewhere, and through capacity building, methodological guides and manuals that will be developed by the project. This will greatly enhance adoption of the practices and lessons generated during project implementation.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

Member of project steering committee or equivalent decision-making body; Yes

Executor or co-executor; Yes

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

Understanding gender relations and the power dynamics behind them is a prerequisite for understanding individuals? access to and distribution of resources, the ability to make decisions and the way women and men, boys and girls are affected by political processes, social development and environmental degradation. A baseline study conducted in 2021 revealed that all gender groups, men, women, girls? and boys? benefit and contribute to ecosystem degradation of the Bua River catchment ecosystem. Both men and Women are affected because of their various responsibilities in the household. Other studies however reported that women and girls are more affected with environmental degradation as they walk long distances fetching water and firewood resulting into limited time for personal development. The involvement of women in the project is key because women generally have a great bearing on the success of restoration projects. The project will apply guidelines to target fair gender distribution on its capacity building activities ? e.g. selection of trainees, as well as decision making fora, which in most cases will be near 50:50 throughout all strata of the project stakeholder groups. At pilot sites, where communities will be directly involved in management activities, at least 50% of field workers will be women. Additional efforts will also be made to enhance capacity and awareness amongst women ? gender sensitive awareness material will be developed and separate workshops will be held for women and men based on their availability, but more importantly to allow women in male dominated communities to comment and participate more freely in issues pertaining to Ecosystem restoration and building resilience.

High population growth, gender inequality, HIV/AIDS, and the Covid-19 pandemic have all had a significant impact on the lives of the villages around the Bua river. As a result, their livelihoods and community economic recovery and empowerment will be investigated using non-natural resource-based methods, particularly for communities who rely on natural resources for their survival. This project will diversify livelihood and economic opportunities for women, men, and youth by promoting micro-entrepreneurship for on-farm and off-farm opportunities, village savings and loans for financial literacy and easy access to credit, and producer group strengthening for increased productivity and access to input and output markets. The output will also contribute to achievement of target 15 of the National Biodiversity Strategy and Action Plan (2015-2025) that states that ?? by 2025 the supply of important ecosystem services is safeguarded and restored, taking into account gender roles and responsibilities of the youth, the poor and the vulnerable. The target is aimed at enhancing participation of vulnerable groups including women and the youth in management of biodiversity and ecosystems. There is currently a Youth Forest Restoration project that the project will take advantage of to enhance the role and participation of the youth in the project.

The majority of women in Malawi are informally employed in the natural resource sector and consequently, their livelihood and food security are more likely to be adversely affected by land degradation. 90% of women above the age of 15 are reliant on natural resources for domestic activities (e.g. collecting firewood, water and NTFP for home consumption) in comparison to 24% of men. It is estimated that gender inequality (e.g. lower access to finance, equipment, inputs and extension services) in the agriculture sector alone is costing the country USD 100 million and 7.3% in crop production annually, due to 25% lower production than male-headed households. In general, Malawi?s female farmers are less productive (by 28 percent on average) compared to their male counterparts, mainly because of unequal access to key agricultural inputs such as land, labour, knowledge, fertilizer, improved seeds, and mechanization. However, according to a report on ?The Cost of the Gender Gap in Agriculture?. Malawi stands to gain if women are more involved in the entire agricultural value chain. The report estimates that closing this gap has the potential to increase 7.3% in crop production, increase USD 100 million in GDP, and alleviate poverty for as many as 238,000 people. There are substantial differences between how men and women use forest resources: men are typically engaged in commercial use of natural forests, cutting wood for poles or other building materials, manufacturing charcoal, or making furniture; women, in contrast, use trees and forest resources for household purposes, including cooking, food, and traditional medicines. They also put much time and labor into gathering wood fuel for cooking. Women?s activities often involve illegal extraction of resources from forest reserves, which can expose them to greater vulnerability.

1.1. **Gender Action Plan**

The Gender action plan aims to support the implementation of a project that promotes and supports gender equality, where women, youth and other marginalized groups are empowered to actively participate and enjoy equal rights, freedoms and access to resources, opportunities and outcomes. The gender action plan has been informed by the gender analysis, and the outcomes of the social and environmental risk assessment.

The goal of this gender action plan is to guide stakeholders in the restoration of the ecosystem of Mchinji forest to ensure no one is excluded in the project due to patriarchal institutions existing in the project area. The objective is to promote gender equality in fulfilling the obligations of the Conventions women and social inclusion to which Malawi is a signatory and to enhance sustainable restoration of the ecosystem in Mchinji Forests. The gender action plan addresses the following fundamental principles: a) Facilitate gender-inclusive decision-making, b) Promote gender equity in the implementation of the project, and c) Empower women, youth and other marginalised and vulnerable groups to participate actively and benefit equitably from the project. The gender action plan is developed based on the project outcomes and outputs. The measures, actions and indicators presented in the action plan will be validated during the inception phase of the project and adapted during the course of the project. *Table below shows the gender action plan:*

Project Level	**Activities/Actions**	**Indicator**	**Target**	**Resources Required**	**Timeframe**
Component 1: Forest management framework and capacity in enforcement of forest protection					
Outcome 1: Effective management of Mchinji forest reserve strengthened through development management frameworks and improving capacity in enforcement for protection of forest reserve					
Output 1.1 Forest management plan for Mchinji forest reserve is developed and implemented	Women, youth and persons with disabilities participate in development and implementation of the Forest Management Plan and assessment of biodiversity and ecosystem services and values in the forest	-Evidence of attendance to meetings by women, youth and persons with disabilities -Existence of gender disaggregated data collection tolls/templates -	A minimum of 50% participation by women with at least 30% are below 35 years of age, and 5% persons with disabilities. Gender responsive monthly, quarterly and annual reporting templates developed well disaggregated by sex, age, disability and household head etc is developed A gender and targeting strategy is developed	IEC materials	Quarter 4, 2024-2027

Set quotas for Equitable gender representation among structures leading development and implementation of the forest management plan	Existence of quotas in decision making positions for women, youth and persons with disabilities	At least 30% youth, 5% persons with disability and 40% women	IEC materials	Quarter 1, 2024
Activities respond to the different needs of men, women, youth and persons with disabilities	Existence of a gender and targeting strategy	1 gender and targeting strategy developed	Technical Personnel, allowances, stationery and conference facility	Quarter 2, 2024
Training materials or modules include gender equity and social inclusion.	Evidence of inclusion of gender mainstreaming and social inclusion materials in training and operations, including data disaggregated by gender.	1 training plan	Technical Personnel and stationery	2024
Extension staff and other service providers incorporate gender considerations during implementation of the Forest management plan	Gender Responsive Forest management plan developed	1 gender responsive forest management plan	Technical Personnel, allowances, stationery and conference facility	Quarter 1, 2024
The recruitment of project participants and beneficiaries is based on gender equity and the empowerment of women, youth and other vulnerable and marginalised groups.	Existence of a gender and targeting strategy	1 gender and targeting strategy developed	Technical Personnel, allowances, stationery and conference facility	Quarter 2, 2024

	Gender focal points work with training developers and organizers to ensure that the local community trainings are gender sensitive, and women are accommodated in training and capacity development activities.	Gender responsive training plan developed	1 training plan developed	Technical Personnel	Quarter 3, 2024
	Gender Action Learning System is implemented in the areas to promote joint decision making, gender division of labour, Access to and control over resources and benefits	Number of gender tools adapted to promote joint decision making, gender division of labour, Access to and control over resources and benefits	5 tools identified and adapted	Technical Personnel	Quarter 1, 2024
	Implement Gender Dialogue session and Theatre for Development to deal with Gender Based Violence, exclusion of women in decision making processes and disability inclusion in the project interventions.	Number of gender dialogue sessions conducted	24 Gender dialogue sessions conducted	Technical Personnel and refreshments	2024-2027
		Number of youth trained on theatre for development	100 youth trained on theatre for development	Technical Personnel, allowances, stationery and conference facility	Quarter 4, 2024
		Number of Theatre for development performances	50 Theatre for development performances conducted	Technical Personnel	2025-2027

Output 1.2: Law enforcement and collaboration among law enforcement agencies strengthened for Machinji Forest Reserve.	Conduct awareness meetings on the preservation of the rights and dignity of women, youth and persons with disabilities during surveillance and forest patrols	Evidence of no cases of abuse on women, youth and persons with disabilities during surveillance and forest patrols	0 cases of abuse on women, youth and persons with disabilities during surveillance and forest patrols	Technical Personnel and transport	2025-2027
	Women representatives are adequately consulted in the process of updating maps	Percentage of women representation during consultation meetings on updating maps	50% women representation during updating of maps	Technical Personnel and transport	
	Capacity of forestry extension staff on gender and social inclusion is built through trainings, mentorship programmes and learning routes or exchange visits	Evidence of promotion of gender equity in awareness raising materials	3000 IEC materials developed and distributed on gender and social inclusion	Stationery and printing services	Quarter 3, 2024
		Evidence of inclusion of gender mainstreaming and social inclusion materials in training and operations, including data disaggregated by gender.	5 modules on gender and social inclusion incorporated in forest extension training materials	Technical personnel and stationery	Quarter 3, 2024
		Existence of a training plan for staff on gender and social inclusion	1 gender and social inclusion training plan developed for staff	Technical personnel	Quarter 3, 2024

	Staff are supported with IEC materials including reference materials on gender mainstreaming and social inclusion	IEC materials are developed and distributed to staff for use	3000 IEC materials developed and distributed on gender and social inclusion	Stationery and printing services	Quarter 3, 2024
	Staff are oriented on the gender and targeting strategy for the project	Project team encourages the selection of women to participate in the project decision making processes, working and stakeholder groups, targeting	A minimum of 50% participation by women with at least 30% are below 35 years of age, and 5% persons with disabilities.	Technical personnel	2025-2027
	Gender responsive M&E is in place and regularly used	Existence of a gender responsive M&E system	A gender responsive M&E system is developed and implemented	Technical personnel, Allowances, stationery and conference facilities	Quarter 4, 2023
Component 2: Supporting local government institutions and communities to enhance conservation and sustainable use of forest resources to maintain and restore biodiversity and ecosystem services in community forests and communal lands.					
Outcome 2: **Improved conservation and sustainable use of forest resources so as to maintain and restore biodiversity and enhance ecosystem services through supporting local government institutions and communities**					
Output 2.1: Ecosystem based IGAs and livelihoods of forest dependent communities promoted	Women, youth and persons with disabilities participate in IGAs and livelihoods of forest dependent communities	Evidence of attendance to meetings by women, youth and persons with disabilities	A minimum of 50% participation by women with at least 30% are below 35 years of age, and 5% persons with disabilities.	Technical personnel	Quarter 2, 2024
		Existence of gender disaggregated data collection tolls/templates	Gender responsive monthly, quarterly and annual reporting templates developed well disaggregated by sex, age, disability and household head etc is developed	Technical personnel	2025-2027

		Existence of quotas in decision making positions for women, youth and persons with disabilities	A gender and targeting strategy is developed	Technical personnel	Quarter 2, 2024
		Evidence of inclusion of gender mainstreaming and social inclusion materials in training and operations, including data disaggregated by gender.	5 modules on gender and social inclusion incorporated in forest extension training materials	Technical personnel and stationery	Quarter 3, 2024
		Existence of a training plan for staff on gender and social inclusion	1 gender and social inclusion training plan developed for staff	Technical personnel	Quarter 3, 2024
Output 2.1 Gender responsive assessment of biodiversity and values in community forests and communal lands is conducted	Gender analysis is done during assessments of biodiversity and values in community forests and communal lands	? Evidence of a gender analysis incorporated in the assessment	2 gender analysis studies done	Technical personnel, stationery and allowances	2024-2027
		Validate the assessment methodology if aligned to the principles of gender equality and social inclusion	2 planning meetings on assessment of biodiversity and values in community forests and communal lands	Technical personnel, stationery and allowances	Quarter 2, 2024

	The PMU, as part of the stakeholder engagement plan and public awareness campaign, highlights that that the project promotes gender equality and the empowerment of women and encourages women to participate in the assessment	Evidence of gender responsive and social inclusive data collection tools	Gender responsive monthly, quarterly, activity and annual reporting templates developed well disaggregated by sex, age, disability and household head etc is developed	Technical personnel, stationery and allowances	2025-2027
		Evidence that the stakeholder engagement plan and public awareness campaign promotes gender equality and the empowerment of women and encourages women to participate in the project.	A gender stakeholder engagement plan is developed	Technical personnel, stationery and allowances	Quarter 4, 2023
	The awareness and communication campaigns pay particular attention to engagement of women, youth and persons with disabilities and other marginalised and vulnerable groups to encourage their active participation.	IEC on engagement of women, youth and persons with disabilities and other marginalized and vulnerable groups to encourage their active participation.	3000 IEC materials developed	Technical personnel, stationery and printing services	Quarter 3, 2024

	The engagement of stakeholders is planned and executed with gender sensitivity to ensure women, youth and persons with disabilities are not excluded through barriers that are socially constructed by existing cultural practices and norms	All data captured on participation and engagement of stakeholders is disaggregated by gender and age, and reported on in progress and monitoring reports	Gender responsive monthly, quarterly, annual and activity reporting templates developed well disaggregated by sex, age, disability and household head etc is developed	Technical personnel	2025-2027
		Records of consultation and attendance at all decision making and planning meetings reflecting participation by women, youth and other vulnerable or marginalized groups.	1 attendance template well disaggregated by gender developed	Technical personnel	Quarter 1, 2024
	Develop specific messages in the communication campaigns that include a focus on and relevance to women, as well as the youth and other marginalised and vulnerable groups.	Number of messages developed on relevance of inclusion of women, youth and persons with disabilities	5 messages developed	Technical personnel	2025-2026
Output 2.2 New village forest areas are created, and natural tree regeneration is promoted in community forests to improve the conservation status of threatened species	Women, youth and persons with disabilities actively participates and benefits from new village forest areas and natural tree regeneration	Evidence of women, youth and persons with disabilities accessing and controlling resources and benefits from the new village forests and natural tree regeneration	2 gender responsive annual work plans and budgets are developed	Technical personnel. Allowances and conference facilities	2024-2027

		Evidence of women, youth and persons with disabilities representation in structures leading creation of new village forests and natural tree regeneration	Project team encourages the selection of women to participate in the project decision making processes, working and stakeholder groups, targeting a minimum of 50% participation by women with at least 30% are below 35 years of age, and 5% persons with disabilities.	Technical Personnel	2025-2027
Component 3: Knowledge Management (generation, sharing, learning and scaling up),					
Outcome 3: An effective knowledge management system in place					
Output 3.1: A gender-responsive communication strategy to facilitate better understanding of project activities amongst all stakeholders developed and implemented	? Women, youth and persons with disabilities participate in the development and implementation of the communication strategy	Evidence of incorporation of the needs of women, youth and persons with disabilities in the communication strategy	A gender responsive communication strategy is developed	Technical personnel, Allowances, stationery	Quarter 2, 2024
	The Communication strategy is made user friendly for women, youth and persons with disabilities	Evidence of women, youth and persons with disabilities ability to use the communication strategy	A well translated communication strategy into local language	Technical personnel, Allowances, stationery	Quarter 3, 2024
	Document success stories, best practices and lessons learnt on the inclusion of women, youth and persons with disabilities	Evidence of success stories, best practices and lessons learnt presentation in various media platforms	60% documented success stories and best practices are on women, youth and persons with disabilities participation and benefiting from project impact	Technical personnel	2025-2027

Component 4: Monitoring & Evaluation					
Outcome 4: An effective project coordination, monitoring and evaluation system in place					
Output 4.1 Project gender-disaggregated M&E system enables tracking of project progress	Gender disaggregated data collection tools are developed	Evidence of existence of data collection tools that disaggregate data based on gender and social inclusion	Gender responsive monthly, quarterly, annual and activity reporting templates developed well disaggregated by sex, age, disability and household head etc is developed	Technical personnel	2025-2027
	Gender responsive and social inclusion indicators are developed	Evidence of existence of indicators on gender and social inclusion	A gender responsive M&E system is developed and implemented	Technical personnel, Allowances, stationery and conference facilities	Quarter 1, 2024
	Gender analysis is done during baseline survey	Existence of gender disaggregated data base	A gender sensitive data base is established	Technical personnel	Quarter 2, 2024
	M&E staff are trained on Gender responsive M&E system	Evidence of M&E staff with capacity on gender responsive M&E	A gender responsive M&E system is developed and implemented	Technical personnel, Allowances, stationery and conference facilities	Quarter 1, 2024
Output 4.2: The project exit strategy developed and implemented	Women, youth and persons with disabilities are engaged in the development of the exit strategy and a replication/upscaling strategy	Evidence of a gender and socially inclusive exit and upscaling strategy	A gender responsive project exit strategy and replication/upscaling strategy are developed	Technical personnel, Allowances, stationery and conference facilities	Quarter 1, 2024
Output 4.3: Project management, coordination, monitoring and evaluation is conducted	Gender analysis is conducted during midterm and end term evaluation	Evidence of gender analysis reports on mid-term and end term evaluations	2 midterm and end term gender analysis reports	Technical personnel, Allowances, stationery	Quarter 2, 2025- Quarter 3, 2027

Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?

Yes

Closing gender gaps in access to and control over natural resources; Yes

Improving women's participation and decision making Yes

Generating socio-economic benefits or services or women Yes

Does the project?s results framework or logical framework include gender-sensitive indicators?

Yes

4. Private sector engagement

Elaborate on the private sector's engagement in the project, if any.

Collectively, the private sector has continuously invested in the natural resources management and promoted ecosystem services. Mchinji forest reserve is used as a water source for Southern Region Water Board and other private users that benefit from the ecosystem services provided. In addition, the forest houses towers of mobile service providers and other institutions including hosting of cultural sites and tourist attraction sites. These private institutions will continuously be engaged in the activities of the project. In addition, Mchinji district is a home to a number of private estates that have private forests and woodlots and have worked with government in conservation and sustainable use of forests. The engagement of private sector will continue through development and maintenance of tourism facilities, protected areas planning, law enforcement and biodiversity monitoring and staff development. Involvement of the private sector in conservation has increased over the past decade and is set to increase further through initiatives such as the River basin management structures, the OECMs and Biosphere Reserve initiatives. With financial and technical support from previous project/programme initiatives, this has seen an increase in the viability of ecotourism, increased financial returns to the investments in biodiversity conservation. The project will cultivate sustainable relationships with stakeholders, policymakers and community leaders in an effort to ensure that policies are in place and applied for the effective management of the protection of the ecosystems. The private sector is expected to contribute towards the protection of the ecosystems as they benefit immensely from the ecosystem services.

5. Risks to Achieving Project Objectives

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

A climate assessment has now been provided as Appendix 19

Risks.

The results framework matrix in Annex A summarizes the principal risks and assumptions associated with the project. Every effort has been made to minimize these in the design of the project strategy and its activities and outputs. This has included a review of past and ongoing GEF projects or projects in similar sectors. In addition there has been a wide consultation through review and discussions with the country stakeholders during the project development phase.

The project strategy identifies the key risks outlined in Table 16 below. These risks and the mitigation measures outlined in detail in the SRIF (Appendix 10) will be continuously monitored and updated throughout the project. The complexity and multi-sectoral nature of forest restoration will directly affect the implementation of this project. Any slowdown across the sectors or stakeholders due to, for example, lack of sectoral coordination, could have an impact on project start dates and even stall progress. These risks and the mitigation measures will be continuously monitored and updated throughout the project implementation period.

Table 16: Risks and risk management measures

Risk	**Rating**	**Risk mitigation measures**
Agriculture which is the most representative land use in the area continues pressure on land and other natural resources	Low	Generation of high value income due to the availability of certain ecosystem services. Existence of natural areas outside of protected areas that can be enhanced
Rapid Changes in climate conditions and related extreme weather events can outstrip the ability of the project to successfully contributing sustainable use of natural resources and sustainable to agriculture production which can translate into food insecurity and increasing of vulnerability	Medium	Enhancing the resilience of ecosystems through restoration will strengthen the health of these ecosystems and their resilience to the impacts of climate change which will eventually provide a cost-effective means of protecting human and productive landscapes against impacts of climate change.. In addition, project interventions will enhance adaptation through enhancing of diversification of livelihoods, climate smart agriculture and protecting of water catchments.

Lack of interest and support from Key national stakeholders? groups and communities in Ecosystem Restoration and activities of the project	Low	By designing management plan, the project will be ensuring that both forest reserve and community forests are managed and human impacts are limited in scope. Training and awareness raising as well as proper coordination arrangements will improve communication and coordination as well as increasing stakeholder engagement, including communities involved through support towards community forest and sustainable agriculture practices. Communities and stakeholders will be eager to participate if the project is benefiting their day to day interest. The development and implementation of communication strategy will also facilitate a better understanding of project activities amongst all stakeholders
Insufficient funding and Government support to continue implementation of activities after the project ends	Low	Several factors will increase the likelihood that increased funding and support will be available. Firstly, Ecosystem Restoration is one of Malawi?s priority areas in its National Biodiversity Strategy and Action Plan and seen by the development of the National Ecosystem Restoration Strategy and Action Plan. Being a project focusing on Malawi?s priority conservation area indicates that there is political commitment at National level for ecosystem restoration. Secondly, the government has developed a climate change fund which has prioritized restoration projects among the priority project to be funded through the fund. In addition, the project will increase awareness and understanding of the decision makers on the full range benefits of ecosystems, not only in terms of hydrological services or agricultural production and livelihoods, but also in terms of ecological services. This will be demonstrated by undertaking valuation of ecosystem services in the target areas and assessing their contribution to the economy and livelihoods. which together will incentivize local communities to continue these practices even in the absence of external support
Some ecosystem services as income generating options poorly understood by communities	Low	Development partners will be engaged in strengthening the capacity of the government in conducting environmental assessments and valuations. Through the project steering committee and other coordination mechanisms, the project will ensure that the project outcomes are supported by this critical baseline.

Lack of adoption or engagement by local communities	Low	The project will develop participative community consultation, educational and awareness programmes, and will use the partnership approach with indigenous peoples and local communities to ensure full involvement in the project.
Risks that COVID-19 and health related emergencies	Low	Mix of virtual and physical options where necessary and adaptive management to ensure that project activities continue even under lock down scenarios. Further procurement of PPE for project participants and staff.

6. Institutional Arrangement and Coordination

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

Institutional Arrangement and Coordination

The National Executing Agency will be the Environment Affairs Department (EAD) within the Ministry of Natural Resources and Climate Change. Staff from EAD will be involved in coordinating activities within country while UNEP will provide guidance and technical backstopping. The two key Ministries involved in the Project will be the MoNREM and the Ministry of Agriculture, Irrigation and Water Development (MoAIWD, Forestry Department, Department of Land Resources Conservation and the Department of National Parks and Wildlife (DNPW). The Forestry Department is responsible for management of the Forest Reserves which are catchment areas for Bua River while the DNPW managed National Parks and Wildlife Reserves.

The project will be implemented by UNEP and executed nationally by Environment Affairs Department (EAD) within the Ministry of Natural Resources and Climate Change. UNEP ? through its GEF Task Manager (TM) and Funds Management Officer (FMO) - will monitor the implementation of the project, review progress in the realization of the project outputs, and ensure the proper use of GEF funds. The UNEP TM will be directly responsible for: (i) providing consistent and regular project oversight to ensure the achievement of project objectives; (ii) liaising between the project and the GEF Secretariat; (iii) ensuring that both GEF and UNEP policy requirements and standards are applied and met (i.e. reporting obligations, technical, fiduciary, M&E); (iv) approving budget revisions, certifying fund availability and transferring funds; (v) organizing mid- and end-term evaluations and reviewing project audits; (vi) providing technical, legal and administrative guidance if requested; and (vii) certifying project operational completion. Environment Affairs Department (EAD) within the Ministry of Natural Resources and Climate Change will be the Executing Agency on behalf of the Government of Malawi and will provide overall coordination and supervision. The EAD will be accountable to UNEP for the achievement of the project objective and outcomes, according to the approved overall project work plan. EAD will implement the project in collaboration with project partners. To expedite delivery of outputs, the EAD will sign Memoranda of Understanding (MoU) with project partners to implement specific activities of the project. These memoranda will clearly spell out the activities agreed upon and responsibilities of each party in the execution of the project. The mandate, expertise and competencies of the partners are some of the criteria that will be used in identifying activities to be implemented by project partners. A Project Management Unit (PMU) will be established in the EAD. A Project Steering Committee (PSC) will be established to provide policy and

strategic guidance for project implementation. The ministry of agriculture will also provide technical support with regard to land use plan development and implementation.

In addition, the project will link with existing projects through the National bodies like the National Biodiversity Steering Committee and will be making periodic presentations at the GEF Steering Committee where other related GEF projects are also required to make presentations on progress to identify areas of synergy and learning from each other. The project will further conduct exchange visits to other areas implementing similar projects in the country to upscale best-ease studies. Table 17 shows the project partners and their roles and responsibilities during project implementation.

Table 17. Project partners and their responsibilities during implementation

COMPONENT/OUTCOME/OUTPUT	**Responsibility Assignment**	
	Lead institution	**Project partners**
Component 1: Forest management framework and capacity in implementation of ecosystem management plans **Outcome 1:** Effective management of Mchinji forest reserve strengthened through development management frameworks and improving capacity in enforcement for protection of forest		
Output 1.1 Forest management plan for Mchinji forest reserve is developed and implemented	Environmental Affairs Department (EAD)	Department of Forestry (DoF), National Herbarium and Botanic Gardens of Malawi, Department of National Parks and Wildlife, Forestry Research Institute of Malawi, Lilongwe University of Agriculture and Natural Resources, University of Malawi (Chancellor College-Biology Department), Department of Surveys, Department of Land Resources Conservation
Output 1.2: Law enforcement and collaboration among law enforcement agencies strenghthened for Mchinji Forest Reserve	EAD	DoF, Department of National Parks and Wildlife (DNPW), Malawi Police, Malawi Defence Forces, Services (MPS), the Judiciary, Community Based Organizations (CBOs), Ministry of Justice
Component 2: Supporting local government institutions and communities to enhance conservation and sustainable use of forest resources to maintain and restore biodiversity and ecosystem services in community forests and communal lands **Outcome 2:** Improved conservation and sustainable use of forest resources so as to maintain and restore biodiversity and enhance ecosystem services through supporting local government institutions and communities		
Output 2.1: Ecosystem based IGAs and livelihoods of forest dependent communities promoted	EAD	DoF, Minister of Trade & Industry, Ministry of Gender, Community Development and Social Welfare, World *Agroforestry Centre*
Output 2.2: New village forest areas are created, and natural tree regeneration is promoted in community forests	EAD	Department of Forestry (DoF), National Herbarium and Botanic Gardens of Malawi, Forestry Research Institute of Malawi.
Component 3: Component 3: Knowledge Management (generation, sharing, learning and scaling up) **Outcome 3:** An effective knowledge management system in place		

Output 3.1: A gender-responsive communication strategy to facilitate better understanding of project activities amongst all stakeholders developed and implemented	EAD	Local NGO (To be identified), University of Malawi (Chancellor College-Department of Language and Communication Skills), Local Radio Stations in Mchinji District, Zodiac Broadcasting Cooperation, Malawi Broadcasting Cooperation, Association of Environmental Journalist in Malawi
Component 4: Project coordination, monitoring and evaluation system **Outcome 4**: An effective project coordination, monitoring and evaluation system in place		
Output 4.1 Project gender-responsive Monitoring and Evaluation system developed to track project progress;	EAD	DoF, DNPW, Ministry of Gender, Social Welfare and Community Development
Output 4.2 : The project exit strategy developed and implemented	EAD	DoF
Output 4.3: Project management, coordination, monitoring and evaluation is conducted	EAD	DoF, DNPW, Ministry of Gender, Social Welfare and Community Development

1.1. Project Internal Structure

1.1.1. Project Management Unit

A Project Management Unit (PMU) will be established and hosted in the EAD who will allocate part-time experts according to the PMU needs as part of government co?financing. The PMU will be responsible for the daily management of project and for ensuring efficient and timely implementation of the project annual work plans (see Table 19 and Figure 9 below for reporting structure). Memoranda of Understanding will also be developed with relevant partners if required for the coordination of some specific interventions of the project. The PMU will work in close collaboration with UNEP and where necessary liaise with other UN Country Teams under the United Nations Sustainable Development Cooperation Framework (UNSDCF) (2019 ? 2023)[1].

The ToRs of the PMU staff are provided in Appendix 10. However, some key functions of the PMU are:

? Technically identify, plan, design and support all activities;

? Liaise with government agencies and regularly advocate on behalf of the project;

? Prepare the Annual Work Plan and Budget (AWP/B) and monitoring plan, and submit them to GEF and NPSC for validation;

? Play the role of the Secretariat of the NPSC;

? Organise regular meetings and workshops with the NPSC;

? Be responsible for day?to?day implementation of the project in line with the AWP;

? Ensure a gender responsive and results?based approach to project implementation, including maintaining a focus on project results and impacts as defined by the results framework indicators in Appendix 4;

? Ensure close collaboration with baseline and partner project to maximize synergy and complementarity;

? Ensure the submission of appropriate yearly expenditure reports on the budget identified as co?financing by the baseline projects;

? Prepare and submit bi?annual progress reports and contribute to the preparation of UNEP progress reports;

? Monitor and evaluate continuously the project progress regarding the Results Matrix Targets according to a specific plan validated by EAD and UNEP, and submit M&E reports regularly to UNEP and NPSC;

? Be responsible for the elaboration of UNEP Project Progress Reports (PPR) and the annual Project Implementation Review (PIR); and

? Facilitate and support the mid?term evaluation/review and final evaluation of the project. PMU staff will be supported by national and international consultants who will be recruited during project implementation as needed.

Being a uni-focal project that covers the areas of biodiversity conservation, the PMU will comprise of the National Project Coordinator (co-financed), Project Manager, and a Project Finance and Administrative Assistant, and one driver (co-financed).

1.2. Project External Structure (Project Oversight Mechanism)

1.2.1. Project Steering Committee

The EAD will be supported by a National Project Steering Committee (NPSC) that will be drawn from relevant stakeholders. The NPSC will be the main decision? making platform of the project, responsible for guiding implementation of the project. The specific NPSC responsibilities will be to:

? Provide overall guidance and direction to the project, ensuring it remains within any specified constraints;

? Provide guidance on new project risks and agree on possible countermeasures and management actions, including gender mainstreaming, to address specific risks;

? Review the project progress and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans;

? Appraise the project annual review report and make recommendations for the next annual work plan;

? Provide strategic advice to the PMU for the implementation of project activities to ensure the integration of project activities with sustainable development objectives;

? Advise the PMU when needed;

? Oversee and ensure technical quality of outputs;

? Ensure alignment of the activities and products with the project document;

? Validate the selection of the community?based projects;

? Review the progress reports and financial reports;

? Ensure close linkages between the project and other relevant on-going projects and programmes relevant to the project;

? Ensure timely availability and effectiveness of co?financing support;

? Ensure sustainability of key project outcomes, including up?scaling and replication;

? Ensure effective coordination of government partner work under this project;

? Modify, where needed, and validate the six?monthly Project Progress and Financial Reports, the Annual Work Plan and Budget;

? Provide contributions to the mid?term evaluation/review and final evaluation, analyse the conclusions and formulate response plans;

? Assist the PMU in solving any issues in the project implementation; and

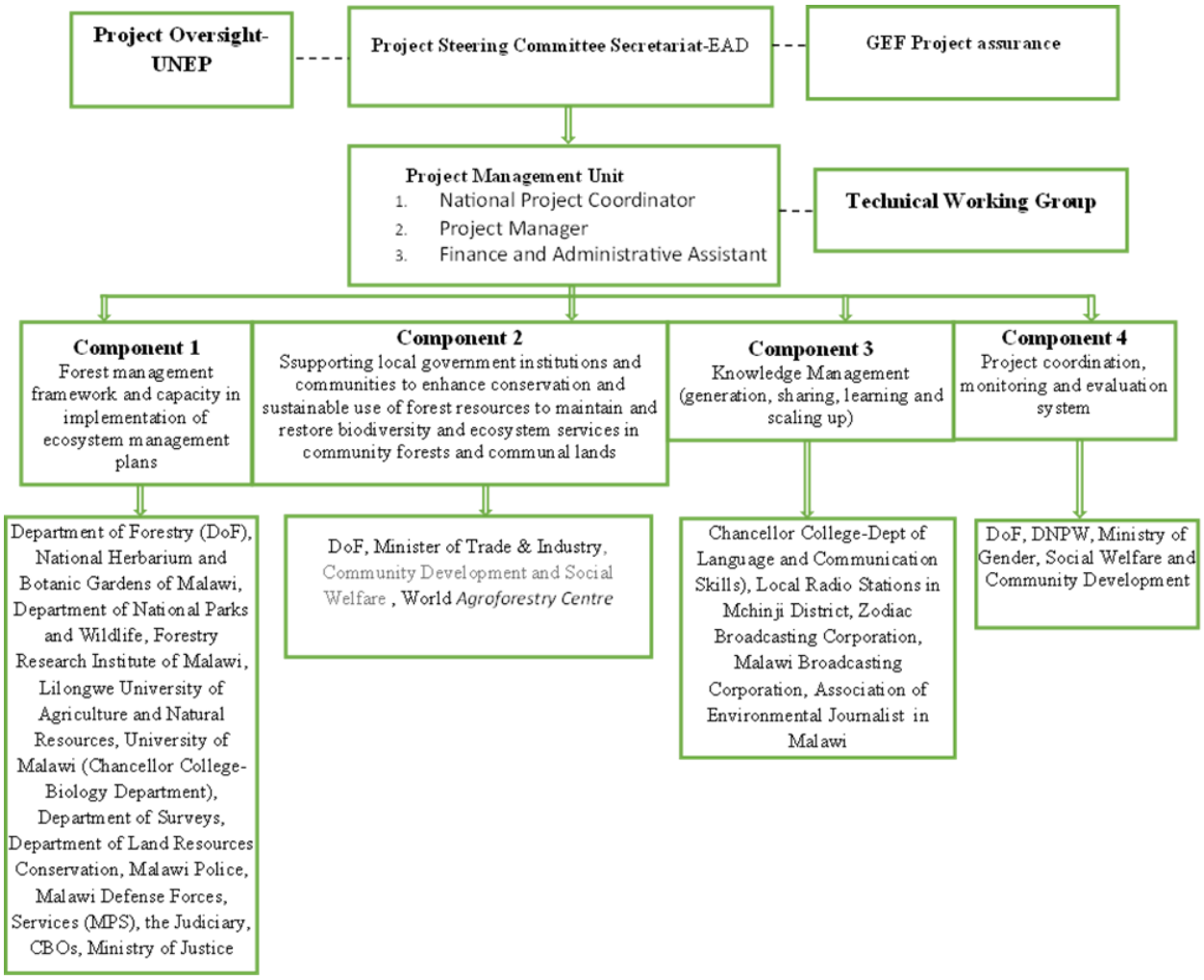
? Facilitate the dissemination and integration of the results in national policies and programmes.

Table 18. Project reporting requirements

M&E Component/Activity	**Responsibility Assignment**		**Means of Assessment/Monitoring Data Source**
	Institution	**Project/Agency Officer**	
Project Inception	EAD (PMU) in consultation with UNEP,	Project Manager, Consultant	Inception report with detailed methodology
Steering Committee Meetings	EAD (PMU)	Project Manager, UNEP Task Manager	Minutes of the meetings

Semi-annual M&E review meetings	EAD (PMU)	Project Manager, UNEP Task Manager	Minutes of the meetings
Monitoring visits to field sites	EAD (PMU) in collaboration with the participating institutions	Project Manager, UNEP Task Manager	On site data collection Monitoring reports
Annual Review and Planning Meeting (ARPM)/Project Implementation Review (PIR)	UNEP in consultation with the PMU, and participating institutions/agencies and stakeholders	Project Manager, UNEP Task Manager	On site data collection PIR reports
Mid-Term external evaluation (MTR)	UNEP in consultation with the PMU, and participating institutions/agencies and stakeholders	Independent Consultant	On site data collection Consultant report
End of Project Terminal Evaluation	UNEP in consultation with the PMU, and participating institutions/agencies and stakeholders	Independent Consultant	On site data collection Consultant report

Figure 8. Project organigram



1.3. Technical support

A Technical Working Group (TWG) will be responsible for technical backstopping during the implementation of the project. The TWG will thus support the PMU and PSC in their work to ensure that implementation of project activities is on course and producing the desired outputs. The TWG will meet at least once per quarter. The specific terms of reference for the TWG will include:

l Support the PMU in the development of work plans and budgets;

l Support the PMU in the development of Terms of Reference for activities to be undertaken by consultants;

l Collate salient and credible data/information to support the PMU and consultants in the delivery of legitimate reports;

l Assess and advise on implementation of the planned project activities against set timeframes to deliver the following key outcomes of the project;

l Review and provide input on draft project reports to ensure adequacy in the attainment of the project objectives and deliverables;

l Support the PMU on quality assurance of documents/reports to be presented to the Project Steering Committee (PSC) for consideration; and

l Perform any other duties that may be assigned by PSC or UNEP.

National, Regional and Global Networks

Networks are important in project implementation as they are critical sources of capacity building through joint learning, leveraging and incentivizing project stakeholders and implementation staff. Networks are also critical avenues for communicating project success and scaling up of best practices to similar landscapes in the country, regionally and globally. The project will, therefore, engage with national, regional and global networks to share communication products, outreach tools and solicit support to ensure that project interventions, improved practices and incentives are well documented and widely understood among relevant stakeholders and the public at the national and global level.

At national level, the project will link with existing projects through the National bodies like the National Biodiversity Steering Committee and will be making periodic presentations at the GEF Steering Committee where other related GEF projects are also required to make presentations on progress to identify areas of synergy and learning from each other. The project will further conduct exchange visits to other areas in the country implementing similar projects to upscale best-case studies. The project will be integrated into similar Government Programmes to foster knowledge sharing, learning, and synthesis of experiences. The project will work in collaboration with the national and district authorities during implementation and joint participatory monitoring so as to enable learning, sharing of experiences and integration of project activities into the National Development Plans.

At the regional and global levels, Malawi is a member of various bodies and platforms such as the Southern Africa Development Community (SADC), the Common Market for Eastern and Southern Africa (COMESA) and the New Partnership for Africa?s Development (NEPAD). The project will use these platforms for learning, sharing experiences and creating synergies. A deliberate effort will be made for cross-country visits especially between southern and east African countries (Mozambique, Zambia, Tanzania, and Zimbabwe) to share lessons learned and best practices and influence. At global level, the project will be aligned to various global and regional frameworks that Malawi is a signatory to and participates in such as: the UNCCD; UNCBD and UNFCCC. Malawi will use her participation in these

global platforms to share experiences and for learning as well as create synergies for leveraging and scaling up and out.

[1]United Nations Development System in Malawi (2023). United Nations Sustainable Development Cooperation Framework (UNSDCF) for Malawi (2019 ? 2023). Office of the United Nations Resident Coordinator in Malawi, Lilongwe, Malawi

7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assesments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

Malawi Government ensures that the protection and sustainable management of environment and natural resources is encouraged through legal framework, policies and strategies. The Malawi Growth and Development Strategy (MGDS III) is a medium national development strategy intended to contribute to Malawi?s long-term development aspirations. The Bua River Ecosystem Restoration is linked to the Agriculture, Water Development and Climate Management Priority key area of the MGDS III. The Agriculture, Water Development and Climate Management priority area?s main goal is to achieve a sustainable agriculture transformation that is adaptive to climate change and enhances ecosystem services. The Environment Management Act (No. 19 of 2017 on the other hand supports this priority area of the MGDS iii as it aims at the protection and management of the environment and the conservation and sustainable utilization of natural resources. With regards to the Bua River Ecosystem Based Management Plan, the Act provides direction on Regulations of use and management of rivers, lakes including protection along banks of rivers and shores of a lake as it may be necessary to protect them from deleterious human activities. Considering the three main land use of Bua River (crop land, forest land, wetland), the Act further regulates the use and management of wetlands, including protection of wetlands by protecting traditional uses of wetlands by excluding or limiting human activity. The Act is in line the National Environmental Policy which encourages restoration, maintenance and enhancement of the ecosystems and ecological processes essential for the functioning and use of renewable resources. These goals are also reflected in other frameworks such as the Land Resources Management Policy and Strategy, National Parks and Wildlife Act, National Climate Change Management Policy, National Disaster Risk Management Policy, Malawi National Forestry Policy and Forest Act, Fisheries Conservation and Management Act and Regulations and National Agriculture Policy among others. The Wildlife Policy in particular acknowledges that 60% of wildlife habitat occurs in customary land. Since most of Bua River?s Ecosystem lies in customary land, the strategies outline in the Wildlife Policy to enhance community based wildlife management on customary land will assist communities in Bua Catchment area to establish Multiple Use Wildlife Areas and strengthen community based wildlife conservation and management.

With regards to climate change, the main policies and programmes regarding climate change and risks include the National Climate Change Management Policy (2016), the National Climate Resilience Programme (2021) and the National Disaster Risk Management Policy. Through the National Climate Change Resilience Programme, the government engaged all districts within Bua River Ecosystem to develop Ecosystem Management Plans, some of which this project intends to implement. The National Biodiversity

Strategy and Action Plan is also another important policy document that benefits the Bua River Ecosystem Restoration and Management. Target 7 of Malawi?s NBSAP indicates that by 2020 aquatic biodiversity is managed and harvested sustainably within safe ecological limits. Management of aquatic biodiversity in Malawi has been compromised over the years and this target aims at enhancing their management including watershed management, wetland management and rehabilitation and restoration of aquatic ecosystems. Target 11 further aims at minimizing the anthropogenic pressures on vulnerable ecosystems thereby improving ecosystems resilience to climate change which the project will be responding to. Target 6 of Malawi?s National Biodiversity Strategy and Action Plan aims at ensuring at least 50% of degraded terrestrial habitats are restored and protected by 2025. The Government of Malawi through Environmental Affairs Department with support from UNDP recently developed Bua River Restoration and management Plan as one of the actions towards achievement of this target. The Restoration and Management plan has mapped out all the priority hotspots and areas requiring interventions. The Restoration Plan was preceded by a detailed baseline analysis of the ecosystem, the socio-economic factors of the catchment and a detailed interactive mapping tool to visually present the hotspots and areas that require interventions. The Restoration and Management plan has proposed an investment cost of Twenty-Five Million USD in a phased approach. The plan has prioritized a number of areas that this concept note seeks to address. The National Forest River basin Restoration Strategy on the other hand, is meant to help Malawi deal with the challenges presented in unpredictable climate shifts and consequent River basin degradation. The main goal of the strategy is to regain ecological functionality and enhance human well-being across deforested or degraded forested River basins by outlining priority opportunities and interventions that can translate the potential of restoration into multiple benefits such as improved food security, increased biodiversity, improved water supply, job creation, income, carbon sequestration and enhanced resilience to climate 1,063,603 ha has been defined as potential area for priority restoration interventions in the Bua Catchment.

The Fisheries Conservation and Management Act of 1997 and National Fisheries and Aquaculture Policy of 2016 aim at promoting regulation, conservation, management and sustainable fisheries and aquaculture development respectively. The Policy identifies seven main priorities related to fisheries and aquaculture which are relevant for the Bua Catchment including capture fisheries, aquaculture, fish quality and value addition, governance, social development and decent employment, research and capacity development. Malawi?s recently revised National Agricultural Policy (NAP) of 2016 is focused on sustainable agricultural production and productivity; sustainable irrigation development; mechanization of agriculture; agricultural market development, agro-processing and value addition. With NAP, the GoM hopes for improved management of agricultural resources, increased agricultural exports and incomes, and improved food and nutrition security. Other NAP priority areas are empowerment of youth, women and vulnerable groups in agriculture; and institutional development, coordination and capacity strengthening; which is supported through the project by e.g., the partnership on Bua River Ecosystem management through Conservation Agriculture.

With regard to International Conventions, Malawi is a signatory to the Convention on Biological Diversity (CBD), United Nations Framework Convention on Climate Change (UNFCCC), UNCCD the provisions of which will be implemented through the project. In addition, the Convention on Wetlands of International Importance (the Ramsar Convention), which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources; the convention calls upon all Contracting Parties to, wherever possible, address the environmental, economic and social impact on wetlands within their jurisdictions. The Bua River feeds into Lake Malawi which has globally important biodiversity and hence there will be a global contribution through the project in enhancing adaptation, biodiversity and resilience efforts

8. Knowledge Management

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

Knowledge Management.

The project will facilitate and enhance knowledge acquisition and experience sharing through better access to information, knowledge, learning and networking. This will be achieved by; (i) developing and operationalizing an interactive M&E system to track implementation of project activities for purposes of scaling out in similar areas in Malawi, (ii) documenting, packaging and sharing best practices and lessons learned at landscape, national and regional levels to inform uptake of good practices and lessons learned, and policy influencing. National and site specific awareness and communication strategies will be developed in consultation with relevant stakeholders to facilitate and enhance knowledge acquisition and experience sharing at local, landscape, national, regional and global levels through better access to information, knowledge, learning and networking for purposes of catalyzing coordinated implementation of forest management and biodiversity loss reduction. The knowledge will be managed and shared intentionally to contribute to the long-term sustainability of project interventions. This will be achieved by; (i) developing and operationalizing an interactive M&E system to track implementation of project activities for purposes of scaling out in similar areas in Malawi. Monitoring and evaluation will be critical in measuring the success of project interventions, and an M&E will continue throughout project implementation, especially with regard to changes in awareness levels. All monitoring and evaluation activities will collect gender-disaggregated data, and where appropriate, women-only focus group discussions will be held regarding the impact of project activities on women (ii) documenting, packaging and sharing best practices and lessons learned at landscape, national and regional levels to inform uptake of good practices and lessons learned, and policy influencing establishment of village forests.

9. Monitoring and Evaluation

Describe the budgeted M and E plan

1. Monitoring and Evaluation.

The project will follow UNEP standard monitoring, reporting and evaluation processes and procedures. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by EAD and UNEP. The project will implement an efficient working arrangement with both UNEP and EAD for purposes of monitoring and evaluation.

The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Appendix 4 includes SMART indicators[1] for each expected outcome as well as mid-term and end-of-project targets. These indicators are designed according to the GEF indicator guidelines. These indicators along with the key deliverables and benchmarks included in Appendix 6 will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Appendix 7 (see Table 19 below). Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.

Table 19**. Monitoring and Evaluation Budget and Work plan**

Type of M&E activity	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Inception Meeting	EAD (PMU), UNEP	10,000	30,000	Within 3 months of project start-up
Project Steering/Technical Working group meetings	EAD (PMU), PSC	4,000	80,000	Once a year minimum.
Annual Review and Planning meetings	EAD (PMU), Partners	2,000	155,004	Annually
Mid Term Review/Evaluation	EAD (PMU), PSC, Consultant	15,000	45,000	At mid-point of project implementation
Terminal Evaluation	EAD (PMU), PSC, Consultant	15,000	65,000	Within 6 months of end of project implementation
Total M&E Plan Budget		**46,000**	**355,004**	

The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-?-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring will be the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It will be the responsibility of the Project Manager to inform UNEP and the PSC of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

The PSC will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures will be the responsibility of the Task Manager in UNEP. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-?-vis delivery of the agreed project global environmental benefits will be assessed with the PSC at agreed intervals. The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored on a quarterly basis to ensure cost-effective use of financial resources.

In-line with the GEF Evaluation requirements and the UNEP Evaluation Policy, the project will be subject to an independent Mid-Term Evaluation or management-led Mid-Term Review at mid-point. The project will also be subject to a performance assessment when it reaches operational completion. This performance assessment will be either an independent Terminal Evaluation or a management-led Terminal Evaluation (TE). The UNEP Evaluation Office will provide tools, templates, and guidelines to support the Review consultant. For all Terminal Reviews, the UNEP Evaluation Office will perform a quality assessment of the Terminal Review report and validate the Review?s performance ratings. This quality assessment will be attached as an Annex to the Terminal Review report, validated performance ratings will be captured in the main report.

In the case of the Terminal Evaluation (TE) of the project, the Evaluation Office will be responsible for the entire evaluation process and will liaise with the Task Manager and the project implementing partners at key points during the evaluation. The TE will provide an independent assessment of project performance (in terms of relevance, effectiveness and efficiency), and determine the likelihood of impact and sustainability.

It will have two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP staff and implementing partners. The direct costs of the evaluation (or the management-led review) will be charged against the project evaluation budget.

The TE will typically be initiated after the project?s operational completion. If a follow-on phase of the project is envisaged, the timing of the evaluation will be discussed with the Evaluation Office in relation to the submission of the follow-on proposal. The draft TE report will be sent by the Evaluation Office to project stakeholders for comment. Formal comments on the report will be shared by the Evaluation Office in an open and transparent manner. The project performance will be assessed against standard evaluation criteria using a six-point rating scheme. The final determination of project ratings will be made by the Evaluation Office when the report is finalized. The evaluation report will be publicly disclosed and will be followed by a recommendation compliance process.

The evaluation recommendations will be entered into a Recommendations Implementation Plan template by the Evaluation Office. Formal submission of the completed Recommendations Implementation Plan by the Project Manager is required within one month of its delivery to the project team. The Evaluation Office will monitor compliance with this plan every six months for a total period of 12 months from the finalisation of the Recommendations Implementation Plan. The compliance performance against the recommendations is then reported to senior management on a six-monthly basis and to member States in the Biennial Evaluation Synthesis Report.

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[1]The detail definitions of each indicator and sub-indicators can be referred in the GEF 7 Core Indicators Guidelines https://www.thegef.org/sites/default/files/documents/Results_Guidelines.pdf

10. Benefits

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

The project will provide benefits globally, nationally and locally. This project will enhance the capacity for implementation of forest management and biodiversity conservation in Mchinji CFR in particular and Malawi in general. By strengthening the strategies, mechanisms, and institutions for forest management and biodiversity conservation, Mchinji CFR will be protected, and livelihoods strengthened. The strengthening of forest and biodiversity management will contribute to the development of social inclusion and gender equality, foster clear and transparent provisions and strengthen the capacity for local communities to benefit from their landscape and biodiversity, thereby generating opportunities for themselves. This will also have benefits to the local communities around Mchinji CFR, including those deriving livelihoods from forest, directly through production forestry (wood products), or indirectly through ecosystem services. Further benefits will accrue through replication of the approaches used at the project sites to other sites in the country. The approach used in the project as a whole will also provide lessons and opportunities for replication in other countries in Africa.

11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

Overall Project/Program Risk Classification*

PIF	CEO Endorsement/Approval	MTR	TE
Low	Medium/Moderate		

Measures to address identified risks and impacts

Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.

see section 5 above and the attached Safeguard Risk Identification Form (SRIF)

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
SRIF Mchinji Forest ecosystm in Malawi - 13 June 2022	Project PIF ESS	

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Project Objective	Objective level Indicators	Baseline	Targets and Monitoring Milestones		Means of Verification	Assumptions & Risks	UNEP MTS reference
			Mid-Point Target	End of project Target			
Effective management of Mchinji forest and supporting local government institutions and communities to enhance conservation and sustainable use of forest resources to maintain and restore biodiversity and ecosyste	Core Indicator 1 - Terrestrial protected areas created or under improved management for conservation and sustainable use	Mchinji FR management has not been tracked for efficiency and effectiveness. Management effectiveness score = 18%	19,166 ha of Mchinji FR is fairly managed. Management effectiveness score= 30%	19,166 of Mchinji FR is fairly managed. Management effectiveness score= 60%	- End of project report - PIR reports - M & E reports - Minutes of meetings - Forest management strategies (plans, staff, etc.)	**Assumptions:** - Government is fully committed to the conservation and sustainable use of the biodiversity of Mchinji FR - Willingness of the local communities to participate **Risks**: - Potential delay in the approval of forest management strategies and plans would	
	Core Indicator 3: Area of land restored	Up to 3,000 ha of communal lands around Mchinji FR are currently degraded (Baseline = 0 ha restored)	1,000 ha of communal lands and community forests restored through reforestation	3,000 ha of communal lands and community forests restored through reforestation	- End of project report - PIR reports - M & E reports - Minutes of meetings - Restoration plans		

m services in community forests and communal lands	Core Indicator 4: Area of landscapes under improved practices (hectares; excluding protected areas)	Landscapes around the Mchinji CFR are not under improved practices. (Baseline = 0 ha)	6,000 ha of communal lands under improved practices and actively providing biodiversity and ecosystem goods and services	13,730 ha communal lands in the Mchinji forest system restored and actively providing biodiversity and ecosystem goods and services	- Meeting minutes - PIR - Monthly reports - Annual reports - M&E reports	delay their operationalization - Lack of consensus of roles and responsibilities for institutional and governance systems - Harsh weather conditions such as heavy rains, drought and dry spells;	
	Core Indicator 6: Greenhouse gas emission mitigated	The current GHG emissions avoided within the Mchinji forest are currently indeterminate (unknown)	-600,000 tCO2e sequestered or avoided through effective management of the Mchinji forest	-1,046,590 tCO2e sequestered or avoided through effective management of the Mchinji forest	- FAO EXACT tool will be used to track GHG emissions.		
	Core Indicator 11: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment		25,000 (Female = 15,000 Male = 10,000) directly benefit from the GEF investment in the project	50,000 (Female = 25,000, Male = 25,000) directly benefit from the GEF investment in the project	- Monthly reports - Quarterly reports - Testimonies from beneficiaries		

Project Outcome	**Outcome Indicators**	**Baseline**	**Targets and Monitoring Milestones**		**Means of Verification**	**Assumptions & Risks**	**MTS Expected Accomplishment**
			Mid-Point Target	**End of project Target**			

Outcome 1: Effective management of Mchinji forest reserve strengthened through development management frameworks and improving capacity in enforcement for protection of forest reserve	Sub-Indicator 1.2: Terrestrial protected areas under improved management effectiveness	The area and boundaries of all 19,166 ha of Mchinji FR do not have updated maps and not effectively protected	19,166 ha for Mchinji FR mapped and demarcated for boundary opening	19,166 ha for Mchinji FR clearly mapped and all boundaries delineated for effective management	- Forest area and boundary maps - Quarterly reports - Annual report	**Assumptions**: - Central government ministries, district local government agencies and farmers are willing to cooperate; Information dissemination pathways are readily available for awareness creation. **Risks**: - Competing priorities and lack of consensus among stakeholders may delay the development of ILM plan, strategies and approaches - Rapid changes in climate conditions and related extreme weather events can outstrip the ability of the project
		Mchinji forest is faced with degradation and loss of biological diversity due to lack of a management plan	Forest inventory, description and prescriptions developed into a draft Management Plan	An approved gender responsive management plan for Mchinji FR in place and operational	- Inventory data - Management prescriptions - Draft forest management plan - Quarterly reports - Annual report - Ground truthing	
		Forestry extension officers have only basic capacity and not proficient in forest management and extension	At least 40% of forestry extension officers are proficient and actively implementing forest management plan and providing forest extension services	At least 80% of forestry extension officers are proficient and actively implementing forest management plan and providing forest extension services, enhancing management effectiveness to a METT score of ? 50	- Training reports - METT score assessment reports - Monthly reports - Quarterly reports - Annual report	

						to successfully contributing sustainable use of natural resources	
Output 1.1: Forest management plan for Mchinji forest reserve is developed and implemented Output 1.2: Law enforcement and collaboration among law enforcement agencies strengthened for Mchinji Forest Reserve							
Outcome 2: Improved conservation and sustainable use of forest resources so as to maintain and restore biodiversity and enhance ecosystem services through supporting local government institutions and	Sub-Indicator 3.2: Area of forest and forest land restored	No area of customary forests (0 ha) has been restored through afforestation and/or reforestation	1,000 ha of customary forests restored through afforestation or /reforestation	3,000 ha of customary forests restored through afforestation/reforestation and natural regeneration	- Remote data by sentinel 2 images - Field reports - Monthly reports - Quarterly reports - Annual report - Ground truthing	**Assumptions** - Local communities willing to allocate land for agroforestry and permaculture; **Risks** - Land use conflicts between agriculture, permaculture and agroforestry. Agriculture likely to be favoured; - Permaculture is a completely new	
	Indicator 4.1: Area of landscapes under improved management to benefit biodiversity	The area of community land under agroforestry and permaculture is currently 0 ha	6,000 ha of new village forests under improved management to benefit biodiversity	11,730 ha of new village forests under improved management to benefit biodiversity	- Remote data by sentinel 2 images - Field reports - Monthly reports - Quarterly reports - Annual report - Ground truthing		

communities.		No area of communal lands (0 ha) managed as new village forests to benefit biodiversity	1000 ha of community land under improved management for agroforestry, beekeeping and permaculture	2,000 ha of community land under improved management for agroforestry, beekeeping and permaculture	No area of communal lands (0 ha) managed as new village forests to benefit biodiversity	concept in the area, it is labour intensive and benefits take time. There is a risk of abandoning the practice by farmers. There is a risk of failure and resistance by community members	
	% of households with additional income from ecosystem based IGAs	There are no households yet with additional income from ecosystem based IGAs	At least 30% of target household realize additional income from ecosystem based IGAs promoted by the project	At least 100% of target households realize additional income from ecosystem based IGAs promoted by the project	- Beneficiary testimonies - Case study reports - Monthly reports - Quarterly reports - Ground truthing	**Assumptions** - Willingness of the community members to partake in IGAs **Risks** - Harsh weather conditions - Theft	
Output 2.1: Ecosystem based IGAs and livelihoods of forest dependent communities promoted Output 2.2. New village forest areas are created, and natural tree regeneration is promoted in community forests to improve conservation							
Outcome 3: An effective knowledge management system in place	Strategies for improving communication and awareness amongst the community on the importance of forests and species habitats	Awareness and communication strategy is not in place	Awareness and communication strategy developed and in operation	Awareness and communication strategy developed and in operation	- Meeting minutes - PIRs - Monthly reports - Annual reports - Copies of awareness and communication strategies	**Assumptions** - Project stakeholders are cooperative and can network effectively - Local communities are cooperative to the project	

	Number of knowledge products and lessons learned shared and disseminated widely with equal participation of stakeholders	No knowledge products and lessons learned have been developed yet. These will be available during and after project implementation	At least five (5) knowledge products and lessons learned are developed with equal participation of stakeholders	At least five (5) knowledge products and lessons learned are shared and disseminated widely with equal participation of stakeholders	- Meeting minutes - PIRs - Monthly reports - Annual reports - Copies of knowledge products and lessons learnt	intervention s **Risks** - Stakeholders are not cooperative during consultations - Lack of interest from critical stakeholders	
Output 3.1: A gender-responsive communication strategy to facilitate better understanding of project activities amongst all stakeholders developed and implemented Output 3.2: Best practices and lessons learned documented and disseminated with equal participation of stakeholders							
Outcome 4: An effective project monitoring and evaluation system in place	Project gender-disaggregated M&E system enables tracking of project progress	Current forest management and conservation practices and not tracked and monitored effectively using an organized M&E system	A draft gender responsive project M&E system in place and piloted in tracking the implementation of forestry management and conservation approaches	Gender responsive project M&E system in place and actively being utilized to track and implement forestry management and conservation approaches	- Meeting minutes - PIRs - Monthly reports - Annual reports - M&E reports - Copies of M&E strategy	**Assumptions** - Men are willing to to be transformed and respect dignity and rights of women **Risks** - Culture and traditional beliefs and customs do not allow for equal participation of women and men in project activities	

	The project exit strategy developed and implemented	An exit strategy has been prepared as part of PPG for this project	An exit strategy developed defining options for further upscaling of best practices	An exit strategy developed defining options for further upscaling of best practices	- Meeting minutes - PIRs - Monthly reports - Annual reports - Copies of exit strategy	**Assumptions** - The project partners and all stakeholders are cooperative from the start if the project' **Risks** - Stakeholders are not cooperative during consultations - Lack of interest from critical stakeholders	
	Project management, coordination, monitoring and evaluation is conducted	Project management strategies have been developed as part of PPG	Project mid-term targets are achieved at a scale of 100%	Project end targets are achieved at a scale of 100%	- Mid-term review reported - Terminal evaluation report - PIR	**Assumptions** - There is political will and support for the project - Appropriate tools and equipment are available **Risks** - Procurement delays may affect project start and implementation - The global economic downturn may affect project implementation	

Output 4.1: Project gender-responsive Monitoring and Evaluation system developed to track project progress
Output 4.2: The project exit strategy developed and implemented
Output 4.3: Project management, coordination, monitoring and evaluation is conducted

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

see the attached file because it could not be pasted here due to size

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

PPG Grant Approved at PIF: USD 50,000			
	GETF/LDCF/SCCF Amount ($) 50,000		
Project Preparation Activities Implemented	**Budgeted Amount**	**Amount Spent To date**	**Amount Committed**
Project Design Expert / international consultant	20,000	10,000	10,000
national technical consultant	10,000	10,000	
social safegurds and gender consultant	5,000	5,000	
PPG National consultant	5,000	5,000	
Travel	2,000	2,000	
meetings/workshops/consultations	8,000	6,000	2,000
Total	**50,000**	**38,000**	**12,000**

ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

Latitude: -13?40'32.05"
Longitude: 32?51'26.35"
The superior administrative division is Central Region

GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. These IDs are available on the GeoNames? geographical database containing millions of placenames and allowing to freely record new ones. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate. Web mapping applications such as OpenStreetMap or GeoNames use this format. Consider using a conversion tool as needed, such as:https://coordinates-converter.com Please see the Geocoding User Guide by clicking here.

Location Name	Latitude	Longitude	Geo Name ID	Location & Activity Description
Malawi Central region	-13.67557	32.85732		

ANNEX E: Project Budget Table

Please attach a project budget table.

COST ITEM		Component Budget					
		1	2	3	4 (M&E)	PMC	Total
PERSONNEL COMPONENT							
1100	**Project personnel**						
1101	Project Director (Co-Financed position)						
1102	Biodiversity conservation expert	60,000	0			0	60,000
1103	community development support expert		60,000			0	60,000

1103	Finance and Administrative Assistant (Co-Financed position)					0	0
1199	***Sub-total***	***60,000***	***60,000***	***0***	***0***	***0***	***120,000***
1200	**Consultants**						
1201	Develop a gender responsive Capacity Building Plan (CBP) for district environment officers and conduct capacity building sessions		7,000				7,000
1202	Develop a communication strategy			10,000			10,000
1203	Develop an M & E system				10,000		10,000
1203	develop a project gender mainstreaming strategy and exit strategy			10,000			10,000
1299	***Sub-total***	***0***	***7,000***	***20,000***	***10,000***	***0***	***37,000***
1600	**Travel on official business**						
1601	Local travel	4,508	8,000				12,508
1602	International travel	7,500	7,500				15,000
1699	***Sub-total***	***12,008***	***15,500***	***0***	***0***	***0***	***27,508***
Component total		**72,008**	**82,500**	**20,000**	**10,000**	**0**	**184,508**
SUB-CONTRACTS COMPONENT							
2100	**Sub-contracts (MOUs/LOAs for cooperating agencies)**						
2101	Department of forestry to lead law enforcement operations and collaboration among law enforcement agencies to effectively manage Mchinji Forest Reserve	160,000					160,000
2102	District council to lead in promotion of IGAs and livelihoods of people bordering Mchinji Forest Reserve		134,000				134,000

2103	Local NGO to establish village forests, fruit tree grafting, permaculture, and conservation of threatened species in selected communities		50,000				50,000
2014	Local NGO to develop and implement communication strategy and knowledge management			60,000			60,000
2199	***Sub-total***	***160,000***	***184,000***	***60,000***			***404,000***
Component total		**160,000**	**184,000**	**60,000**		**0**	**404,000**
TRAINING COMPONENT							
3200	**Group Training**						
3201	Training of law enforcement field staff and officers on investigations, intelligence gathering, ranger-based monitoring and evaluation, prosecution to upscale and sustain law enforcement functions	54,000					54,000
3202	Training of project staff on the preservation of the rights and dignity of women, youth and persons with disabilities in conservation	10,000					10,000
3203	Training of community members on agroforestry practices	17,500	12,500				30,000
3204	Training of bee-keeping clubs on beekeeping and management		10,000				10,000
3205	Training of communities on marketing skills		12,000				12,000
3206	Training of champion of extension workers to upscale and sustain IGAs		10,000				10,000
3207	Training of staff on gender responsive M and E system		10,000				10,000

3208	Training of key stakeholder staff in the use of the hardware and software for storage and processing of the experiences and knowledge gained from project implementation (EAD)	10,000		0			10,000
3299	***Sub-total***	***91,500***	***54,500***	***0***	***0***	***0***	***146,000***
3300	**Meetings/Conferences**						
3301	Project Inception Workshop					10,000	10,000
3302	Project Steering/Technical Working group meetings	25,000	0	0	2,000		27,000
3303	M&E Annual Review meetings	29,000	0	0	4,000		33,000
3399	***Sub-total***	***54,000***	***0***	***0***	***6,000***	***10,000***	***70,000***
Component total		**145,500**	**54,500**	**0**	**6,000**	**10,000**	**216,000**
EQUIPMENT AND PREMISES COMPONENT							
4100	**Expendable equipment**						
4101	Stationery	500	500				1,000
							0
4199	***Sub-total***	***500***	***500***	***0***		***0***	***1,000***
4200	**Non-expendable equipment**						
4201	Vehicles					63,000	63,000
4202	Office equipment (furniture, printer, photocopier, laptops, phones)	6,000	5,000			0	11,000
4299	***Sub-total***	***6,000***	***5,000***	***0***	***0***	***63,000***	***74,000***
	Component total	**6,500**	**5,500**	**0**	**0**	**63,000**	**75,000**
MISCELLANEOUS COMPONENT							
5100	**Operation and maintenance of equipment**						
5101	Office equipment					2,000	2,000
5102	Vehicles					0	0
5199	***Sub-total***	***0***	***0***	***0***	***0***	***2,000***	***2,000***
5200	**Reporting costs**						
5201	Publication of project success stories			4,000			4,000
5299	***Sub-total***	***0***	***0***	***4,000***	***0***	***0***	***4,000***
5500	**Evaluation**						

5501	Mid-Term Evaluation				15,000		15,000
5502	Terminal Evaluation				15,000		15,000
5503	Audit				0	6,000	6,000
5599	***Sub-total***	***0***	***0***	***0***	***30,000***	***6,000***	***36,000***
Component total		**0**	**0**	**4,000**	**30,000**	**8,000**	**42,000**
GRAND TOTAL		**384,008**	**326,500**	**84,000**	**46,000**	**81,000**	**921,508**

ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

N/A

ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencys is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

N/A

ANNEX H: (For NGI only) Agency Capacity to generate reflows

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies? capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

N/A