Transforming landscapes and livelihoods: A cross-sector approach to accelerate restoration of Malawi?s Miombo and Mopane woodlands for sustainable forest and biodiversity management

Part I: Project Information

Name of Parent Program

Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes

GEF ID

10254

Project Type

FSP

Type of Trust Fund

GET

CBIT/NGI

☐CBIT

☐NGI

Project Title

Transforming landscapes and livelihoods: A cross-sector approach to accelerate restoration of Malawi?s Miombo and Mopane woodlands for sustainable forest and biodiversity management

Countries

Malawi

Agency(ies)

FAO

Other Executing Partner(s)

Department of Forest

Executing Partner Type

Government

GEF Focal Area
Multi Focal Area

Taxonomy
Biodiversity, Focal Areas, Forestry - Including HCVF and REDD+, Mainstreaming, Agriculture and agrobiodiversity, Land Degradation Neutrality, Land Degradation, Land Cover and Land cover change, Land Productivity, Sustainable Land Management, Sustainable Livelihoods, Restoration and Rehabilitation of Degraded Lands, Improved Soil and Water Management Techniques, Integrated and Cross-sectoral approach, Sustainable Forest, Community-Based Natural Resource Management, Sustainable Pasture Management, Forest, Drylands, Climate Change Mitigation, Climate Change, Agriculture, Forestry, and Other Land Use, Demonstrate innovative approache, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Private Sector, Stakeholders, Individuals/Entrepreneurs, SMEs, Civil Society, Community Based Organization, Non-Governmental Organization, Beneficiaries, Type of Engagement, Participation, Consultation, Information Dissemination, Partnership, Local Communities, Communications, Awareness Raising, Strategic Communications, Behavior change, Gender Equality, Gender results areas, Participation and leadership, Knowledge Generation and Exchange, Capacity Development, Gender Mainstreaming, Women groups, Sex-disaggregated indicators, Capacity, Knowledge and Research, Knowledge Generation, Workshop, Learning, Theory of change, Innovation, Knowledge Exchange, South-South, Peer-to-Peer

Rio Markers
Climate Change Mitigation
Climate Change Mitigation 2

Climate Change Adaptation
Climate Change Adaptation 0

Submission Date
12/11/2020

Expected Implementation Start
5/1/2021

Expected Completion Date
4/30/2026

Duration
60In Months

Agency Fee($)
571,541.00

A. FOCAL/NON-FOCAL AREA ELEMENTS

Objectives/Programs	Focal Area Outcomes	Trust Fund	GEF Amount($)	Co-Fin Amount($)
IP SFM Drylands	Promoting effective coordination for sustainable forest management	GET	6,350,459.00	47,702,324.00
		Total Project Cost($)	**6,350,459.00**	**47,702,324.00**

B. Project description summary

Project Objective

Sustainable management of the Miombo and Mopane productive landscapes of the Districts of Balaka, Ntcheu and Mangochi, contributing to national land degradation neutrality targets.

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing ($)

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing ($)
1. Effective governance support on LDN at the national level and in the targeted Mopane/Miombo landscapes	Technical Assistance	**1.1 Enhanced multisectoral and multilevel LDN planning and governance.** Indicators: (i) Level of increase in active participation of the NCCC&DRM inter-ministerial committee and sub-national government counterparts in cross-sectoral policy revision and coordination. (ii) Gender-inclusive by-laws and regulations for land use and land tenure improvements introduced in at least 75% of the target communities. Targets: (i) Level 4. (ii) Gender-inclusive by-laws and regulations introduced in at least 75% of the target communities	**1.1.1** The Malawi National Committee on Climate Change and Disaster Risk Management (NCCC&DRM) empowered to mainstream and harmonize LDN into sectoral policies and to ensure their implementation through the introduction of cross-compliant regulations and incentives. **1.1.2** The capacity of concerned agencies/managing bodies in the 3 target districts is developed to become leading actors in the planning, implementation, and monitoring of LDN at the district level. **1.1.3** Multi-sectoral and multi-level policies and regulations are improved and disseminated, using the knowledge generated and lessons learned through LDN practice.	GET	470,710.00	3,966,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing ($)
2. Scaling-out SLM and SFM best practices at the landscape level, to support the development of environmentally sound, socially-beneficial and economically-viable green value chains	Investment	**2.1 Integrated Landscape Management Plans (ILMPs) incorporating LDN objectives developed and under implementation in the Balaka, Ntcheu and Mangochi Districts.** Indicators: (i) Area of landscapes under ILMP (contributing to GEF Core Indicator 4). (ii) Area of landscapes under improved management to benefit biodiversity and prevent the introduction of invasive species (GEF Sub Indicator 4.1) (iii) Inclusion of Tsanya (Mopane) on the CITES list to improve the conservation status of threatened species Targets: (i) 420,539 ha (ii) 30% of landscape area (126,000 ha, covering forest areas, buffer zones among them, and riparian corridors) (iii) CITIES list updated **2.2 Climate - adaptive natural resources**	**2.1.1** ILMPs developed in the target landscapes of Mangochi, Ntcheu and Balaka districts **2.2.1** Three pools of extension agents created in each target District and empowered to deliver training and extension support on climate-resilient restoration, adaptive management and conservation priorities to sustain ecosystem services at the landscape level. **2.2.2** Community SLM actions for the sustainable intensification of diversified agro-ecological food production systems implemented. **2.2.3** FLR, co-management and protection interventions implemented by the landscape forest practitioners in co-managed forest blocks and community forest areas. **2.2.4** Long-term financial sustainability to implement ILMPs secured by harnessing existing domestic public finance and at least one new financial initiative to regain landscape	GET	4,207,746.00	28,380,324.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing ($)
3. Effective knowledge management, monitoring, and linkages with the SFM-DSL-IP	Technical Assistance	3.1 Framework in place for monitoring and the transfer of lessons learned on LDN to multi-level policies at the national and international levels. Indicators: (i) % integration of LDN indicators in National FLR Monitoring Framework). (ii) Participatory monitoring systems measuring LDN in place. (iii) # of people reached by the project?s communication and dissemination work. Targets: (i) At least 80%. (ii) 3, 1 in each target landscapes. (iii) At least 500,000 people **3.2** National and sub-national measures to deliver LDN enhanced through shared collaborative opportunities at regional and global levels. Indicators:	3.1.1 National stakeholders are trained on LDN M&E to incorporate LDN-related indicators in multi-level policies at national and international levels. 3.1.2 LDN monitoring integrated into development planning and monitoring processes at the national and district, traditional authorities and village committees? level. 3.1.3 Information clearinghouse and focal node for knowledge management created and operational. 3.2.1 Actions and investments identified to address transboundary land and environmental degradation priorities in Miombo-Mopane ecoregion and bi-/multi-lateral initiatives strengthened/established to progress towards LDN 3.2.2. Collaborative actions to support business and market development for SLM/SFM products across the	GET	1,225,393.00	10,891,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing($)	Confirmed Co-Financing ($)
				Sub Total ($)	**5,903,849.00**	**43,237,324.00**

Project Management Cost (PMC)

	GET	446,610.00	4,465,000.00
Sub Total($)		**446,610.00**	**4,465,000.00**
Total Project Cost($)		**6,350,459.00**	**47,702,324.00**

Please provide justification

Justification for increased PMC (7.56%) : The cost for financial auditing is high due to the risk levels of EA's identified in HACT assessments. Cofinancing sources will provide substantial PMC related support however, in terms of key staff required to execute the project, considering complex institutional arrangements involving 2 main EA?s, several subcontracted partners including WRI, The Department of Agriculture Extension Services (DAES),Malawi?s National Bureau of Standards, local NGO?s, regional entities, and others - and in view of a heavy procurement focused budget ? cofinancing support is not considered to be sufficient to ensure the desired level of coordinated operations support. Under the circumstances, additional full time staff covered by the project is deemed essential for smooth implementation.

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($)
Donor Agency	European Union	Grant	Investment mobilized	31,300,000.00
Donor Agency	UK/DFID	Grant	Investment mobilized	4,549,324.00
Recipient Country Government	Department of Agricultural Extension Services (DAES)	In-kind	Recurrent expenditures	740,000.00
Recipient Country Government	Department of Forests (DF)	In-kind	Recurrent expenditures	1,608,000.00
Recipient Country Government	Department of Land Resources Conservation	In-kind	Recurrent expenditures	838,000.00
Recipient Country Government	Department of National Parks and Wildlife (DNPW)	In-kind	Recurrent expenditures	456,000.00
Recipient Country Government	Ministry of Local Government	In-kind	Recurrent expenditures	2,560,000.00
Recipient Country Government	Environmental Affairs Department (EAD)	In-kind	Recurrent expenditures	486,000.00
Recipient Country Government	Department of Fisheries	In-kind	Recurrent expenditures	305,000.00
Donor Agency	USAID	Grant	Investment mobilized	3,460,000.00
Donor Agency	USAID	In-kind	Investment mobilized	1,400,000.00
			Total Co-Financing($)	**47,702,324.00**

Describe how any "Investment Mobilized" was identified

The investment mobilized was identified during PPG consulations in Lilongwe and field investigations althoughout the PPG period. Specific investments mobilized includes: 1. The USAID/UKAid funded and TetraTech ARD executed: Modern Cooking for Healthy Forests project. 2. The EU funded and FAO executed Revitalizing Agricultural Clusters and Ulimi wa Mdandanda through Farmer Field Schools in Malawi programme (KULIMA) project - 3. The DFID funded and FAO executed: Promoting Sustainable Partnerships for Empowered Resilience (PROSPER).

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($)	Fee($)
FAO	GET	Malawi	Biodiversity	BD STAR Allocation	2,810,567	252,951
FAO	GET	Malawi	Land Degradation	LD STAR Allocation	1,423,072	128,076
FAO	GET	Malawi	Multi Focal Area	IP SFM Drylands Set-Aside	2,116,820	190,514
				Total Grant Resources($)	**6,350,459.00**	**571,541.00**

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

☐

PPG Amount ($)

200,000

PPG Agency Fee ($)

18,000

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount($)	Fee($)
FAO	GET	Malawi	Biodiversity	BD STAR Allocation	88,515	7,966
FAO	GET	Malawi	Land Degradation	LD STAR Allocation	44,818	4,034
FAO	GET	Malawi	Multi Focal Area	IP SFM Drylands Set-Aside	66,667	6,000
				Total Project Costs($)	**200,000.00**	**18,000.00**

Core Indicators

Indicator 3 Area of land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
0.00	16299.00	0.00	0.00

Indicator 3.1 Area of degraded agricultural land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	7,845.00		

Indicator 3.2 Area of Forest and Forest Land restored

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
	8,454.00		

Indicator 3.3 Area of natural grass and shrublands restored

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

Indicator 3.4 Area of wetlands (incl. estuaries, mangroves) restored

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)
0.00	420539.00	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)
	126,000.00		

Indicator 4.2 Area of landscapes that meets national or international third party certification that incorporates biodiversity considerations (hectares)

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)
	294,539.00		

Indicator 4.4 Area of High Conservation Value Forest (HCVF) loss avoided

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	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	712288	0	0
Expected metric tons of CO?e (indirect)	0	0	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)		712,288		

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO?e (indirect)				
Anticipated start year of accounting		2021		
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)				
Anticipated start year of accounting				
Duration of accounting				

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 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female		75,000		
Male		75,000		
Total	0	150000	0	0

Part II. Project Justification

1a. Project Description

1. a. The global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description).

THE GLOBAL CONTEXT

The Malawi child project is part of the Dryland Sustainable Landscapes Impact Programme (DSL IP), that aims to avoid, reduce, and reverse further degradation, desertification, and deforestation in drylands through the sustainable management of productive landscapes. DSL IP focuses on three dryland ecoregions: (i) the Miombo and Mopane?, (ii) ?the savannas of West Africa? and (iii) ?the temperate grasslands, savannas and shrublands of Central Asia?). The programme gives specifical importance to the Miombo and Mopane ecoregion, which is targeted in seven child projects in Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania and Zimbabwe.

The Miombo and Mopane woodlands are the most predominant type of vegetation in Southern Africa, covering ca. 3 million square kilometers, stretching from Angola, Namibia, Botswana, Democratic Republic of the Congo, Zambia, Zimbabwe, Malawi, Mozambique and Tanzania. Together with the Amazonia, the Congo Basin, New Guinea and the North American deserts, the Miombo and Mopane woodlands are considered wilderness areas of global conservation significance as they concentrate the majority of plant and vertebrate species endemic to individual wilderness. These woodlands are the main ecosystems of the ?Zambezian? region of Africa, distinct in terms of mammals, birds, amphibians, reptiles and plants, with high level of diversity and endemism. Malawi lies entirely within the Zambezian region, and its vegetation is characterized by miombo and mopane woodlands, alongside various types of thicket and dry forest. Within Malawi, the Shire basin is home of the dry miombo woodlands at higher altitudes on the escarpments above 400 m, and mopane woodlands at lower altitudes. These woodlands are dominated by numerous tree species belonging to the Fabaceae (species from the genera Brachystegia, Julbernardia and Isoberlinia in the Miombo woodlands and Colophospermum mopane in the Mopane woodlands), which is considered the second most economically important plant family.

The Miombo and Mopane Ecoregion has an estimated diversity of 8,500 flowering plant species, of which ca. 54% are endemic. In the case of Malawi, flowering plant diversity reaches 6,000 species, alongside other groups such as ferns and mosses. More specifically, the Shire basin is at the cross road of three main regions of plant endemism: the Zambezian, Afromontane and Eastern Forest regions.

Ecosystem services from the Miombo and Mopane woodlands support the livelihoods of 100 M rural people and 50 M urban dwellers, and others beyond the region. A high diverse of provisioning services (e.g. NTFPs, including food, medicines, cosmetics, fuelwood and charcoal, building materials) contribute on average USD 9 billion/yr to rural livelihoods; 76% of energy used in the region is derived from woodlands; and traded wood-fuels have an annual value of USD 780 M. Woodlands support much of the region?s agriculture through transfers of nutrients to fields and shifting cultivation. Woodlands store 18?24 PgC carbon. Cultural services provided by woodlands include tourism and spiritual succour.

The miombo woodlands are under severe pressure resulting in serious negative effects for the millions of rural poor depending on them directly and indirectly. The main drivers are conversion to agriculture, timber extraction (domestic and commercial), fire (Bond et al., 2009) and land clearing for bio-fuels. An estimate of climate change-related risks under the 2 ?C warming scenario in globally significant biodiversity conservation areas highlights the Miombo & Mopane ecoregion as one of the most exposed to temperature changes, and a greater reduction in wet day frequency and seasonal precipitation. Under the 2 ?C scenario, approx. 25% of taxa presently found in priority places such as the Miombo & Mopane ecoregion are at risk of extirpation.

THE NATIONAL CONTEXT

Malawi is one of the poorest countries in the world, ranked 170 of 188 countries on the global United Nations Development Programme (UNDP) HDI. More than 70% of the population lives below the international poverty line of USD 1.90 per capita per day and GDP per capita is just USD 372 (2015). The intra-regional variation of poverty is more pronounced in the south, where some districts have high poverty rates between 50 and 82%, such as Balaka, Mangochi and Ntcheu. Malawi?s wealth per capita, USD 8,409 in 2014, is much lower than the average for other low-income countries (USD 13,629) or for Sub-Saharan Africa as a whole (USD 25,562). Much of Malawi?s wealth is renewable natural capital (43%), mainly cropland with smaller shares contributed by pastureland, forests, and protected areas in 2014.

Population

Malawi?s population is growing quickly, with an estimated population of 18 million in 2017, representing one of the highest population density (over 180 people/km2) in the region. At current rates, it is projected to reach 40 million by 2050, creating an ever-larger demand for agricultural land and natural resources. The combined effect of rapid population growth, natural land conversion into agriculture, unsustainable agriculture and land use practices and climate change impacts are exacerbating current environmental degradation problems . The majority of the population are still rural-based, and it is anticipated that only 20% of Malawi?s population will live in an urban environment by 2040. The Southern Region has the highest density of 162 persons per square kilometer. The majority of rural families depend directly and heavily on natural resources for their livelihoods, in particular farmland for cropping, and woodlands and forests for the provision of NTFP and fuelwood, the latter supplying nearly 90% of national domestic energy needs . Youth (aged 10-35),

who constitute over 40% of the population, do not generally participate in household or community level decision-making processes and their views are unrepresented in wider societal circles. In rural areas, youth and younger households tend to be poorer than those headed by older adults due to limited access to assets particularly land. This typically leaves youth locked in unpaid or subsistence farming.

Gender

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, fertiliser, improved seeds, and mechanization. However, according to ?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.

Land tenure

Land ownership in Malawi falls within four tenure systems: public, private, leasehold or customary. The majority of the people in the rural areas in Southern Malawi have settled on customary land, which is under the jurisdiction of the local chief who has power to allocate land on behalf of the state. Tenure security in customary land is poor and therefore not conducive to promoting long-term investments (lack of evidence of ownership prohibits occupier to use it as collateral for securing financial resources, and limits people?s interest to invest and sustainably manage the resources). The public land includes the gazetted forest and wildlife reserves and land occupied by public infrastructures and these are by law enforced although cases of encroachment and poaching are common. The private land includes the estates and sugar cane plantations where by lease covenant 10% is supposed to be left as or put into forests. The adherence to this and other conservation requirements is not monitored and the private land has suffered massive degradation.

Natural Resources management themes

Climate: The climate of Malawi is continental with two distinct seasons - the dry and wet seasons, which are characterised by large seasonal variations in temperature and rainfall. The rainy season runs from November to April and the dry season from May to October. Shire valley receives the lowest

rainfall (below 900 mm per annum). The mean annual minimum and maximum temperatures range from 12C? to 32C?.

Biodiversity: Malawi has unique and diverse flora, fauna and ecosystems which are attributed to its diverse climate, soils and topography. There are upwards of 6,000 flowering plant species in Malawi, alongside other groups of plants such as ferns and mosses. Alongside the charismatic megafauna that draw many tourists to Africa, such as the hippos and elephants, Malawi has more than 500 species of birds and over 400 species of butterflies. Terrestrial habitats are at a crossroads of three main regions of plant endemism, or phytochoria, on the African continent: the Zambezian, Afromontane, and Eastern Forest regions. Southern Malawi is characterized by the Zambezian vegetation: miombo woodland (with species of Brachystegia, Julbernardia and Isoberlinia) at higher altitudes on escarpments above 400 m, and mopane woodland (dominated by Colophospermum mopane) at lower altitudes, alongside various types of thicket and dry forest. Terrestrial protected areas in Malawi cover 1.8 million ha (21% of Malawi?s land area), including 87 Forest Reserves, 5 National Parks, and 4 Wildlife Reserves. The Shire River Basin boasts some of Malawi?s most iconic protected areas including Liwonde National Park and Zomba-Malosa Forest Reserve ? key attractions for tourism to the Southern region.

Ecosystem services: Malawi?s Miombo & Mopane forests and woodlands play a key role in supporting livelihoods and protecting ecosystem services. Non-timber forest products such as fruits, medicinal products, mushrooms, honey, caterpillars, flying termites and bush meat from the Miombo woodlands are central to the livelihoods of both rural and urban dwellers. Wood fuels dominate Malawi?s energy sector, used by 98% of the population. Forests and woodlands also play a key role in protecting watersheds from erosion, sustain the biodiversity that underpins a large proportion of Malawi?s tourism sector, and make an important contribution to mitigating carbon emissions by sequestering carbon (forest loss and degradation are by far the largest contributors to Malawi?s national GHG emissions). The nine protected areas that are part of the Shire River Basin Management Program store an estimated 80 million tons of CO2e.

The forest sector contributes 6.2% of the GDP, which does not account for the value of NTFP or the enormous informal trade in wood fuel and charcoal. Some 33,000 jobs are heavily dependent on the existence of Malawi's forests, 75% of whom are in household businesses. Approximately 2.8 million households depend primarily on wood fuel for cooking, and the average value of their consumption is almost MK 23,000 per year. Malawi?s forests are divided into four different categories: (i) Natural forests on customary land; (ii) Forest reserves under the jurisdiction of the DF or within protected areas under the jurisdiction of Department of National Parks and Wildlife; (iii) State-owned plantations managed by private companies under concession agreements; (iv) Private forests owned and managed by tobacco and tea companies.

The agriculture sector: the country?s most significant agricultural commodities are maize, cassava, potato, peas, beans, rice, groundnuts, bananas, and millet as food crops, and tobacco, sugar, tea, coffee, cotton oil seeds and grain legumes, as cash crops. The dominance of maize and tobacco renders the country vulnerable to production and market risks related to these two commodities, hence, diversification of production and exports has become a priority. The agriculture sector remains the backbone of the economy and vital for the livelihoods of most Malawians including national food self-

sufficiency and household food and nutrition security. Considering the linkages of agricultural production and processing with input supply, trade and transport service, the broader agri-food system contributes 44% to GDP and generates 74% of employment (NAIP, 2018). Agriculture employs 64% of the workforce, which consists mainly of subsistence farmers. Smallholders account for 80% of agricultural production and 70% of agricultural GDP. Overall, the sector is characterised by low productivity, low levels of improved farm input use, limited private investment, and low mechanisation levels.

Policy context

Malawi?s institutional and policy framework for natural resources management dates back over 20 years and is characterized by an elaborate and diverse set of policies, legal instruments, and institutional arrangements. The most relevant policies and legal instruments are included in the table below:

Theme	Responsible Agency	Main Legislation
Environment	MoNREM[1][1]	National Environmental Policy (NEP) (2004); National Environmental Action Plan (NEAP) ; Environmental Management Act (EMA).
Climate Change	MoNREM	National Climate Change Policy (2012); National Climate Change Investment Plan (NCCIP 2013-2018); National Adaptation Programme of Action (NAPA); National Disaster Risk Management (NDRM) Policy; National Determined Contribution.
Biodiversity, Wildlife & Natural Resources	MoNREM	National Biodiversity Strategy and Action Plan (NBSAP) II 2015-2025; Wildlife Policy of 2000; National Parks and Wildlife Act (1992); National Parks and Wildlife Policy 2000.
Forestry	MoNREM	National Forest Policy (2016); Forestry Act (1997); National Forest Landscape Restoration Strategy (2017); National Charcoal Strategy (2017-2027); National Cookstove Steering Committee Strategy 2018 ? 2020.
Energy	MoNREM	National Energy Policy (2003); Energy Regulation Act (2004); Rural Electrification Act (2004); Electricity Act (2004); Malawi Renewable Energy Strategy; Sustainable Energy for All Action Agenda for Malawi.
Growth and	MoFEPD[2][2]	MGDS III (2017?2020)

Development	OPC[3][3]	National resilience Strategy (2018-2030); Vision 2020
Agriculture	MoAIWD[4][4]	National Agriculture Policy (NAP); National Agricultural Investment Plan (NAIP) covering a five-year period (FY2017/ 2018-FY2022/202); Agriculture Sector Food and Nutrition Strategy ASFNS (2017-2021); Water Resources Act 2013; Agricultural Extension and Advisory Services Strategy; Agricultural Risk Management Strategy; Contract Farming Strategy; Crop Production Policy; Farmer Organisation Development Strategy (2016) ; Fertiliser Strategy (2007) and National Fertilizer Policy; National Livestock policy; National Land Resources Management Policy and Strategy (2000); Food Security Policy (August 2006); National Irrigation Policy; Seed Policy; Special Crops Act (1972).
Nutrition	MoHP[5][5]	National Nutrition Policy NNP (2016-2020); Multi-sectoral Nutrition Policy and Strategic Plan MSNPSP (2017-2021).
Land Tenure	MoLHUD[6][6]	National Land Policy (2016); The Land Bill, 2016; Customary Land Bill, 2016; Physical Planning Bill, 2016; Land Survey Bill, 2016; Registered Land (Amendment) Bill, 2016; Land Acquisitions (Amendment) Bill, 2016; Local Government (Amendment) Bill, 2016; Malawi Housing Corporation (Amendment) Bill, 2016.
De-centralization	MoLGRD[7][7]	Decentralization Policy (1998) and its implementation tool (Integrated Rural Development Strategy)
Socio-economic	MoFEP&D	Malawi National Social Support Program (MNSSP); National Gender Policy (2015); National Youth Policy (2013); Micro, Small and Medium Enterprise (MSME Policy,2012).
Trade & Private Sector Development	MoITT[8][8]	Joint Sector Plan (2016); National Trade Policy (2017-2021); National Tourism Policy (2017), National Culture Policy (2014); National Export Strategy (2013-2018); National Industrial Policy (2017-2021).

[1] Ministry of Natural resources, Energy and Mining.

[2] Minister of Finance, Economic Planning and Development.

[3] Office of the President and Cabinet.

[4] Ministry of Agriculture, Irrigation and Water Development.

[5] Ministry of Health and Population of Malawi.

[6] Ministry of Land, Housing and Urban Development.

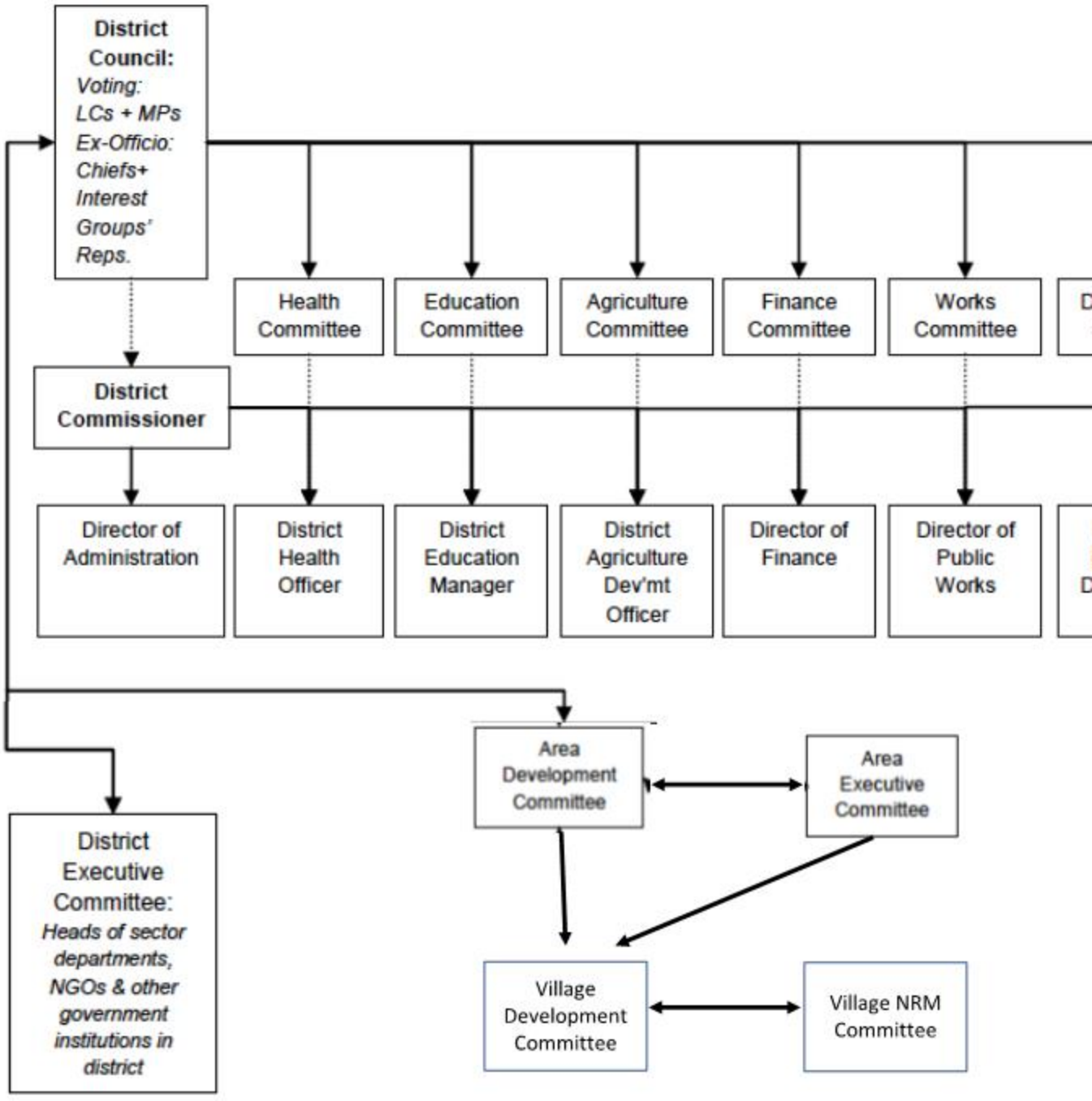
[7] Ministry of Local Government and Rural. Development.
[8] Minister of Industry, Trade and Tourism.

Decentralization of governmental institutions

GoM has given renewed attention to decentralization since local government elections in 2014, by increasing intergovernmental transfers and initiating the devolution of human resources. Central government supports local governments with policy guidance, financial and technical assistance among others. Local governments? role is to re-enforce national policies through local programmes and activities thereby ensuring their subsidiarity and complementarity to the central government. The institutional set-up of the local government system comprises the local governments and its committees at the district level:

? District Council to make decisions on local governance, planning and development at the district level, and consolidation of VLAPs into District Development Plans;
? Council Directorates on sectoral issues (e.g. D. of Agriculture, Environmental Affairs and Natural resources; D. of Public Works; D. of Planning and Development; D. of Education, Youth and Sports; D. of Health and Social Services);
? District Executive Committee (DEC) providing technical and advisory support to the Council, training to the members of the VDC/AED/ADC, coordination of district policies and activities, among other issues. It is a key decision-making technical advisory body with sectoral sub-committees which facilitates the process of district development planning and implementation, including heads of the devolved sector directorates mentioned above, NGOs operating in the respective districts and traditional leaders.
? Area Development Committees (ADC) representing all the VDCs in Traditional Authority (TA) (first sub-division level under the District) and involve in priority setting, community mobilization, project formulation, supervision, M&E;
? Area Executive Committee (AEC) responsible for advising the ADC on all aspects of development for the community within a TA area, project identification and preparation of project proposals for community projects, M&E.
? Village Development Committees (VDC) involved in community priority setting, mobilization, support and M&E, and the formulation of Village Action Plans (VAPs) which set key priority needs from the village, aligned to the national priorities outlined in the Malawi Growth and Development Strategy (MGDS).
? Village Natural Resources Management Committees (VNRMCs) is key to achieving and operationalizing land restoration, with mandate to restore degraded land and other key natural resources management such as forest management, protection of catchments and fragile areas, and soil and water conservation. They play an advisory role to the VDC, and participate in the development of VLAPs.

Decentralized Local Government System



AREA OF INTERVENTION

General overview of the area

During design phase, the project chose to prioritize landscape units including watersheds whose catchment areas are established as forest reserves, to mitigate the impact of the different land uses on

the forest ecosystem services supporting local livelihoods. Because of the increased fragmentation of the forests and the growing encroachment by expanding agriculture, the project will focus on the following type of areas: (i) agriculture buffer zones around forested catchments; (ii) forest reserves, and (iii) the mosaic of agriculture and forestland that connect nearby forest reserves. The project will prioritize the development and implementation of Integrated Landscape Management Plans (ILMPs) in the landscapes where partial assessments on land degradation and household resilience (baseline sites represented with red dots in the figure below) were undertaken during the formulation of the project.

In recognition of the importance of applying resilience thinking, FAO has developed a harmonized Integrated Landscape Assessment Methodology (ILAM) toolbox for application during the formulation of all the Miombo cluster child projects, which built on FAO?s Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP) tool, is linked to the LDN Conceptual Framework (LDN CF), as was inspired by RAPTA. The ILAM tool (which is detailed in Annex N and summarized in the table below) was specifically developed to ensure that the six Southern African IP countries followed a harmonized, systematic approach to baseline assessments, project development and project monitoring.

Box 1. Summary table of the Integrated Landscape Assessment Methodology (ILAM) toolbox

An Integrated Landscape Assessment Methodology (ILAM) toolbox was developed to ensure that the six Southern African countries follow a harmonized, systematic approach to baseline assessments and subsequent project development which is linked to the LDN Conceptual Framework (LDN CF) and associated guidelines for application. The aims of the ILAM toolbox were twofold: i) to enable the systematic assessment of essential baseline information from national to regional/district level, initial site level and household level using an integrated strategic approach; and ii) to provide countries with a toolbox that is replicable to support the future baseline assessment and integrated land use planning, SLM/SFM decision making and monitoring at sub-national level in contribution to national priorities, processes and targets, including LDN.

The essential components of the toolbox consisted of a combination of bottom-up and top-down approaches that support various Modules in the LDN CF as follows:

LDN CF Module	**Toolbox components**
Module A: To enable integrated landscape-level system description (e.g., biophysical, socio-economic, land degradation processes and drivers, existing SLM/SFM, value chains, resilience, etc.).	•Rapid participatory land degradation assessment per land type •Participatory stakeholder analysis •Climate-risk assessment •Policy, institutional and capacity needs analysis •Indigenous Peoples and the Free, Prior and Informed Consent assessment (FPIC) assessments •Household surveys using the Self-evaluation and Holistic Assessment of climate Resilience for farmers and Pastoralists (SHARP) •Value chain analysis and selection
Module B: To determine the frame of reference or baseline values for the three indicators of land cover, land productivity and soil organic carbon*	•Remote sensing (Collect Earth, Trends Earth)
Module D: •Determine existing policies for land governance, land use planning and natural resource conservation and management. •Preparatory assessments of land degradation status, resilience of current land uses, socio-economic context (including gender equality)	•Policy, institutional and capacity needs analysis •Rapid participatory land degradation assessment per land type •Household surveys using the Self-evaluation and Holistic Assessment of climate Resilience for farmers and Pastoralists (SHARP)
Module E: Determine baseline values for LDN metrics	•Remote sensing (Collect Earth, Trends Earth)

* The soil organic carbon indicator, due to its complexity, is derived from the land cover change (traditional approach applied by basically everyone, including the IPCC https://archive.ipcc.ch/ipccreports/sres/land_use/index.php?idp=98 and https://archive.ipcc.ch/ipccreports/sres/land_use/index.php?idp=163, trends.earth and the EX-ACT team). During programme/project implementation, the REM/global project will provide further guidance on how to comprehensively estimate and monitor the SOC indicator

The ILAM methodology enabled a better understanding of direct and indirect drivers of land degradation and resilience, including anthropogenic causes, by:

Identifying and analysing the level of exposure of production systems, livelihoods and landscapes to climate and non-climate hazards

Understanding of the nature of vulnerabilities (sensitivity) of communities and landscapes to such threats.

Target Landscapes:

Justification of landscapes? selection with regards to IP and Global Significance

The project will focus on the dry miombo and mopane ecosystems of the upper Shire Basin in Malawi, and more in concrete in priority landscapes in the Districts of Mangochi, Ntcheu and Balaka. The selection of the target districts/landscapes is based on the following biodiversity, land degradation and climate change vulnerability issues:

Biodiversity and Ecosystems Services: The upper Shire basin belongs to one of the three main regions of plant endemism ? the Zambezian - on the African continent. Although most plant species in Malawi have not yet been assessed for their IUCN Red List status, a Rapid Botanic Survey (RBS) conducted in 2016 in the Shire basin resulted in the identification of about 1,100 plant species, and showed that this region is home to a variety of globally rare and range restricted species (e.g. Malawi near-endemics) which are found in only few other small areas outside the Shire basin. Malawi boast 35 out of the 70 species of birds endemic to the Zambezian region, from which 27 occur in the Shire Basin. It is estimated that at least 30 species of amphibian and 50 species of reptiles occur in the Shire basin, several of them endemic to the basin and a number recognized as threatened by the IUCN Red List. There are a number of unique butterfly species that occur in the mountains of the basin, including many of the 60 endemic species of Malawi.

Approximately 20% to 40% of the households within a radius of 7 km from forest areas in the Shire basin are involved in multiple value chains (e.g. firewood, charcoal, poles, thatching grass, bamboo, reeds, mushrooms, wild fruits, medicinal and cosmetic plants, bush meat and edible insects). In a study of forest products harvested and sold by communities in Mangochi Forest Reserve, it was found that total annual gross values were MK7 billion.

The dry Miombo and Mopane woodlands are well represented in the upper Shire basin, which boast some of the most iconic protected areas (e.g. Lake Malawi National Park, Liwonde National Park) and high value forest areas already included and/or proposed as forest reserves (e.g. the forest reserves of Mangochi, Mvai, Dzonzi, and the proposed Phirilongwe forest reserve). There are key areas for the conservation of the mentioned flora and fauna globally rare and endemic species. The target landscape in Mangochi includes the proposed Phirilongwe forest reserve and buffers Lake Malawi National Park, while the target landscape that spreads over Ntcheu and Balaka districts includes the Mvai and Dzonzi forest reserves.

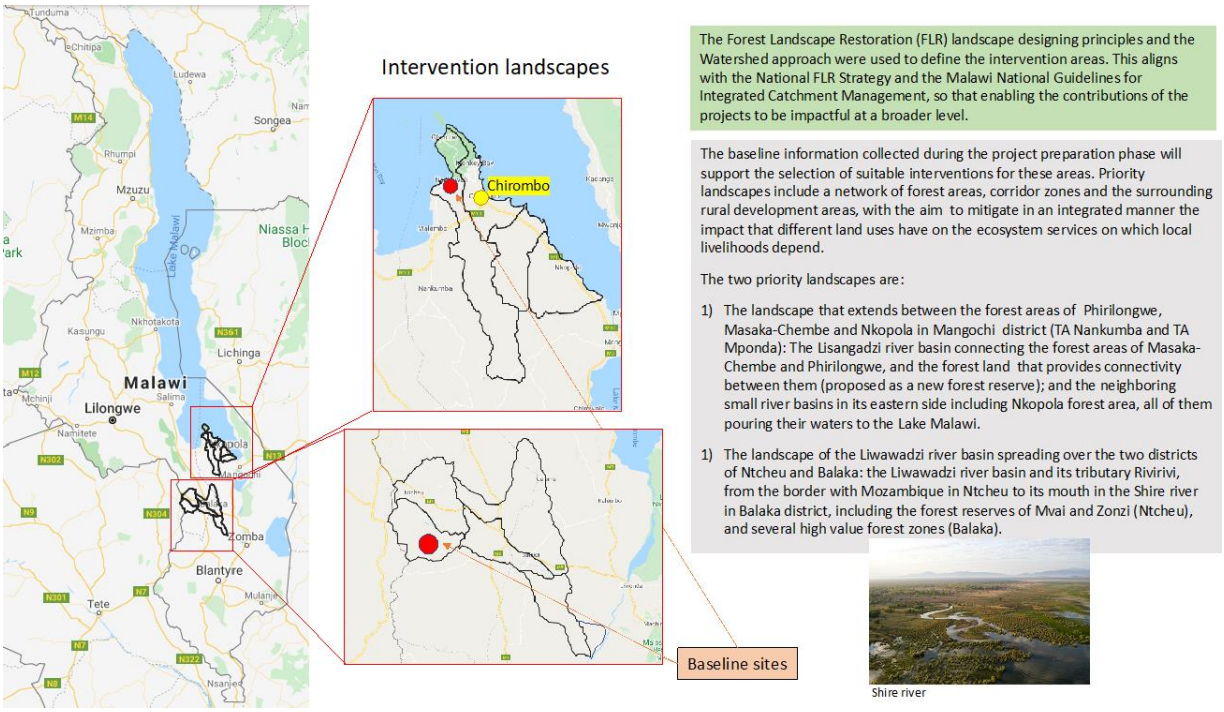
Land degradation: The Malawi Report on Land Degradation Neutrality (LDN) Target Setting Programme has defined among its priority targets to attain land degradation neutrality in the Shire River basin catchment by 2030 compared to 2015 and an additional 2% of the basin has improved (Net gain) . According to the Forest Landscape Restoration Opportunities Assessment for Malawi, the majority of Mangochi and Balaka districts, and hotspot areas in Ntcheu are mapped as opportunity area for applying the FLR technologies of conservation agriculture, forest-managed natural regeneration and agroforestry (CA, FMNR, AF) with an expected higher multiple impact on poverty alleviation, food security and drought mitigation.

Climate change vulnerability: According to the Malawi Hazards & Vulnerability Atlas, the Shire basin is the region in Malawi with highest vulnerability of the human population to multiple hazards. The target district of Mangochi is one of the three most vulnerable districts, and hotspots of very high vulnerability are observed in the other two target districts of Balaka and Ntcheu. High poverty levels, high levels of malaria susceptibility/suitability, higher percentage of female headed houses and higher level of infant mortality, also contribute to the higher sensitivity to climate change of the three target areas.

Target landscapes description

The project areas belong to the districts of Mangochi, Ntcheu and Balaka in the upper of part of the Shire River Basin in southern Malawi. Two landscape areas that extend through the territory of the three districts were selected for the project implementation:

Figure 1. The target landscapes in the upper part of the Shire River Basin



? The landscape of the Liwawadzi river basin. This landscape spreads over the two districts of Ntcheu (upper part of the landscape, spreading over parts of the Traditional Authorities of Mpando, Phambala, Kwataine, Champiti, and Makwangwala) and Balaka (lower part of the landscape, spreading over parts of TA Kalembo, TA Kachenga, TA Sawali and TA Nsamala). The catchment feeds water to the Shire River. This landscape includes the nearby Mvai and Dzonzi Forest Reserves (FRs) in the Liwawadzi catchment area with the agriculture land buffering them in the Ntcheu district, and the mosaic of agriculture land and unprotected forest patches in the middle and lower part of the basin between the Ntcheu and Balaka districts. The landscape covers an area of 318,864.35 hectares, of which approx. 60% of the area is in the Ntcheu district and 40% in the Balaka district.

Figure 2. The Liwawadzi and its tributary Rivirivi river basin target landscape in Ntcheu and Balaka districts

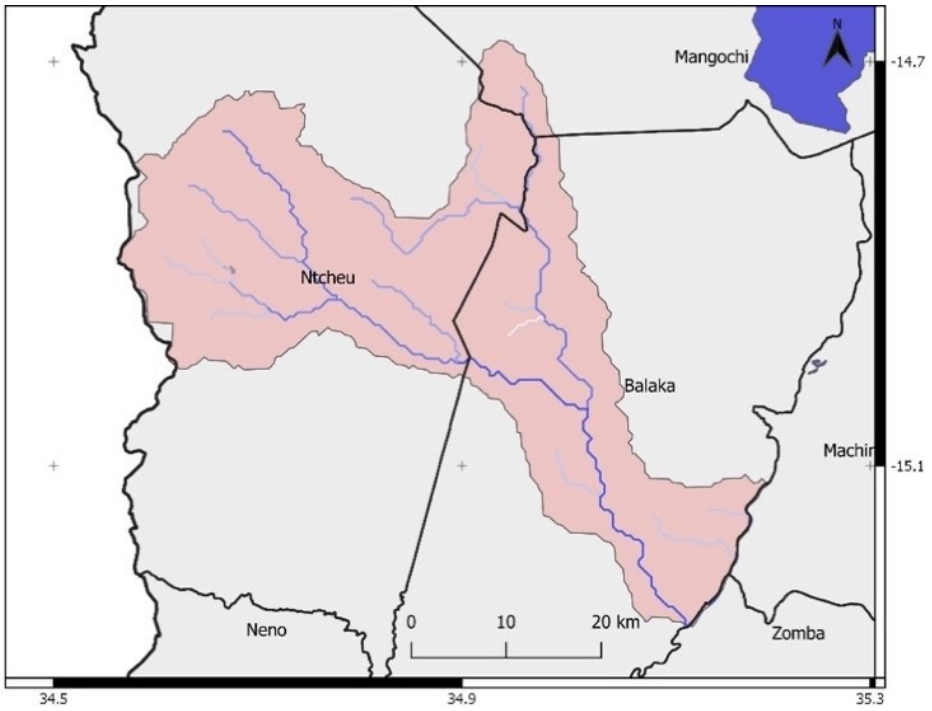
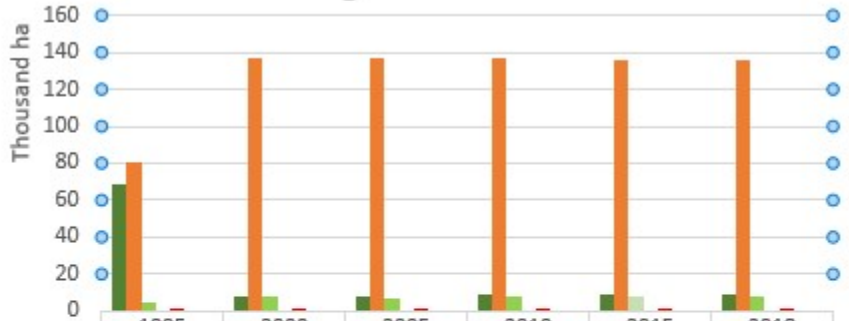


Figure 3. Land Cover – Sub-basin 2 (Ntcheu-Balaka)[15]



	1995	2000	2005	2010	2015	2018
Tree-covered areas	68253.43	7933.79	8100.1	8527.03	8975.84	9315.09
Cropland	80135.42	137179.14	137125.19	136546.39	136088.93	135801.56
Grassland	4090.01	7365.95	7253.59	7405.46	7388.17	7336.29
Wetlands	0	0	0	0	0	0
Artificial surfaces	129.67	129.67	129.67	129.67	155.61	155.61
Other land	0	0	0	0	0	0
Water bodies	0	0	0	0	0	0

? The landscape that extends between the Forest Areas of Phirilongwe, Nkopola and Masaka-Chembe: it covers large parts of the Traditional Authorities (TA) of Nankumba, Chimwala and Mponda in the Mangochi district. The landscape includes four river basins: (i) Lisangadzi river basin between Phirilongwe (upstream) and Masaka-Chembe (downstream) forest areas, and the forest land

providing connectivity between them (ii) three neighboring small river basins in its eastern side, including Nkopola forest area. The four river basins feed their waters to the Lake Malawi. The total surface of the landscape is 101,675 hectares.

Figure 4. The Phirilongwe, Nkopola and Masaka-Chembe target landscape in Mangochi district

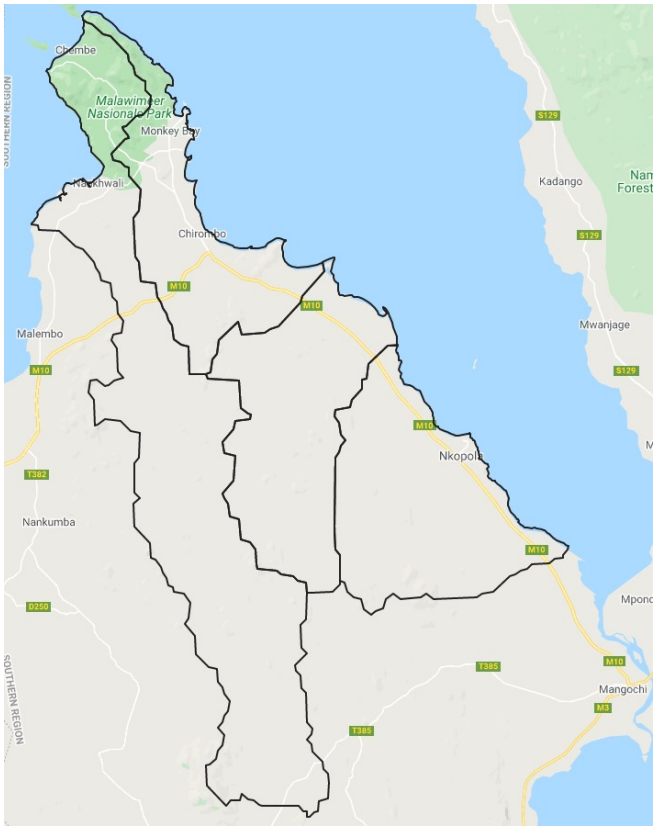
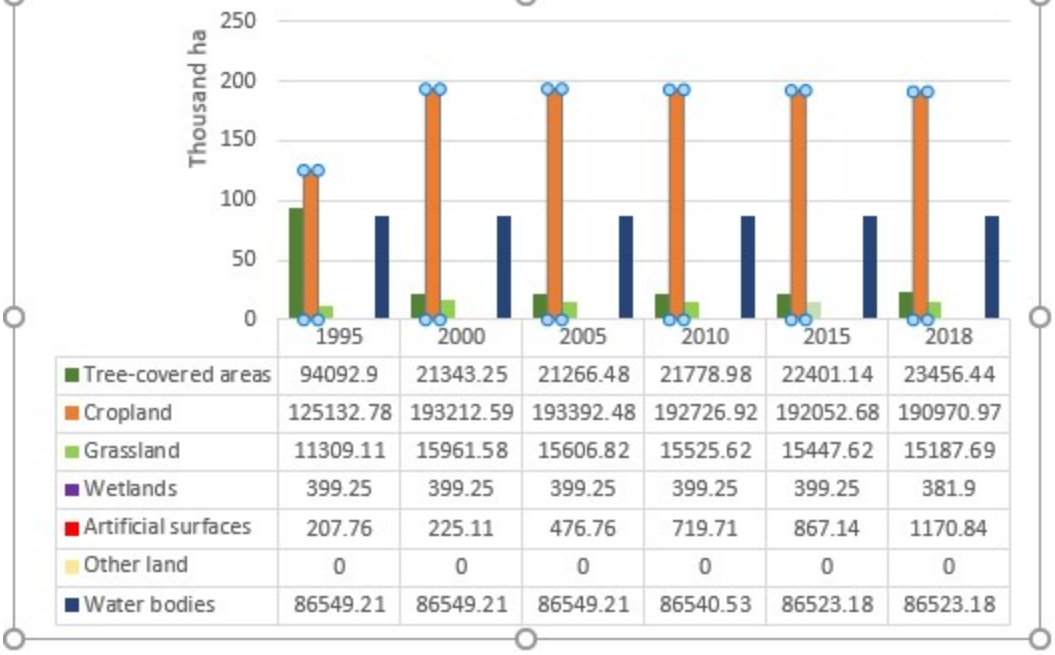


Figure 5. Land Cover – Sub-basin 1 (Mangochi)[16]

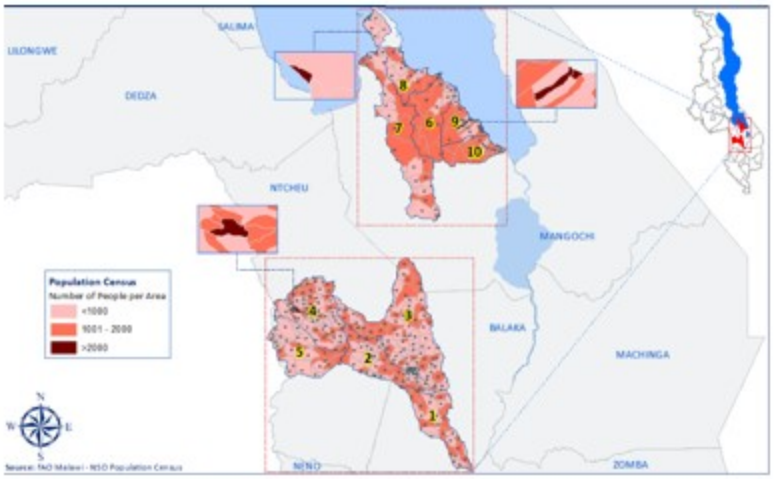


	1995	2000	2005	2010	2015	2018
Tree-covered areas	94092.9	21343.25	21266.48	21778.98	22401.14	23456.44
Cropland	125132.78	193212.59	193392.48	192726.92	192052.68	190970.97
Grassland	11309.11	15961.58	15606.82	15525.62	15447.62	15187.69
Wetlands	399.25	399.25	399.25	399.25	399.25	381.9
Artificial surfaces	207.76	225.11	476.76	719.71	867.14	1170.84
Other land	0	0	0	0	0	0
Water bodies	86549.21	86549.21	86549.21	86540.53	86523.18	86523.18

Socio -economic analysis

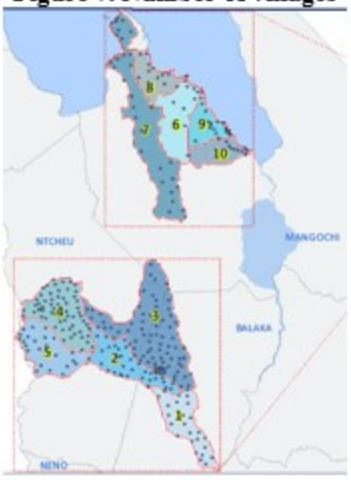
The target landscapes have a total population of 376,910 people, from which approx. 71,000 are urban. The landscape that extends between the Forest Areas of Phirilongwe, Nkopola and Masaka-Chembe has a total population of 99,663 people (22,263 households) living in 215 villages. The landscape of the Liwawadzi river spreading over the two districts of Ntcheu and Balaka has a total population of 277,247 people (64,357 households) living in 713 villages. The percentage of women is slightly higher than that of men, with 50.4% in the Mangochi landscape and 52.6% in the Ntcheu/Balaka landscape.

Figure 6. Total population and households in the target landscapes



Target	Female	Male	HH	Total Population
Target Area 1	18.737	16.940	8.378	35.677
Target Area 2	19.912	18.189	9.199	38.101
Target Area 3	57.729	52.172	25.580	109.901
Target Area 4	37.410	33.302	15.983	70.712
Target Area 5	12.106	10.750	5.217	22.856
Target Area 6	6.028	5.901	2.831	11.929
Target Area 7	20.603	20.382	9.624	40.985
Target Area 8	6.496	6.455	3.229	12.951
Target Area 9	9.179	9.132	4.849	18.311
Target Area 10	7.958	7.529	3.730	15.487
TOTAL	**196.158**	**180.752**	**88.620**	**376.910**

Figure 7. Number of villages



Target	Number of Villages Per Map Target Area
Target Area 1	70
Target Area 2	97
Target Area 3	282
Target Area 4	177
Target Area 5	87
Target Area 6	40
Target Area 7	86
Target Area 8	25
Target Area 9	45
Target Area 10	19
TOTAL	928

Source: FAO Malawi - NSO Villages 1998

The project formulation team undertook a Self-evaluation and Holistic Assessment of Resilience of Farmers and Pastoralists (SHARP tool[1]) surveying a total of 355 households from the target landscapes. Information on different macro-domains - agronomic, economic, environment, social and government ? and people?s livelihoods - household composition, access to resources, agricultural practices, land/forest/water/pest management practices, climate events, social capital, among others - was collected to better understand the livelihoods, socio-economic characteristics, resource management practices, among others, of the project?s potential beneficiaries in the target districts in Malawi. The assessment provided the following results for Mangochi and Ntcheu districts (See Annex N1 for further details):

Household characteristics:

? 66% of the respondents were women and 34% were men. The gender of the household head was evenly distributed among the sample, were 38% were men-led, 32% women-headed and 30% dual-headed[1]. The vast majority of respondents belonged to the Yao and Chewa, the most predominant groups in the sites assessed.

? The livelihoods of 41% of households rely on a single source of income, while 37% count on two and the remaining 21% on three or more (farm and non-farm activities) income sources[2].

Household led by men seem to have a more diversification of income sources than women and dual-headed households.

? Regarding the diversification of agricultural activities, crop and animal production are the main ones of 97% of households and 3% of households respectively. Fishing is practiced by 8% of producers in Mangochi, and none of the other agricultural activities listed in the survey were selected.

? Women and men between 18 and 55 years of age (20% of women and 17% of men) are the ones more largely involved in agricultural activities (crop and livestock) than family members under 18 and over 55. Young and adult women (under 55) are notably more engaged in charcoal production, firewood collection and selling than men in all age ranges.

? 83% of producers described their level of commercialization as being of ?subsistence agriculture? (88% in Mangochi and 67% in Ntcheu). When asking households what the main purpose of production was, they declared that agricultural activities are practiced at small-scale and mainly for both household/on-farm consumption (81% of households). Crop producers dedicate production for farm and household consumption in 15% of the cases (12% in Mangochi and 27% in Ntcheu). Only 5% of farmers in Ntcheu declared to produce exclusively for market purposes.

? *Non-farm income generating activities*: On average, 42% of family members of the households interviewed received income from activities outside agriculture in the last 12 months. Women between 18 and 55 years are the ones that are notably more engaged in nonfarm IGAs than men and women in other age ranges. The **project interventions related to timber and non-timber forest production and processing should target adult women and men between 18-55 years** as this age group is the one with higher involvement in such activities.

? *Main expenditures*: Household income is mostly spent on food (97%) and agricultural inputs as fertilizers (43%) and seeds (24%). Education constitutes another important aspect on which households spend their income (20% of households), although 62% mentioned difficulties to afford school fees and supplies in the last 12 months.

? *Savings*: On average 22% of respondents declared to have saved money after meeting their main expenditures; 17% are women and 31% are men respondents. People usually save money by keeping cash at home (61%), using saving structures (18%), micro-finance institutions (9%) or through banks (6%). About 9% of households use other mechanisms as phone banking to save and access financial services (e.g. micro-lending). **The development of the financial sector for saving, investing and insuring is key to strengthen producers? resilience**.

? *Access to local markets*: When asking producers whether they were able to sell all the products they wanted to in the last 12 months, 4% of them mentioned that they managed to sell only few and 22% sold most of the desired products. However, 97% these respondents (263 HH), mentioned that their main barrier was the limited amount of agricultural produce over the past year. At district level, producers from Ntcheu (52%) seem to have better ability to sell their produce compared to producers in the Mangochi, where only 17% were able to sell any agricultural product. When disaggregating by sex of the respondents, men had greater capacity to sell the desired products compared to female

respondents (36% vs 21% sold at least few). For the farmers selling any agricultural produce, local markets are the main trading place for 85% of them. Traders coming to communities constitute the remaining 15% of buyers. **The project should foster to increase producer?s bargaining power and access agricultural inputs**. **None of the respondents** assessed **is part of a certification scheme** (e.g. organic agriculture, fair trade) to add value to their agricultural production, being inexistence in the area (38%), lack of awareness (54%) and the complexity to fulfil the requisites (8%) main reasons of this. **The project should incentivise the implementation of certification methods to promote and add value to produced goods at local and territorial levels**.

Productive activities:

? *Crop production*: 95% households interviewed are engaged in crop production (either exclusively or in mixed systems with animals). Maize, pumpkin, beans and groundnuts are the main seasonal crops cultivated in the last 12 months. In Mangochi, 93% of farmers produce maize as their main crop, followed by pumpkin (50%) and groundnuts (15%). In Ntcheu, farmers appear to have a more diversified cropping system, planting maize (88%), beans (30%), potato (27%), pumpkin (17%) and groundnuts (14%), among others. On the other hand, 43% of households have grown perennials within their farm systems, being fruit trees as mango and avocado the main ones. Diversification of perennials is wider among farm systems in Ntcheu compared to systems in Mangochi, where fruit trees (mango, guava, bananas, avocado, orange and peach) are commonly observed. **Diversification of crops, including the presence of perennials, help farmers to be more resistant to plant diseases and pests**. As 95% of households rely on crop production for their livelihoods, the **diversification of crops - including high-value crops - would allow them to a) increase revenues from agricultural activities, b) maintain soil-health particularly if planting legumes, c) increase dietary diversity at household level.**

? *Sources of seeds and plants*: Planting material is obtained by different means: 34% is acquired from markets, 33% is sourced by relatives/friends, 19% is produced by farmers themselves and 1% obtain seeds from the government.12% of farmers source their seed from other means. At district level, farmers from Ntcheu seem to have better capacity to produce and reproduce their planting material, as 30% of them declared to obtain their seeds from own-production, compared to 16% of farmers from Mangochi. Conversely, farmers residing in Mangochi appear to have better access to markets for purchasing their seeds, seedlings and/or plants as almost 40% of them acquired them in local shops. Relative, friends and neighbours constituted an important source of more than 32% of farmers in both districts. When asking farmers whether they were able to afford enough seed for each growing season in the past 2 years, limited number of farmers declared to always be able to afford their seed (4% in Mangochi and 13% in Ntcheu), 28% of households mentioned only rarely (30% in Mangochi and 20% in Ntcheu), 19% sometimes and 19% not at all. On average, 18% of farmers saved seeds. When disaggregating by the gender of the household head, female-led families count with less capacity to afford seeds in each growing season. The households with both male and females making decisions appear as the ones with higher ability to ensure their access to seeds and save seeds for each growing season without the need to purchase these.

? *Post-harvest practices*: Post-harvest practices are paramount in order to avoid food-waste, add value and improve the profitability of agricultural production. Practices like good storage systems, food processing as drying and transformation, and having a good transportation can increase the efficiency, climate resilience and sustainability of the food system and its actors. In the last 12 months, an average of 45% of crop producers, mostly women, conducted any practice after the harvest (65% of women respondents and 35% of men respondents). At district level, 45% of farmers in Mangochi packed their products (possibly for later consumption or selling), while farmers in Ntcheu sorted (25%) and cleaned (5%) their harvested crops. Transformation of products was not carried out by any of the families assessed.

? *Land management practices*: Practices to improve land quality have been used by an average of 59% of households over the past 12 months (61% in Ntcheu and 58% in Mangochi). The disaggregation by sex of the respondents shows that 54% of men and 61% of women have used at least one practice to improve the fertility of their land. However, the main practice used is a non-sustainable practice of applying synthetic fertilizers (80% of the sample) to improve the quality of the soil, which in return increase pollution, CO2e emission, and leads to a loss of crop diversification, just focusing on mono-cropping maize. Of the farmers practicing intercropping (12% of the sample), almost 60% of them keeps more than 81% of their land with legume-cereal. This promotes greater yields and product diversification by making more efficient and ecologically-sound use of resources. None of the farmers assessed conduct assessments of the soil and plants to ensure the nutrient addition corresponds to the needs of plants and soil. **The introduction of practices to manage land and soil sustainably** ? e.g. nitrogen fixing legume crops and trees, use of cover crops and intercropping - **has a great potential, particularly to reduce the large reliance on synthetic fertilizers** (in Ntcheu), **and increase productivity**. Likewise, **mechanisms to teach farmers how to assesses use SLM (e.g. through observation) is key in order to avoid detrimental environmental, low productivity, and people?s health impacts in the long-term.**

? *Pests and pest management practices*: Among all the farmers involved in crop production, the 79% of them declared to have been seriously affected by pests or diseases in the past 12 months (78% in Mangochi and 69% in Ntcheu). Women and men respondents were affected similarly (77% men and 75% women). The main pests observed were fall army worm (particularly for maize), grasshoppers, potato blight, and beetles. Among the farmers affected, only 49% took any measure to manage pests, with no differences between women and men. Synthetic pesticides were the main resource used by 63% of farmers in Ntcheu; while more ecologically-sound methods such as the use of traps, repellents (including repellent species), and natural pesticides were adopted by 84% of farmers in Mangochi. **The use of ecological, integrated pest management should be further introduced across the project landscapes units in the target districts to minimize the use of synthetic pesticides**.

? *Animal production*: On average 40% of the interviewed households have kept any animal in their farm systems in the last 12 months. The disaggregation by gender of the household head shows that male-led households are the ones more engaged in livestock rearing/herding than in female headed and in households where male and female are involved in making decisions. On average, 54% of producers described their livestock production systems to be small-scale, 27% of producers identified their production system to be extensive (possibly carried out in communal lands), and 18% semi-

nomadic. The main livestock species kept were poultry (64% of households), goats (47%), pigs (11%) and cattle (6%). Producers usually keep a single breed of the different animal species. women-led households are not involved in cattle rearing.

? *Use of local crop varieties and breeds*: The majority of farmers use local crop varieties (74%) in combination with non-native (hybrid) varieties (38%). However, farmers acknowledge that in the last 12 months, newly introduced crop varieties were better adapted than the local ones (98% vs 36% respectively). Livestock rearers use in their majority local breeds (96%), and only 3% declared to use non-local animal breeds. The local crop varieties used in Ntcheu seem to be better adapted than the ones used by Mangochi farmers. The opposite is observed regarding local breeds that appear to be better adapted to local conditions in Mangochi than in Ntcheu.

Tree production:

? *On-farm trees*: On average 78% of households declared to have trees in their farms (84% in Mangochi and 59% in Ntcheu). 81% of male-headed households are involved in tree production, while this corresponds to 78% and 74% of women and dual-led households respectively. On-farm trees are mostly used for obtaining charcoal (57%), to promote soil fertility (37%), food (23%), to source wood for construction (16%) and to provide shadow to crops (10%). The variety of tree species grown appears to be high as 75% of families keep between 2 and 10 species on their farm. The distribution of these is mostly few and scattered throughout the land (83% of the cases), suggesting the presence of agroforestry. Tree species cultivated in the farm vary across provinces; however, 93% of producers (97% in Mangochi and 73% in Ntcheu) highlighted that the tree diversity has declined in the past 3 years. In Mangochi the main species observed are *Acacia polyacantha* (33% of households) and *Faidherbia albida* (35% of households). In Ntcheu a larger diversity of trees was recognized with the presence of *Acacia polyacantha* (18% of households), *Faidherbia albida* (12% of households), *Pterocarpus angolensi* (8%), *Bridelia micrantha* (8%) and others (35%), such as *Sclerocarya birrea (Mfula)*, *Carissa edulis (Khalagongoni)*, *Brachystegia speciformis (Tsamba)*.

? *Forests:* Forests are accessed by 81% of producers on average, 77% of them in Mangochi and 93% of them in Ntcheu. 88% of households mentioned that forests were located within a 5 km radio from their homes. Almost all respondents (99%) acknowledged that the forests they have access to have been degraded in the last 3 years, being charcoal and the use of unsustainable practices to extract wood the main causes of it. Although forest reserves are deemed protected and forest guards protect the forests from unauthorized extraction of trees, it was noticed that efforts to protect the forest are not effective due lack of forest officers to manage the entire forest for instance forest guards are not enough to monitor the entire forest area.

? *Tree products*: Forest trees are used of sourcing charcoal (95%), timber for construction material (48%), food (11%) and medicines (4%), among other minor uses. The introduction of sustainable forest management practices is urgently needed in the communities assessed. This is key to revert and prevent the degradation processes observed in the forest areas. Agroforestry practices at the farm level can be further incentivized, particularly for the production of timber for charcoal and construction material. The sustainable use of non-timber forest products (e.g. honey production, wild fruits/vegetables, fibre,

medicine) can be further explored as part of the project, which can positively contribute to income generation and preservation of forest resources.

Value chain development:

? Several missions and consultations (both physical and by phone where key informants were not physically available) were undertaken by an FAO Agribusiness Office and a national expert on value chain development. A number of key stakeholders (e.g. local producers? organizations, district public departments, village-level committees, NASFAM, national buyer companies and retailers, research organizations, NGOs, National Forestry and Agriculture departments, Ministry of Industry, Trade and Tourism, Malawi Bureau of Standards, International Aid Agencies) who are listed in the *Stakeholders Engagement Matrix* (Part II Project Justification, Stakeholders Chapter*)* were consulted. A thorough consultation process was undertaken to select priority value chain commodities for the project, based on ecological, social and economic criteria and ranking system for all Miombo & Mopane countries that are part of the SFM-DSL IP, including multi-stakeholders? workshops, focus groups? discussions, and meeting with key informants. Discussions between the formulation team and the target stakeholders involved in the production and marketing of agricultural and forestry products led to the selection of seven neglected and underutilized species (NUS) and non-timber forest products (NTFPs): pigeon pea, sorghum, baobab, moringa, honey, mushrooms and fuelwood. These products have high potential to expand production in the target landscapes due to: (i) their adaptability to climate change (identified as more adaptable in the climate change scenarios for southern Malawi); (ii) their presence and agro-ecological potential; (iii) their high value in terms of livelihoods? diversification and food security; (iv) the existence of moderate production marketed locally and at a national level through commercial relations between producers and buyers operating at national and international level. Additional NUS and NTFPS with high potential for green value chain development in the target areas (e.g. *Strophanthus kombe* and *Ziziphus mauritiana*) will be further investigated and, if the target beneficiaries identify more attractive options, the PMU will propose their inclusion in the work plan of this component. The assessment of the targeted value chain commodities led to the following conclusions (for further details, see Annex N2):

? Pigeon pea has very attractive market opportunities for the target farmers in this project. However, the linkages between local producers and the large processors are extremely weak, mainly due to the high transaction costs of sourcing from a large number of scattered, un-organized smallholders that the buyer companies cannot afford. In order to benefit from this market opportunity, local producers need financial and capacity development support to: work together as effective producer organizations and take advantage of negotiating power and better access to the market thanks to group marketing; increase production and productivity; increase business management skills, financial literacy and development of bankable projects, entrepreneurship, market research and negotiation. The value chain assessment identified the same type of capacity development need in all value chains.

? Sorghum has a more limited domestic market, although big trading companies in Blantyre export sorghum mainly to Botswana, Zambia and Zimbabwe. The Indian-owned agriculture commodity trading company *Export Trading Group* (ETG) that has operations in Malawi, among other

African countries, is developing a new sorghum-soy blend formula to be launch in the next 2 years, which will significantly increase the domestic demand for sorghum.

? There is a large and unmet domestic demand for honey, which represents a very attractive market opportunity for producer groups in the target landscapes. However, as for the other value chain commodities, financial capacity development support is needed to reach an acceptable level of quality and reliability of supply. The large buyer company Honey Products Ltd produces and commercializes certified honey, which enables access to higher value domestic markets, such as hotels and supermarkets, and to export. The company has benefited from business accelerator opportunities, becoming environmental and social corporate responsible, linking beekeepers through a chain of micro-entrepreneurs who aggregate and deliver honey to the factory. The company could out-scale its operations to the target areas, especially in the light of its expansion plans. The project could also benefit from the existing opportunities for innovation in honey production: the beekeeping software Block Chain developed by the US-based company Hive Tracks, which creates an authenticity profile and can validate that social- and environmental-sound practices have been followed, could be introduced in the target areas by promoting a Honey Products Ltd and Hive Tracks partnership.

? Zankhalango Association, based in the target landscape in Mangochi, is attempting to apply organic certification to baobab products in order to regain access to the international market, as a joint venture with the Lilongwe-based buyer company Naturals Ltd. However, as previously mentioned, financial and capacity development support for both Zankhalango Association and Naturals Ltd (e.g. business incubator and accelerator programmes) is needed to reach an acceptable level of quality and reliability of supply.

? The prospects for moringa products could be good, for both the nutritional security of local communities in the target landscapes, and for the domestic and export market. Moringa Miracles Ltd, based in Blantyre, is the main buyer company that sources moringa seeds from outgrowers. Although the company has benefited from a Land Accelerator programme, and developed a good environmental and social corporate responsibility policy, it still requires support to improve its financial and managerial challenges.

? The production of sustainable charcoal from the giant bamboo has great potential to reduce pressure on natural forests for the production of charcoal from traditional tree species, while also providing alternative income opportunities to local communities in the target areas. Initial trials by the farmer organization LOMADEF (Lipangwe Organic Manure Demonstration Farm) in Ntcheu district, have shown promising results but further technical and capacity development support is needed to ascertain the technical and economic feasibility of charcoal made from bamboo, narrowing the price gap between traditional and sustainable charcoal. The project invest to support community groups in the establishment of woodlots of natural and naturalized tree species, including giant bamboo, could have a very positive environmental impact in the longer term.

? A number of additional crops and NTFP could provide communities with income generating activities throughout the year in order to improve their livelihoods in a sustainable manner and reduce their dependence on forest related activities, particularly the production of charcoal. These include micro-irrigation horticulture, potato, cultivated mushrooms (as opposed to wild ones), hemp and the

NTFPs masau (*Ziziphus mauritiana*) and kombe (*Strophanthus kombe*). The government through Environmental Affairs Department has already established Access and Benefit Sharing guidelines and is piloting community protocols to allow communities enter into Mutually agreed terms with would be buyers that can enhance their livelihoods.

Access to resources, environment and ecosystems:

? *Access to land*: Access to land is the obvious precondition for every agricultural producer to conduct his/her activity, especially when this is the main livelihood option. On average 32% of producers have private land, while 52% have access to customary land for agriculture. Fourteen percent of households rely on rented land to carry out their agricultural activities. Producers in Ntcheu seem to have better access to private land (48% vs 27% in Mangochi), while producers in Mangochi have larger access to customary agricultural land than households in Ntcheu (57% vs 36%). When asking respondents about the ownership of private land, the largest share of it is owned by women (65%= aggregation of 57% ?only you? female respondents + 8% ?your spouse? in male respondents), while 17% of men (aggregation of 6% ?only you? male respondents + 11% ?your spouse? in female respondents) have the ownership of their land. Adult women and men jointly own an average of 8% of land. Rented land always requires payments (e.g. money, in-kind) for its use and 4% household using private land have been requested some in-kind payment. The rest of land types accessed did not require the payment of any fee for their use. Regarding the land extension of land owned by farmers, 56% of producers own less than 0.5 hectares and 26% between 0.5 and 1 ha, meaning that the households here assessed are smallholders. Only 3% (3) of households surveyed own more than 3 hectares. At the district level, producers in Mangochi own larger extension of land (22% own 1 ha or more) than producers in Ntcheu where only 10% own 1 ha or more to carry out their agricultural activities. Although ownership among women is larger, the disaggregation of the data by sex of the respondents shows that men have ownership to larger land extension than their female counterparts. While 27% of men own 1 ha or more, only 15% of women own more than 1 ha. With respect to the rights to use land among household members, over 60% families declared that everybody in the household has the right to use customary agricultural and forestlands. In 20% of the cases regarding forestland, only women were accessing these. This information suggests that when targeting interventions for forest management, the inclusion of women is paramount, as they appear to be important users of these resources.

? *Access to water*: Households rely on a single source to access water for household consumption (e.g. cooking, drinking, cleaning) and agricultural production. Boreholes and water streams are the main source for household use. Eighty-seven percent declared they take less than half hour to go to the water point and collect water. Over 60% of respondents mentioned that water availability has remained the same, and 41% that the availability has decreased in the past 3 years. Farmers rely on rivers and water streams for irrigation, and 88% of them take less than 30 minutes to reach the source. Almost 70% of farmers mentioned that water quantity has reduced. Water streams and boreholes are also an important water source for livestock producers, being these sources reachable in less than 30 minutes (78% of households).

? *Water management practices:* One-fourth of producers have taken any action to preserve the quantity of water for their household and agricultural needs. At district level, a large difference is

observed regarding the adoption of such practices: Fifteen percent of producers in Mangochi and 55% in Ntcheu have adopted any water conservation measures. By gender of the household head, dual-led households appear to be more involved in the practice of related to water preservation compared to female and dual-headed counterparts (37%, 20% and 19% respectively). Further exploration is needed to understand the drivers and barriers to adoption; however, access to knowledge is advised to ensure constant access to clean and enough water for household consumption and agriculture production. Among those using any water conservation method, the use of water retention ditches (70%) and watering early in the morning/late (23%) at night are practiced most widely used in the sites assessed. The use if mulches is also practices adopted by about 13% of farmers, while water harvesting is only practiced among 3% of the sampled households. Terracing and localized irrigation are also used among 11% and 9% of producers in Ntcheu

? *Energy sources*: Fuelwood represents the main energy source for household consumption: of 93% of respondents in Mangochi and 86% of respondents in Ntcheu. People using fuelwood and charcoal (348 households, 98% of the sample) for either household or agriculture, these are mostly obtained in an unsustainable fashion: from forests with unlimited extraction (49%) and tree pruning (31%). These results suggest the urgent need to implement strategies to better managed natural forests to avoid deforestation and unrestricted extraction not only of charcoal and fuelwood, but also for other NTFP.

? *Landscape value for land users:* The variety of elements - when natural - surrounding the landscape, positively contributes to the conservation of biodiversity at the levels of ecosystem, species and genetic resources of both crops and livestock. This also helps reducing the risk of crop and livestock loss due to pest and diseases, as these elements provide a buffer against these. In the assessed areas, landscape surrounding the plots of farmers appears to be varied; however, cropland is predominant surrounding 92% of the farmers? plots. Forests represent 19% of the landscapes, and water bodies 15%. Other features as grasslands, plantation or protected areas are present but in a minimum proportion. Degraded lands are also observed in 2% of the cases.

Nutrition and food stocks:

? *Dietary diversity:* The household dietary diversity score (HDDS) aims to reflect the economic ability of a household to access a variety of food items. Overall, the HDDS of 62% of households are placed in level 1 (1 to 3 food items consumed), a low dietary diversity. Mangochi households, where only 34% of them consume at least 4 different food products on a daily basis, present a lower consumption of food items compared to household residing in Ntcheu (50% consume at least 4 different foodstuff). When disaggregating by sex of the respondents, men present a larger diet diversification than women (51% of men consumed more than 4 food items, while this is the case for 31% women). Corn and other grains are consumed alike in both districts (50% of households have consumed this over the past 24 hours). Vegetable and tubers are largely consumed by 83% and 40% of families in Ntcheu respectively and compared to families from Mangochi. Also, prevalence in the consumption legumes and fat-rich products is observed among Ntcheu producers. On the other hand, fruits (57%) and fish (42%) are mostly consumed by households residing Mangochi compared to families from Ntcheu. Legumes and pulses, and sugar and honey were consumed in 23% of households. Less than 3% of families acknowledged the consumption of meat, eggs and dairy products.

Regarding micronutrient content, 18% of households (64) consume oil rich foods, while 38% of the sampled households consume iron rich foods (i.e. organ meat, flesh meat, and fish).

? *Food stocking*: Most of the respondents declared to stock food in the last 12 months, mostly right after the harvest season (62%). Around 9% of farmers managed to storage agricultural produce throughout the year, and 26% did not manage to do so. Farmers located in Ntcheu district seem to be more proficient at storing food throughout the year compared to their peers in the Mangochi district (24% and 4%). This can be related to the larger presence of granary/storage facilities at home in Ntcheu households (49% compared to 21% in Mangochi). Nonetheless, the presence of cereal banks at the community level seems uncommon in both districts, as only 2% of farmers acknowledged their access. The project could promote the establishment of cereal banks and communal food storage facilities to improve the preservation of seeds and food and ensure community members? access in times of need.

Social capital, access to information and government programmes:

? *Community cooperation*: When asking producers about the presence of any types of problems at the community level the required collective action, 87% of them acknowledged their presence (92% in Mangochi and 72% in Ntcheu). 70% of farmers (247 households) mentioned to have customary mechanisms in their communities to address such problems (72% in Mangochi and 63% in Ntcheu). Elders committees (50%), water resources management (34%) and conflict resolution committees (25%) are the mechanisms recognized by households to address community issues. Land committees (3%) and other mechanisms (9%) are also used by community members.

? *Inequality:* When asking participants if they felt that some households in their village/area have different economic or political opportunities than others linked to their religion or ethnic/minority group, 83% declared not to have noticed such inequality problems (86% in Mangochi and 71% in Ntcheu). 15% of household in Ntcheu district recognized the presence of few household experiencing segregation linked to their religion or ethnic background. Moreover, of the total respondents stating a situation of inequality (61 households) in their communities, 36% of them mentioned that this situation has slightly worsened and 11% remarked inequality been worsened a lot in the last 3 years. Only 15% declared the situation had improved (i.e. reduced inequality) and 13% saw no change.

? *Group membership*: Less than 30% of respondents mentioned to be part of a group in their community (28% in Mangochi and 24% in Ntcheu); of which 19% are men and 31% are women. Groups for accessing credit (36%), funeral-related (19%) and water users (11%) are the ones where most of the respondents are a member. Although existing, watershed management, crop and animal producers? groups have little rate of participation among the communities assessed. Participation in schools for agricultural producers and forest users is scant among the communities assessed. Their establishment in the project areas could mean an opportunity for farmers to access information on sustainable practices on resource management, transformation and marketing, while strengthening the social capital and bargaining power. The main reasons for people to join these groups are to improve their access to facilities in 36% of the cases (e.g. cereal banks), to inputs (24%) and for advocacy (9%). Other reasons (8%) comprised the enhanced access to loans, to receive social services and to support bereaved family (e.g. funeral groups). Only 3% has accessed groups to receive training / capacity building.

? *Access to information*: On average 58% of producers claimed to have access to information on future weather and natural events (62% in the Mangochi and 52% in Ntcheu). Women respondents appear to be disadvantaged in accessing this type of information with respect to men respondents, as 49% of women compared to 75% of men have accessed weather forecasts in the past 12 months. Of the ones accessing weather information, 85% of farmers retrieved information on extreme events, seasonal weather forecasts (for long rains or short rains) was provided to 83% of smallholders, and 80% obtained information on start of the rains. Only 57% of farmers received information on upcoming pest outbreaks and management. The relatively low access to this type of information has produced a higher exposure to pest and diseases of crop systems in the assessed districts as seen in the shocks section. Producers located in the Ntcheu district appear to have more information available to predict weather and natural events than those residing in the Mangochi district. Regarding access to adaptation practices, 37% of producers declared to have access to it (same in Mangochi and Ntcheu). Women respondents seem relatively advantaged in accessing information on adaptation practices compared to male respondents (39% and 33% respectively). The project could serve as a mechanism to provide information on crop and livestock production and management, post-production handling and adaptation practices overall, which jointly would allow producers to better adapt to changes in climate and produce more sustainably.

? *Government policies*: Only 11% of respondents (39) have accredited their awareness of any governmental policies or programmes on climate change or sustainable agriculture (9% in Mangochi, 19% in Ntcheu). These were mainly dual-headed households (22%). Limited knowledge of the existence of these programmes / initiatives was noticed among both female-led families (9%) and men-led households (4%). Of the ones aware, only 23% participated in such programmes, and mainly benefited from training and cash transfers. 17% of families from Ntcheu also received other types of support from these public initiatives. Regarding the presence of any forest management initiatives at community level (e.g. afforestation of reforestation projects), on average 28% of producers accredited them (27% in Mangochi and 29% in Ntcheu). The objectives of these initiatives varied among both districts. In Mangochi, the main aim of these initiatives were to diversify landscape to reduce risks (e.g. climate, diseases). In Ntcheu, the main objectives were the provision of environmental services (20%), including cultural services (i.e. allowing the community to see the trees) in 24% of the cases, and to diversify landscape for climate risk reduction (28%). The initiatives in Mangochi also had other objectives recognized by 14% of producers.

Root causes of landscape degradation and barriers

Climate change impacts

The change of climate has already been observed in southern Malawi with an increase of the average temperature of 0.21?C/decade over the last 20 years. Climate projections provide an additional increase of 1.5?C more by 2040. The largest increase of temperature is projected to take place during the early summer months, just when planting begins and crops germinate. Rainfall patterns are already shifting with later onset and earlier cessation causing larger dry periods, a trend expected to continue into the future. Average monthly rainfall is expected to decrease during the months of December and January, and increase during the months of February, March, and April. However, reductions in total annual

rainfall is not necessarily predicted for all areas?in many areas, heavier rains may make up for the shortfall in rain day frequency. Heavier rains, less predictable rains, hot spells, and extended dry periods, already contribute to making farmers? decisions regarding planting and harvesting more difficult. The combination of ongoing changes in temperature and rainfall patterns with maladaptive agriculture and forest management practices, make forests more vulnerable to wildfires, reduces food supply for domestic and wild animals, and increases soil water evaporation and erosion problems, contributing to land degradation on a large scale in Malawi.

An evaluation of the impacts of the natural hazards using probabilistic risk analysis[1] reported that Malawi loses on average 4.6 percent of the maize production (nationally) each year due to droughts, and 12 percent to flooding in the southern region, where about one-third of Malawi?s maize is grown. These losses equate to 1.7 percent of the gross domestic product, equivalent to almost US$22 million in 2005 prices. Economic losses are much higher during extreme droughts; for example, during a 1-in-25 year drought experienced in 1991/92, GDP contracted by as much as 10.4 percent. Droughts exacerbate Malawi?s already high levels of income poverty, causing a 1.3 percent increase in poverty, which rises to almost 17 percent during a 1-in-25 year drought (this is equivalent to an additional 2.1 million people falling below the poverty line).

Higher frequency and intensity of droughts are compromising the most important staple food in Malawi ? maize ? giving rise to more favourable conditions for other neglected and underutilized crop species (NUS) that are more resistant to drought. This is the case of sorghum, which may begin to replace maize as the main staple crop due to its drought tolerance, albeit with a moderate potential for reduced productivity due to the increased temperatures and post-harvest handling problems due to fungal growth. Pigeon pea, the third most important legume crop in the country, is another NUS crop tolerant to low fertile soils, drought and high temperatures, whose production will likely increase with climate change, especially in southern Malawi.

Adaptive capacity of rural communities

Rural communities are finding that their agricultural lands, often degraded through poor husbandry and lack of access to fertilizer, are being further degraded due to the growing trend of soil leaching by heavy rains and floods. In response to the changes they have already observed, farmers have been altering the dates for planting their crops and making use of selected seed for shorter cycle crops. Some are clearing land and planting crops closer to streams and lakes. Farmers are increasing their use of conservation agriculture techniques to conserve soil moisture, as well as investing in dry season irrigated vegetable gardens. Many are adopting intercropping and diversifying their crops in their efforts to cope with the impacts of climate change, most rural households are investing more time and effort in harvesting, producing, and marketing charcoal and firewood. Other alternatives are NTFP and timber harvesting.

Land degradation

Land degradation is a continuing challenge faced by Malawi with over 60% of Malawi?s land affected. It affects the livelihoods of millions of farmers and costs the equivalent of 6.8% of the country?s GDP.

It is caused by unsustainable land management practices and is exacerbated by increasing demographic pressures, climate change, and poorly designed agricultural support policies. It also has major impacts on a number of other sectors?including water resources, energy generation, agriculture, and fisheries. Evidence of the severity of land degradation in Malawi shows estimated costs of USD 244 million per year (in 2007 prices) over 2001?2009. This is equivalent to about 6.8% of the country?s GDP. This figure becomes even larger when costs associated with sediment management to maintain hydro-power development are factored in.

Land degradation ?hot spots? cover about 41% of the land area in the country, of which the Shire River basin is the most affected. The Mangochi district in the upper catchment of the Shire River basin experiences the highest costs of land degradation and inaction nationwide, with an annual cost of USD 27 million**[2].** Increasingly, agriculture expansion has occurred in fragile upper forested catchments over recent decades, albeit at a slower rate since 2000. Soil erosion and nutrient depletion are major forms of land degradation that are reported to affect more than 60% of the entire land area. The average annual national soil loss rates in 2014 was 29 tons per hectare. Chemical land degradation, including soil pollution and salinization/alkalization, has led to 15% loss in the arable land in Malawi in the last decade alone. Unsustainable agricultural intensification has also taken place along riverbanks and in wetlands. This degrades natural habitats, exacerbates downstream flooding, and increases exposure to weather shocks. In addition, the impact on forests has been substantial. **The condition of the land, and its associated erosion and flooding, severely affect both the landscapes and the livelihoods of local communities.** There is also a strong correlation between areas with highly degraded land and those with a high incidence of poverty.

Biodiverstity Loss and Loss of Ecosystem Services

The most immediate threat to biodiversity in the Shire Basin is the severe degradation and loss of critical habitats, particularly miombo and mopane forests and woodlands, mainly due to land conversion into agriculture and unsustainable exploitation of a variety of forest products ? notably fuelwood - for domestic and commercial use. The rate and scale of this destruction has meant that important elements of the country?s biodiversity are now confined to a relative small, and diminishing, set of protected areas, including forest reserves. A rapid increase in human population is the primary cause of increased demand for agricultural land and fuel biomass. Habitat fragmentation has also a major effect in biodiversity loss, even if the overall area of natural habitat coverage seems sufficient, preventing the connection between small populations of the same species and destroying fundamental corridors for the movement of large mammal species. Tree species richness, diversity and abundance all have declined with increasing human disturbance in many miombo and mopane areas. A number of defining miombo and mopane species, such as *Colophospermum mopane, Pterocarpus angolensis*, species from the genera *Brachystegia, Julbernardia and Isoberlinia*, are overharvested and almost absent from regenerating areas due to maladaptive practices. Some species are already listed as near-threatened on the IUCN Redlist of Threatened Species ? *Pterocarpus angolensis, Prunus africana, Dalbergia melanoxylon* ? although it should be noted that information on the conservation status of Miombo and Mopane tree species is still scarce as most secies have not yet been assessed globally. In Malawi, the defining species of the Mopane woodlands ? *Colophospermum mopane* ? is under very

strong pressure which has resulted in its scarce presence in many areas of its distribution. According to climate change modeling[3], range contraction is predicted ? and in some cases already observed ? for a number of species, such as Afzelia quanzensis, Albizia antunesiana, Brachystegia microphylla, B. spiciformis, B utilis, Cryptosepalum *exfoliatum, Julbernardia globiflora, Pericopsis angolensis* and *Pterocarpus rotundifolius*. Invasive species also affect natural habitats by competing with species naturally found there, but also put agricultural productivity at risk. The Shire River Basin?s crops have suffered devastating impacts from cassava mealy bug, cassava green mite, larger grain borer and spotted stalk borer.

Given the economic and social importance of the Shire River basin for economic growth, poverty reduction, and food security, it is critical to address the root causes of land degradation, especially in the upper catchment districts. The Shire River Basin is being subjected to a number of environmental pressures influenced by the below underlying factors driving land degradation in the target districts are:

? **Population growth**: The combined effect of rapid population growth, natural land conversion into agriculture, unsustainable agriculture and land use practices and climate change impacts are exacerbating current environmental degradation problems.

? **Growing demand for agricultural land**: population pressure leads to expansion of agriculture into fragile areas and reduction of fallow periods in the cultivated plots

? **Growing demand for biomass fuel**: It was estimated a total use of natural forest wood of about 13 million m3 in 2010 mainly for energy, whereas sustainable yield nationwide for miombo woodlands in 2010 was estimated to be 7 million m3. Charcoal consumption is doubling every 12 to 15 years, and the cultural preference for cooking with charcoal for certain foods remains in households with main electricity connections. Tobacco is dried by burning natural woods, an activity that was estimated to cause 26% of the country's deforestation in the early 1990s.

? **Insecure land tenure**: Insecure land tenure among smallholders, especially women, may act as a disincentive to investment in high value crops or sustainable agricultural practices and technologies, and results in lower levels of productivity and land degradation[4]. Female-managed plots are 25% less productive than those managed by males, constrained by restricted access to labour force, suitable equipment and inputs. Similarly, a growing population without proper land management will exhaust the capacity of land to provide ecosystem services[5]. It is also argued that population pressure leads to expansion of agriculture into fragile areas and reduction of fallow periods in the cultivated plots[6].

? **Unsustainable land management practices**: Land degradation is mainly caused by unsuitable land uses and inappropriate land management practices (such as slash and burn agriculture, timber and charcoal extraction, deforestation, overgrazing), deforestation and uncontrolled fires. (only 12% of cultivated land has ridges on contours, which is the recommended method). Lack of multi-sectoral landscape planning results in conflicts between stakeholders and land uses, and prevents sustainable land use practices. The no consideration of climate change impacts and trends at the landscape level, and the limited access to resources (e.g. knowhow, bylaws, technical support, finance) on climate-smart restoration, management and protection interventions, magnifies the anthropogenic causes of land degradation in the agriculture and forest systems.

? **Gender imbalance constraints**: A baseline gender and social assessment study conducted in the shire river basin to identify and assess potential economic, social, and gender differences and inequalities indicated that they affect land use practices; access, control, and/or use of natural resources; or the decision making of key actors, such as smallholder farmers and other natural resource users[7]. There is concern that gender unbalance in parts of the Shire River Basin contribute to soil erosion and land degradation. Female-headed households have insufficient resources (especially cash and male labor) to sustainably manage their land?for example, through conservation agricultural methods, including adequate organic and chemical fertilizer applications. Moreover, within the matrilineal system, although women hold the land rights, men make most of the agricultural decisions which are usually not linked to managing farmland sustainably?including addressing soil erosion challenges?because they have weak tenure security and are expected to leave the village in the case of divorce or the death of the wife. **Identifying and addressing women?s and men?s needs with gender-environment data are critical elements to ensuring the success of environment and natural resource**.

? **A weak policy environment and weak institutions**: Major challenges towards a conducive policy environment for the implementation of LDN in Malawi are: (i) lack of cross-sectoral coordination and cross-compliance; (ii) lack of implementation and weak enforcement of existing policies, mainly because these policies are developed without accompanying implementation frameworks; (iii) lack of capacity and sufficient human resources, mainly at the district and local levels; (iv) insufficient and inadequate financing instruments often supporting maladaptive natural resources management practices. Enforcement of laws designed to SLM, SFM and forest protection is weak and ineffective. On the one hand, prevailing regulations and procedures are complicated and not widely understood at community levels. Inadequate communication of the law generates uncertainty about which regulations apply to the natural resources management. On the other hand, the scarce number of extension workers have a limited knowledge/ understanding of legal and policy frameworks, therefore limited capacity to raise awareness and inform producers and users. Such uncertainty over regulations and responsibilities creates space for corruption, and this undermines the ability of formal mechanisms to effectively govern the sector and protect forest resources.

? **Limited access to markets and rural finance**: Access to sustainable finance is a major barrier for agriculture and forest producers to apply SLM and SFM. Challenges identified at project design include: (i) lack of investments in equipment and production; (ii) lack of training and technical support on business development, sustainable production, processing and marketing issues; (iii) poor or insufficient link between major trade actors and suppliers of raw/processed produce; and (iv) limited capacity to interact with national and international markets due to low production of high quality products and lack of compliance with certification and quality control. Sustainable finance is also a major barrier to support long-term landscape restoration actions to regain conditions for the sustainable intensification of diversified production systems and biodiversity conservation.

Land Degradation assessment in the target districts:

To understand the root causes and drivers of land degradation and barriers to integrated sustainable land and forest management (SLM/SFM) in the Dzonzi (Ntcheu District) and Monkey Bay (Mangochi District) Phase 1 areas, rapid participatory land degradation (LD) assessments were conducted during

multi-stakeholder (MSG) group discussions held in Ntcheu and Monkey Bay. Separate MSG discussions were held with institutional and land user representatives respectively. In both instances, participants completed a LD assessment matrix to determine the two main types (groups) of land degradation, their extent (% of the land area affected), degree (light, moderate, strong, extreme), the rate of degradation (i.e. whether it is stable, active, or the condition of the land is improving), as well as the two main direct causes and indirect drivers per LD type. These assessments were conducted per land use system (LUS) for croplands and forests. It is important to note that this assessment produces qualitative results based on the consensus reached amongst a diverse group of technicians/experts and/or land users over the assessment findings. The overall status of LD per LUS was classified as low (green), medium (orange), or high (red) as function of the extent, degree and rate of degradation based on the criteria in Table 1.

Table 1. Classification of low, medium and high state of degradation per degradation type

Degradation status	LD Extent	LD Degree	LD Rate
Low	30%	Light/moderate	Improving/stable/active
	20%	Light/moderate/strong	Improving/stable/active
	10% or less	Light/moderate/strong/extreme	Improving/stable/active
Medium	All combinations that do not fit under "Low" or "High"		
High	70% or more	Strong/extreme	Stable/active

Based on the overall status of LD, LUSs are classified as LD bright spots (green) or hot spots (red) as follows:

- **LD bright spot:** All the degradation types in the LUS are classified as low (green).
- **LD hot spot:** At least one of the degradation types in the LUS is classified as high (red).

Additional information on LD and sustainable land and forest management (SLM/SFM) was obtained from the Collect Earth and household (SHARP) surveys. The qualitative assessment of LD, its root causes and drivers are presented per district in the figures below. The identification of LD bright spots and hot spots serves to flag LUSs for particular closer investigation in terms of the combined LD and SLM/SFM information obtained at regional, district, site or household level.

Based on the above classification, **farmland and forestland** in the target landscapes appear as **LD hotspots**.

? In forestland: 30-40% soil erosion by water, 33-50% biological degradation, conflicting opinions whether LD is active or decreasing, Causes of degradation: deforestation for charcoal, firewood and agricultural expansion.

? In farmland: 70% soil erosion (by water) (moderate/strong), 80% biological degradation (strong), 90% chemical soil deterioration (moderate), Causes of degradation: inappropriate soil and crop management, tree cutting.

Figure 8. Land degradation assessment results in Ntcheu-Balaka Landscape

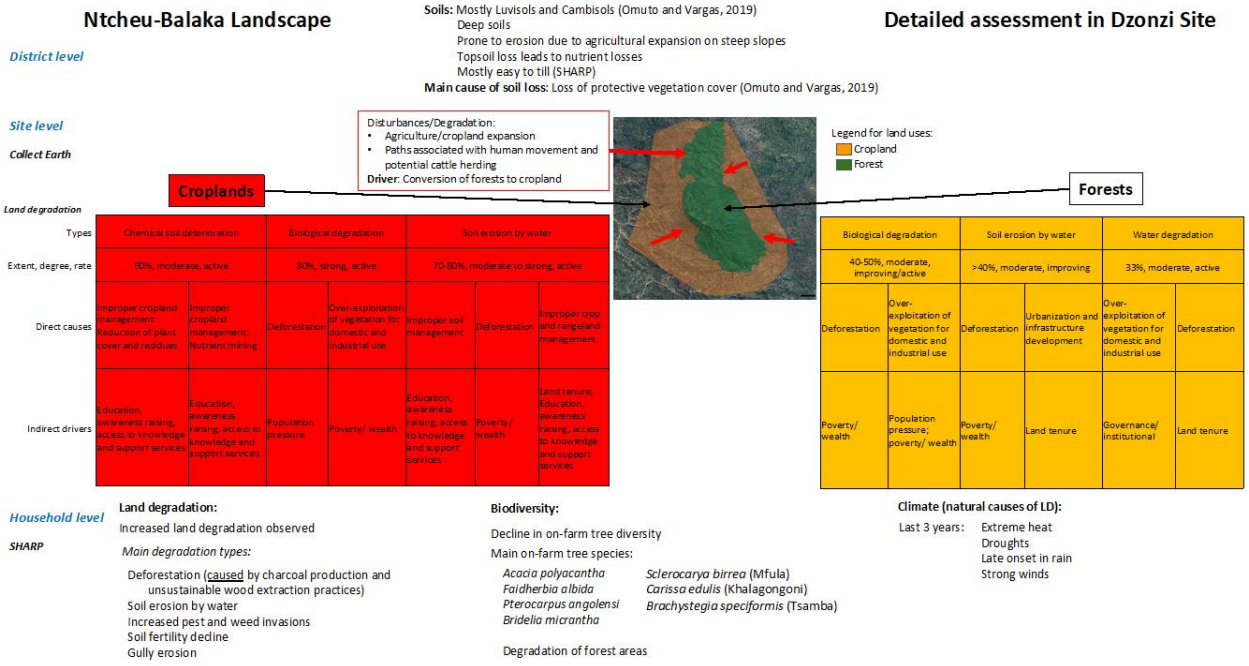
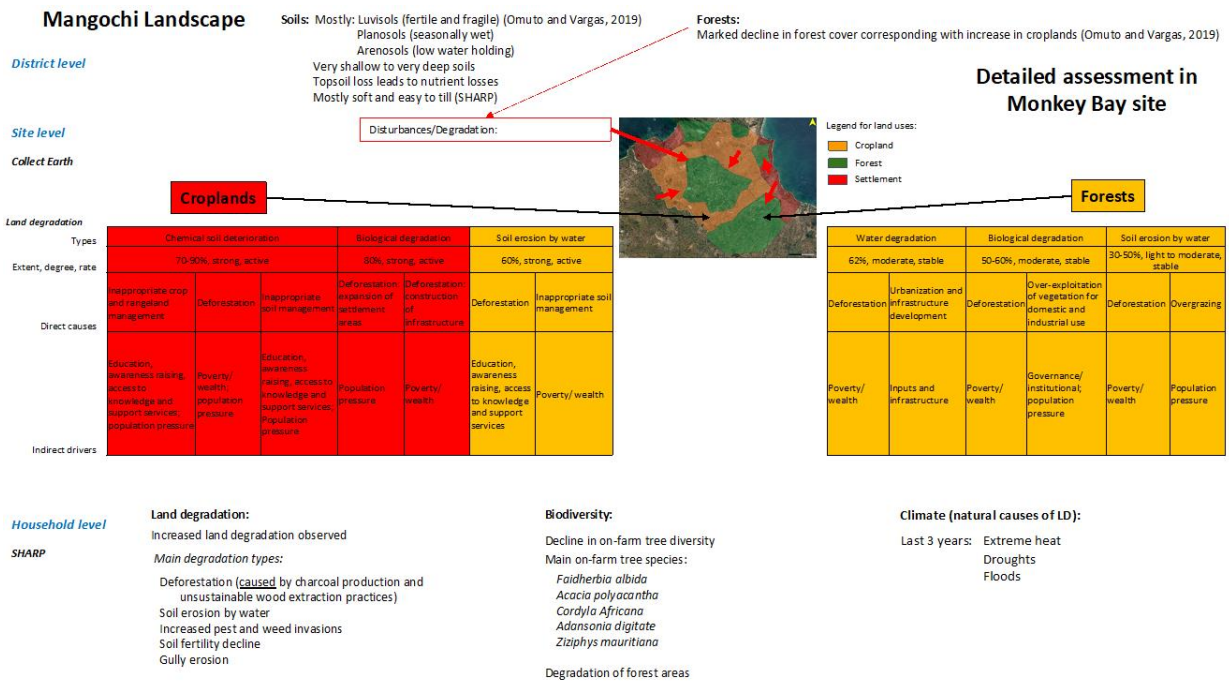
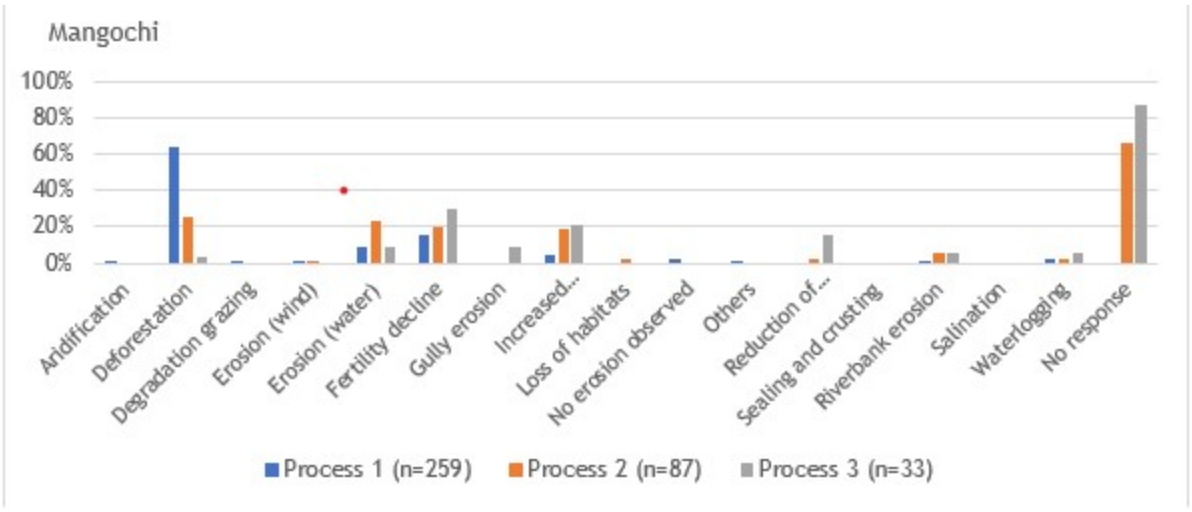


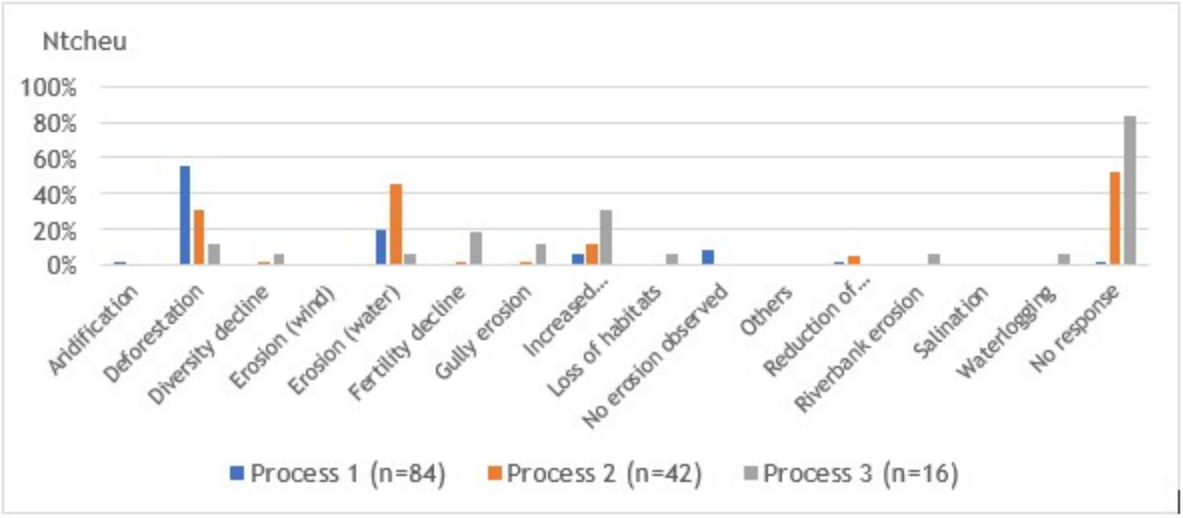
Figure 9. Land degradation assessment results in Mangochi Landscape



In the last 3 years, 80%of farmers have observed an increasing trend in land degradation. Deforestation and water erosion are the processes mostly observed by the producers assessed. Degradation processes vary across districts. In Mangochi, producers have recognized deforestation (64%) as the main degradation process. Other signs of soil and land degradation were water erosion, decline in soil fertility, increased pest and weeds and the reduction of vegetation. In Ntcheu, Deforestation (56%) and water erosion (20% when listed in the first place). Other processes observed are increased weed and pest invasions, fertility decline and gully erosion. When asking farmers whether the soil on their land was soft and easy to till 86% responded that it was (90% in Mangochi and 72% in Ntcheu).

Figure 10. Land degradation processes observed (main ones mentioned) by district (N=355)



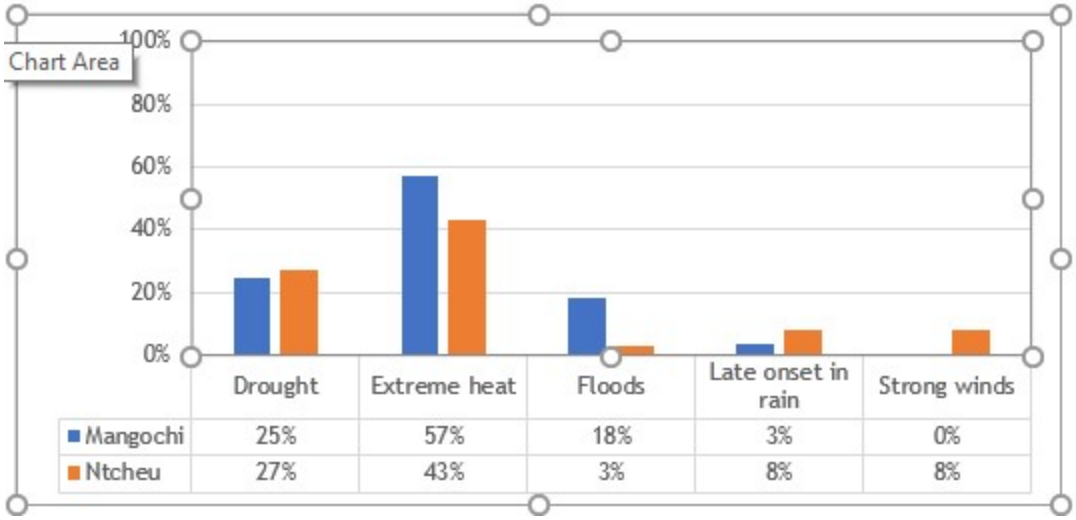


Climate change impacts and adaptive capacity in the target districts

The SHARP assessment in the target districts has provided the following results regarding climate change impacts and the adaptive capacity of the rural communities:

? Climate disturbances affect the quality and quantity of the agricultural production, but also the livelihoods of producers and their families. Shocks addressed here include both climate and non-climate. 28% of the sample reported to have been affected by any climate shocks (extreme event) in the past 3 years. Extreme heat (57% in Mangochi and 43% in Ntcheu) and droughts (25% in Mangochi and 27% in Ntcheu) are the climate shocks affecting the surveyed farmers the most (52% and 26% respectively). Floods impacted producers, particularly in Mangochi (18% vs 3% in Ntcheu), while the late onset in rains was highlighted by 5% of respondents on average. 8% of families in Ntcheu also noted the presence of strong winds / windstorms.

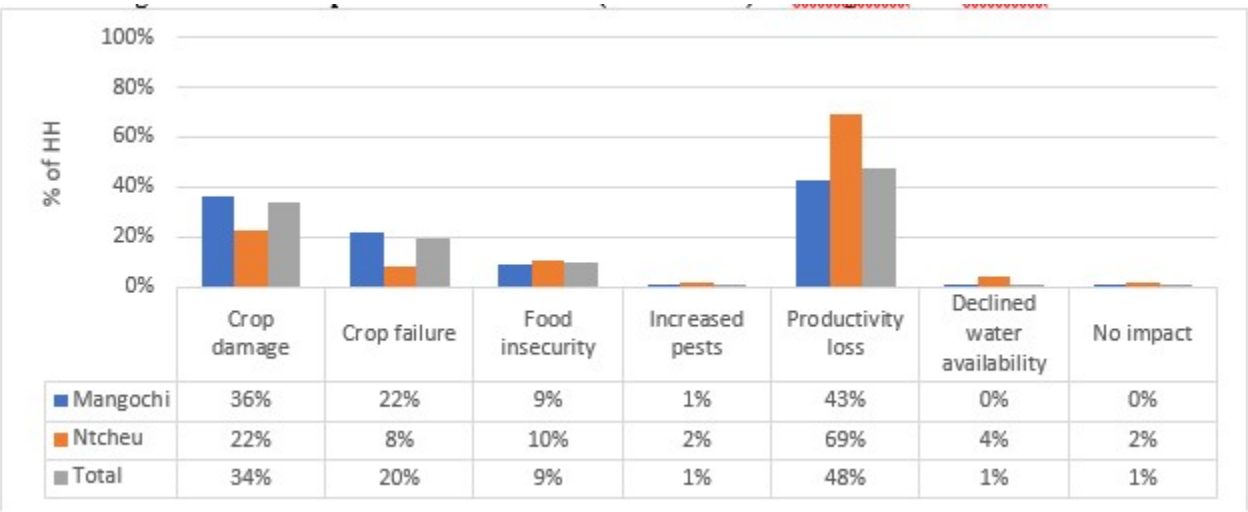
Figure 11. Climate shocks experienced in the past 3 years (self-assessed) in Mangochi and Ntcheu



	Drought	Extreme heat	Floods	Late onset in rain	Strong winds
Mangochi	25%	57%	18%	3%	0%
Ntcheu	27%	43%	3%	8%	8%

? The impacts of climate shocks were mostly reflected in the loss of agricultural productivity (48% of households on average). The damage of crops and the failure of production were particularly noticed by 36% of farmers from Mangochi. Food insecurity was also experienced as a result of the climate disturbances in 9% of the assessed households.

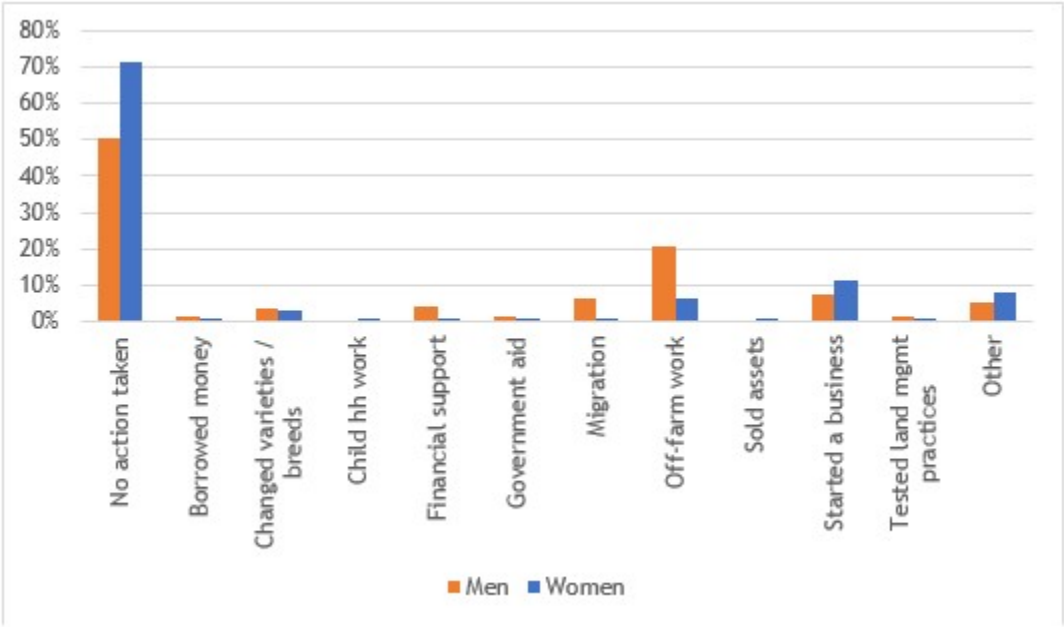
Figure 12. Main impacts of climate shocks (self-assessed) in Mangochi and Ntcheu



	Crop damage	Crop failure	Food insecurity	Increased pests	Productivity loss	Declined water availability	No impact
Mangochi	36%	22%	9%	1%	43%	0%	0%
Ntcheu	22%	8%	10%	2%	69%	4%	2%
Total	34%	20%	9%	1%	48%	1%	1%

? Despite having suffered from different shocks, information gathered reveals that less than half of the families (48%) took any action to cope with the negative effects. Men respondents appear as the ones lacking coping strategies to respond to unexpected events, as 72% did not take any action in response to these (vs 51% of women respondents). The main strategies used by men were to find work outside agriculture (20%), start a business (8%), migrate to find work elsewhere (6%) and request financial support (4%), among others. Women also relied on off-farm work (6%), started a business (11%), or relied on other type of support (e.g. from relatives) in 8% of the cases.

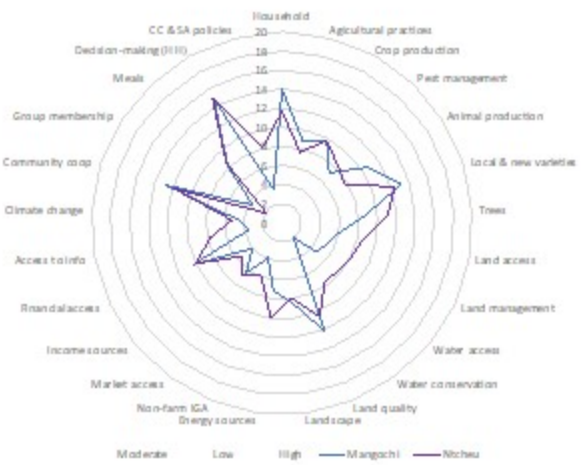
Figure 13. Coping strategies used by household head (N=266)



? Participants were also asked about the most likely source of assistance in case the worst of the negative events mentioned were to occur in the next 12 months. The information collected exposed that 49% of farmers would not have anybody to help them, while 20% would count on relatives, 12% on international organizations and 12% on the government. When asking farmers about the time they would need to recover if the worst shock were to occur in the next year, 38% replied it would take for them 6 months or more; 14% from 3 to 6 months, 12% from 1 to 3 months and 12% believe they would never recover. Only 6% of respondents estimated that they would take less than a month and 16% were unable to estimate the time needed to mend.

? In the methodology used by SHARP, the compound resilience score is directly connected to the capacity of the household or of the farming system to absorb a shock, cope with it and reorganize, keeping its main features and functions. Thus, the higher the ?compound resilience score?, the higher the resilience of the household. These considerations can be applied to each module assessed through the survey. The analysis was carried out for the main domains included in the socio-economic analysis (above) of the rural population in the selected landscapes of the target districts. The analysis concluded that the average level of climate resilience is moderate in the borderline with low resilience levels in both districts assessed. With 7.75 points (out of 20) in Mangochi and 8.65 points (out of 20) in Ntcheu across all the different aspects assessed, suggest that small-scale agricultural producers possess certain capacity to cope with unexpected shocks and climate variability. However, there is great need to strengthen their ability to adapt to climate change and disturbances as they are at risk to fall into very low resilience if unexpected and intense shocks are experienced.

Table 2. Socio-economic resilience aspects to be highlighted

Socio-economic resilience aspects to be highlighted: • Limited participation to CB groups aiming to improve production and NRM. • Need for diversification, including income (non-farm income) and agricultural production. • Inadequate capacity and means to timely respond and adapt to climate shocks and change, including pest outbreaks. • Low participation in local markets due to low production rates. • Need for integration of water conservation techniques, particularly in response to water decline. • Inadequate information access on weather forecasts, adaptation practices, post-production techniques. • Heavy reliance on unsustainably sourced fuelwood (charcoal), as a main energy source.	

1.b. Baseline scenario and any associated baseline program/project

Country Baseline:

Policy and institutional baseline at national and sub-national level

The GoM has set national voluntary Land Degradation Neutrality (LDN) targets by 2030 and formulated associated measures to achieve the governmental commitments under the Rio Conventions (UNCCD, CBD, UNFCCC) and the Sustainable Development Goal target 15.3 on Land Degradation Neutrality (LDN). LDN targets in Malawi are defined at sub-regional level, being one of these subregions the Shire River Basin, with the target to attain LDN by 2030 and an additional 2% net gain of land improvement in the basin area. Additional LDN-related targets have been set in the National FLR Strategy with its commitment under the AFR100/Bonn Challenge to restore 4.5 million hectares of degraded land by 2030. The National Charcoal Strategy (2017?2027) is harmonized with the National FLR Strategy and represents an ambitious and progress reform which sets out a 10-year plan for a climate-resilient and sustainable energy sector. Malawi?s landscape restoration efforts are a direct contribution to numerous regional and global processes, including: AFR100 and Bonn Challenge, LDN under UNCCD, CBD Aichi targets 2-6-8-13-15-16, SDGs, UNFCCC, UN Sustainable Energy for All (SE4ALL), and the Great Green Wall Initiative (GGWI) that will help SADC countries mobilize resources to combat desertification namely in Miombo drylands.

Malawi?s efforts to avoid, reduce and reverse land degradation and deforestation in production landscapes and create multiple benefits in the focal areas of land restoration, biodiversity conservation and sustainable use, and climate change adaptation and mitigation, are embedded in several policy frameworks:

•**The Malawi Growth and Development Strategy** (MGDS III 2017-2020) is the fourth, medium-term national development strategy formulated to contribute to the attainment of Malawi's long-term development aspirations enshrined in Vision 2020. The strategy aim is ?Building a Productive, Competitive and Resilient Nation? to improve productivity, turn the country into a competitive nation and develop resilience to shocks and hazards. It identifies five key priority areas, namely: (i) Agriculture, Water Development and Climate Change Management; (ii) Education and Skills Development; (iii) Transport and ICT infrastructure; (iv) Energy, Industry and Tourism Development and (v) Health and Population. The MGDS III also takes into account Malawi?s international obligations and commitments, such as the 2030 Agenda on Sustainable Development Goals (SDGs), the African Union Agenda 2063, the Southern African Development Community Regional Indicative Strategic Development Plan (SADC RISDP) and the Common Market for Eastern and Southern Africa (COMESA) Treaty.

•**The National Agriculture Policy (NAP)** emphasis is on farmer-led agricultural transformation and commercialisation by treating farming as a business, facilitating dynamic transitions within farming communities, in particular a transition into non-traditional high-value agricultural value chains, and increased engagement in profitable off-farm and non-agricultural livelihoods. Its main implementation vehicle ? National Agriculture Investment Plan 2017-2023 (NAIP) ? support alignment with related policies and investment frameworks to ensure environmentally sustainable and climate-smart sectoral growth. NAP recognise FFS as one of the approaches for attaining sustainable agricultural production and productivity.

National Forest Policy (2016).Coordinates all-natural resource management, including forest resources and environmental policy instruments in Malawi. It recognizes that forestry conservation is a cross-cutting issue which requires collaboration and broad participation to meet the goals of other focused policies, such as those addressing land, biodiversity, wildlife, water, energy, and population, but also the more comprehensive Malawi Growth and Development Strategy. Among the policy outcomes aimed at protecting forests are financial benefits and other livelihood outcomes (e.g., food, biomass, shelter, health). Financial incentives to protect forests include eco-tourism and recreation, and also still include forest-based enterprises. The livelihood outcomes are realized in the goods residents reap on a daily basis and profit from to support their health and well-being.

•**The National Land Policy** (2016) has a major focus on formalizing customary systems, and education of stakeholders on what the land laws mean and how they will improve society.

•**The National Gender Policy** (2015) aims to reduce gender inequalities and enhance participation of women, men, girls and boys in socio-economic development processes in the priority areas of

education, health, agriculture, food security and nutrition, natural resources & climate change, economic development, governance, gender violence and human rights.

•**The National Youth Policy** (2013) aims to create an enabling environment for all young people to develop to their full potential in order to contribute significantly to personal and sustainable national development. The policy recognises the role that youth play in rural development and the pressing need to render agriculture attractive to youth. Policies and programs contributing to rural development are expected to emphasise the need to involve youth for effective gender mainstreaming.

•**The National Resilience Plan** is an overarching framework, monitored and developed by OPC. The plan has five components: (i) Agriculture and Food Security: (ii) Catchment Protection and Management; (iii) Flood Control (iv) Early Warning Systems; and (v) Social Support Programs. The resilience plan brings together a number of sectoral key indicators into one holistic picture.
•The National Determined Contribution to the UNFCCC points out the importance of improving approaches to SLM and SFM at the landscape level, and stresses the need to encourage climate-resilient agricultural and land husbandry.

•**The National Biodiversity Strategy and Action Plan** Target 6 indicates that at least 50% of the degraded terrestrial habitats are restored and protected by 2025 and focuses on the need to identify degraded habitats and restore them.
Despite the existence of policies in the sector relevant to Integrated Landscape Management, SLM, SFM and LDN, most of them need to be updated/reviewed to improve their alignment with international and regional obligations, as well as their relevance to emerging LDN issues. Major challenges towards a conducive policy environment for the implementation of LDN in Malawi are: (i) lack of cross-sectoral coordination and cross-compliance; (ii) lack of implementation and weak enforcement of existing policies, mainly because these policies are developed without accompanying implementation frameworks; (iii) lack of capacity and sufficient human resources, mainly at the district and local levels; (iv) insufficient and inadequate financing instruments often supporting maladaptive natural resources management practices. The lack of concise national operational policy in key sectors such as agriculture, leads to subjectivity in resource allocations, compromised inter- and intra-sectoral collaboration, policy inconsistencies along the commodity value chains, and inadequate collaboration between the governmental sectors and the society.

A number of multi-sectoral and multi-stakeholder coordination bodies and platforms, were established at national level to provide oversight on the implementation of national strategies supporting LDN, such as the FLR Platform for the implementation of the National FLR strategy and the National Committee on Climate Change and Disaster Risk Management (NCCC&DRM) responsibility to mainstream climate change and disaster risk management into sectoral policies and programs. These bodies provide an institutional framework for national and international cooperation, through collaboration between Government agencies, the private sector, NGOs, CBOs, academia, and local communities, and the establishment of experts? working groups on specific thematic areas. They aim to

steer effective policy dialogue on frameworks, priority setting, and ways and means of facilitating investment and transfer of technology on relevant initiatives in the country. However, these bodies generally operate within the framework of projects, with little continuity once their funds have ended, and they lack institutional mechanisms that allow their long-term continuity.

The Decentralisation policy (1996) devolved authority for managing development projects at District level. The country is also home to a system of customary/traditional authorities who are integrated into local resource governance through their role on area and village development committees. The District Council is the focal point for district level policies and programmes, integrated development planning and oversight, including natural resource management, monitoring and evaluation. Several line ministries have decentralised their activities and budgets, including agriculture, water, environment and forestry. Districts receive direct budget allocations through the National Local Government Finance Committee, under the Ministry of Local Government and Rural Development to use in line with district level policies and plans.

The process of decentralization has been undermined by a slow and fragmented assignment of functions and resources to local authorities. The integration of natural resources management into district administration has been very minimal in practice. The reasons cited included: limited reporting of sector-related staff members at the district level as in practice they still report at national level; limited resources and capacity of sectoral district officers (e.g. forest and agriculture extension agents). Fiscal decentralization has not followed administrative decentralization. District budgets are very small and fragmented which results in limited integration of climate change into sector plans and budgets at District level. With insufficient resources and weak capacity and incentives to perform, the local government has been unable to play an effective role in shaping sustainable development, whether for efforts to address land degradation, restore forest cover, or implement effective control over natural resources.

Integrated Landscape-level planning

Integrated landscape management (ILM), ecosystem restoration and SLM/SFM are pivotal elements of several policy frameworks, such as the National FLR Strategy, the National resilience Plan, the National Water Resources Act, the Malawian NDC to the UNFCCC, the National Climate Change Investment Plan, the National Biodiversity Strategy and Action Plan (NBSAP) II 2015-2025, and the 2017-2022 MGDS III.

The National FLR Strategy, which follows the international FLR approach under the Global Partnership on Forest Landscape Restoration, has applied a multicriteria analysis (MCA) to identify areas of functional landscape degradation where FLR interventions could be targeted to support increased food security, resilience, and biodiversity. Using the MCA to help prioritize spatial investments in FLR throughout forest landscapes in the country, five priority interventions types were defined to be implemented according to the severity and type of degradation in each landscape areas, and specific recommendations on the design of technical packages restoration interventions that stop and reverse the underlying drivers of degradation were provided. In 2016 the Government of Malawi made an ambitious pledge to restore 4.5 million hectares of degraded land, or 38% of its total landmass, as part of the African Forest Landscape Restoration Initiative (AFR100) and Bonn Challenge. The

government has prioritized tackling both youth unemployment and improving the productivity of the land for FLR implementation. The Malawi Youth Forest Restoration Programme (MYFRP) - K1.43 billion (USD 2 million) programme entirely funded through Malawi?s domestic budget - spread awareness of the importance of maintaining Malawi?s ecosystems and provides young people with training and jobs, protect the environment, and foster environmental stewardship throughout the country. Young participants receive a daily wage of K900 ($1.25) to plant trees, maintain firebreaks, and practice sustainable land management techniques. The Government also implement a bonus scheme tied to tree survival rates and improved forest management, and local District Councils will take the lead in forming youth groups and implementing restoration on the ground. By putting young people at the center of this effort, the Government has demonstrated its commitment to the long-term success of Malawi?s restoration movement.

The development objectives of the Shire Valley Transformation Program for Malawi are: (i) to increase agricultural productivity and commercialization for targeted households in the Shire Valley (irrigation infrastructure, sustainable management and service provision); and to improve the sustainable management and utilization of natural resources. (natural resources management to broaden the multi-sectoral benefits of the program and enhance environmental sustainability; investments in protected areas; land governance and land consolidation; agriculture development and commercialization finances on-farm investments in irrigation and drainage, land leveling, and commercial farm development). Under the World Bank SRBM Program Phase I project, national guidelines for ?Integrated Catchment Management? were developed and piloted for the development of Catchment Management Plans in four landscape units in the lower and middle Shire River basin. The Shire River Basin Authority (SRBA) was successfully set up within the framework of the National Water Resources Act.

Despite the efforts made by the FLR strategy and National Water Resources Act in landscape-level planning, there is still a need to harmonize and give coherence to the efforts made to establish comprehensive landscape plans that address in an integrated way the complex nexus of local livelihoods, land degradation, climate change, and environmental protection, and provide a special framework to restore multiple functions for multiple benefits through a wide range of implementation options (active restoration, protection, SLM, SFM) with a cost-benefit view, and a sustainable financing mechanism.

The GEF Food Security IAP Program refers to both innovative agricultural practices and innovative multi-sectoral institutional approaches. The overall approach to integrated natural resource management is innovative, as it combines strengthening of policy and institutional frameworks with new mechanisms for scaling up on-the ground, and of enhanced smallholder value chain access as well as regional multi-stakeholder platforms for scaling up. Five child projects cover all three focal areas in terms of their allocations (Ghana, Kenya, Malawi, Swaziland and Tanzania). In the case of Malawi, the child Project aims to move from micro- to macro-catchment ?reas with a landscape-level focus.

Sustainable natural resources management

According to researchers, **the cost of action (USD 4.1 billion) against land degradation is lower than the cost of inaction (USD 15.6 billion) by about 4.3 times in Malawi over a 30 years horizon**.

This implies that a dollar spent to restore degraded lands (e.g. forestation, enacting bylaws to enhance protection, temporary enclosures and controlled grazing, conservation agriculture, integrated soil fertility management in croplands) returns about 4.3 dollars in Malawi.

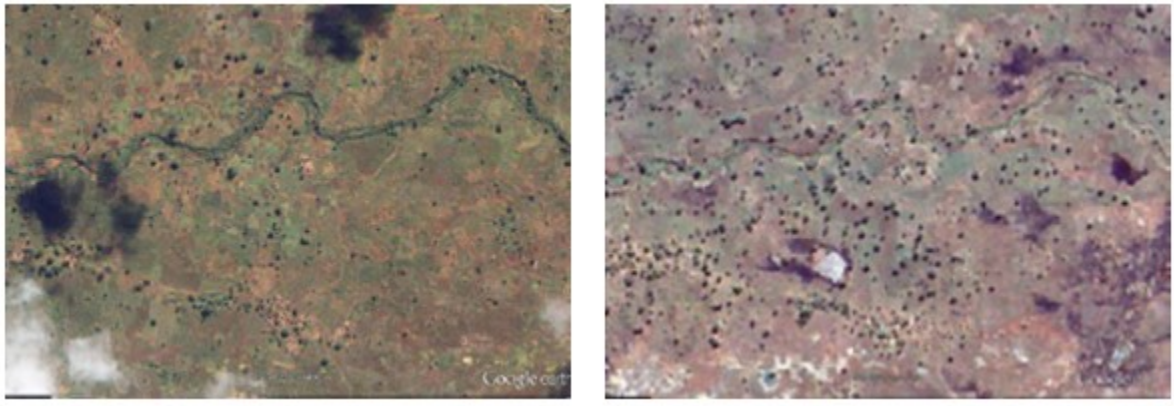
A number of sustainable land management systems and technologies - including conservation agriculture (CA), intercropping with legume crops, manure application, integrated pest management (IPM), multipurpose tree planting and farmer-managed natural regeneration (FMNR) - and the governance of forest resources through woodlot plantations, assisted natural regeneration and native tree planting, co-management and protection systems, are considered as priority interventions under LDN, FLR, climate change, biodiversity and other national sustainable development objectives.

Forest co-management initiatives have been developed in a number of forest reserves in Malawi, including the forest reserves of Mvai and Dzonzi in the target landscape in Ntcheu district, with some positive results in terms of enhancing local participation and promoting sustainable management of forest resources. Co-management has created new democratic local forest organizations, which represented a new social capital for the community. However, there are still limitations to ensure wide participation of the community members that are not part of the Forest Management Committees in co-management activities, and consequently weak capacity of co-management bodies to effectively influence illegal and maladaptive practices in forestland. Other factors that limit co-management effectiveness include weak policy enforcement, lack of empowerment and legitimacy, inadequate human and financial capacity, and conflicts with other land uses. This could be reversed if a ?broad based community empowerment? approach is adopted to enable all community members, especially women, to participate, improve bylaws, and demand accountability from the established local forest co-management institutions. It is recommended that well trained forestry extension workers on the ground are provided with the necessary technical support to facilitate such a process. In this regard, the District Forest Office and other service providers need to provide continued support in areas such as the technicalities of suitable SFM systems, organizational and financial management, law enforcement, and development of forest-based enterprises, including identification of markets.

According to a recent study on the economics of land degradation and improvement in Malawi[1] the households plots analyzed applied at least one of the analyzed SLM practices (improved seeds, Intercropping, manure application, crop rotation, soil erosion control, and integrated soil fertility management-ISFM[2]). In central and southern Malawi research revealed a significant increase in maize grain yields over time under conservation agriculture compared with the traditional ridge and furrow system, especially in situations where moisture was limiting during the season. Conservation agriculture is promoted by a wide range of governmental, research, NGO and international aid agencies in Malawi, through a pluralistic agriculture extension system. For instance, Department of Agriculture Extension Services (DAES) has trained, following a Farmer-to-Farmer extension (F2FE), more than 12,000 lead farmers country-wide to promote agriculture technologies, including CA, through their networks of follower farmers and with the use of demonstration trials. FAO is using the FFS learning system to train master trainers and community-based facilitators on conservation agriculture (The project baseline investment KULIMA will scale out the use of FFS to support farmers in the adoption of sustainable agriculture systems and technologies).

The increase in the density of tree cover on farms through the adoption at scale of FMNR and related agroforestry practice is relatively recent. The analysis of satellite images shows that tree cover density increased significantly over the last 15 years[3].

Figure 14. Crop land area in Balaka district with tree cover changes between 2001 (left) and 2013 (right) as a result of FMNR[1]



USAID, under PERFORM project (Protecting Ecosystems and Restoring Forests in Malawi), has played a major role in the training of trainers (e.g. AEDOs, Forest Assistants, CEWs) on farmer-managed natural regeneration to support farmers interventions on FMNR. Other Aid Agencies such as the European Union have supported programmes to improve tree cover in farmland and forest land. Involvement of NGOs has also been an important driver for the spread of FMNR. For instance, Total Land Care (TLC), a regional NGO, has been implementing FMNR projects over several years in various district, and World Vision Malawi has also actively promoted FMNR through trainings for farmers on how to manage regrowth of natural trees on farms and on community land. Studies demonstrated that FMNR agroforestry supporting the natural regeneration of *Faidherbia* trees in farmland plots resulted in sustain unfertilized maize yields of 2.5?4 metric tons per hectare, which is 200?400 percent more than the national average. The emission reduction potential of crops intercropped with trees was recently explored in Malawi indicating that the net impact of maize intercropped with *G. sepium* is the removal of up to 31 metric tons of CO2e per hectare over a 20-year period. Outside crop fields, farmers also use FMNR techniques in assisted natural regeneration of trees to restore degraded woodlands. Household surveys conducted in Balaka district in southern Malawi indicated that respondents received several main benefits from FMNR: fuelwood (32 percent), soil fertility improvement (26 percent), fruits and useful plant material (24 percent), and the use of trees for poles (12 percent)[1].

Despite efforts to support SLM in Malawi, currently a low percentage of crop land has still a low tree cover (e.g. approx. 70% of crop land in Balaka district). Regarding conservation agriculture, estimates about the adoption rate (between 0.29% according to FAOstat and approx.. 3%) lead to ambiguity in what constitutes CA adoption, due to the fact that most farmers are just applying one of the CA principles, which is not enough to demonstrate successful results. Moreover, estimates are also constrained by disadoption, particularly in Malawi (71.1% of users disadopted). According to users, lack of training and technical support to transfer knowhow are among the main barriers to the adoption of SLM systems and technologies, in addition to limited access to finance for equipment and inputs and

lack of law enforcement. Moreover, limited access to high quality seeds of suitable crop varieties is another barrier that farmers? face for the sustainable intensification of agriculture production. The Farm Input Subsidy Program (FISP) is mainly providing maize hybrid seeds to farmers, which has a very negative effect on crop diversification and resilience. Climate change projections indicate high to very high decrease in maize productivity, especially in the drier southern part of the country, while favourable conditions for drought-resistant crop varieties of sorghum and pigeon pea increase in the Shire River Basin.

Sustainable financing for LDN

To achieve the target of a land degradation-neutral worldwide (SDG target 15.3) by 2030, large amounts of financial resources must be mobilized. Public and philanthropic resources alone will not suffice, so that new financial instruments and enabling conditions are needed to catalyse private capital to attain land degradation neutrality (LDN). Decision 3/COP.12 requested the Global Mechanism (GM) to develop options for increasing resources for the full realization of LDN initiatives, including the creation of an independent Land Degradation Neutrality Fund (LDN Fund).

In Malawi, examples of sustainable financing for LDN are linked to the establishment of payment mechanisms for ecosystem services (PES), and the development of sustainable green value chains around the sustainable production and marketing of dryland commodities. In the case of PES, The Clinton Foundation supported the carbon credits project ?Trees of Hope? in the Neno and Dowa districts under Plan Vivo certification standards. Thanks to this project, the Clinton Development Initiative (CDI) has sold certificates for more than 30,000 tons of carbon and 875 farmers have received more than $100,000 in Payments for Ecosystems Services, accessing carbon finance for landscape restoration activities such as the planting of woodlots to reduce fuelwood collection in natural forest and the implementation of income-generating agroforestry. The geographic proximity of ?Trees of Hope? could facilitate the extension of the PES activity to the project districts. Recent piloting in the Shire River basin of a catchment-level revolving fund mechanism has shown promising results when combined with participatory planning at catchment and village levels and with complementary investments that improve farmer access to markets. This approach could be funded by a PES mechanism and scaled up more widely in Malawi.

In terms of green value chain development, a number of private sector companies are developing business around Miombo and Mopane NTFP, such as baobab products, bee products, moringa, *Azadirachta indica, Sclerocarya birrea, Uapaca kirkiana, Parinari curatellifolia, Strophanthus kombe*mondia whitei*,* and *ziziphus mauritania*, among others. Several buyer companies active in the project target districts (e.g. Naturals ltd, Honey Products Ltd, Moringa Miracles Ltd) are members of PhytoTrade Africa - the Southern African Natural Products Trade Association ? and have benefited from the SEED Programme for promoting entrepreneurship for sustainable development, and the WRI Land Accelerator Programme. The participation of local producers in green value chains has also been promoted by several development projects (e.g. One Village One Project OVOP funded by JICA, JANEEMO agroforestry initiative funded by the Scottish gov.) with successful results in terms of strengthening the organizations? capacity in production and marketing. Local producers Innovation Platforms in southern Malawi (e.g. Balaka IP) have also improved 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 centres (e.g. CIAT, CIMMYT, LUANAR), NASFAM, the Agriculture Commodity Exchange (ACE), members of the media[2]. In the case of Balaka IP, the platform has demonstrated that conservation agriculture was impactful and sustainable for smallholder farmers in the district. IP member farmers have improved market access with linkages with national buyers and the Export Trading Group and Trans Globe, involved in legume sales to Asian markets.

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, and the water and energy sectors, among others. Coordination between government agencies is crucial because climate change is a cross-cutting issue that affects value chain development throughout sectors, such as agriculture, energy, wildlife, water, and forestry. The project will build on the ongoing aid agency efforts, such as the USAID NAPAS[1] initiative supporting the MoAIWD to increase the commercialization of Malawi?s agriculture sector through strategic investments in various value chains that have the potential for sustainable and inclusive economic growth. In line with the National Agriculture Policy, the project will support the development of selected value chains to achieve sustainable agricultural transformation in the target landscapes, with the objective to influence government subsidies towards the effective development of value chains, expanding incomes for farm households, improved food and nutrition security, and increased domestic and export trade opportunities. The integrated planning approach of uses, priorities and economic opportunities at the landscape level, following the National FLR Strategy and national guidelines for ?Integrated Catchment Management?, will contribute to a harmonized development of value chains cross-compliant with the various sectors? sustainable development needs, such as water and agriculture, and energy and forests.

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[1] New Alliance Policy Accelerator Support: Malawi.

Further constraints on private sector development in Malawi, especially for local producers? organizations, include limited access to training, technical assistance and financial capital, little agro-processing value addition, week coordination of key stakeholders supporting NTFP-based enterprises, delays in obtaining business licenses and certification, lack of policy implementation, among others.

Baseline Investments

USAID Modern Cooking for Healthy Forests (MCHF) Project: The purpose of MCHF is to promote sustainable energy options in Malawi in order to sustainably maintain forest cover and reduce land-based emissions. By increasing the demand for alternative and efficient energy options and technologies and the supply of sustainable wood fuels from well managed forest resources, the project will help Malawi reduce unsustainable tree cutting in both public and customary forests, improve forest cover as well as conserve associated watersheds. MCHF?s core objectives are the following: Objective 1- Alternative energy sources and efficient cooking technologies adopted to reduce unsustainable wood fuel demand; Objective 2 - Local delivery of forestry services and sustainable use of forestry resources

in targeted areas improved; Objective 3 - Regulatory, and enforcement framework to support sustainable wood fuel production and use strengthened; Objective 4 - Government of Malawi?s implementation capacity of low emissions development in REDD+ and/or other Land Use increased; Objective 5 - Interventions leveraged with other USAID and development partners resources. MCHF serves as USAID?s primary support to the Government of Malawi (GoM) to implement some of its significant policies and strategies in the forestry and energy sectors. These include the Nation Forestry Policy (2016), Forestry Act (1997), National Charcoal Strategy, National Forest Landscape Restoration Strategy, Malawi Renewable Energy Strategy, draft National Energy Policy, Sustainable Energy for All Action Agenda for Malawi, and National Cookstove Steering Committee Strategy 2018 ? 2020.

EU-funded KULIMA Programme: the broader objective of KULIMA is ?promoting sustainable agricultural growth and incomes to enhance food and nutrition security in Malawi within the context of a changing climate?. The specific outcome of the Action is to ensure sustainable increase of agricultural productivity and diversified production. This will be attained through building capacity of a pool of FFS Master Trainers and Community Based Facilitators to be drawn from selected farming communities. Availability of highly qualified FFS Master Trainers and Community Based facilitators will facilitate the overall empowerment of the farmers to address the various issues affecting the production, productivity, nutrition and access to market. At the same time, the extension system will become more effective through an increased access to quality extension messages and production by a critical mass of producers. Therefore, the Action is building upon a desire and ongoing efforts of the DAES to strengthen quality assurance and enhance coordination and harmonisation of FFS programming in the country.

The Action activities are articulated through a three-pronged strategy of mutually reinforcing pillars of institutionalisation, quality assurance and strengthening capacity development of the Farmer-Filed Schools (FFS). The envisaged activities contribute towards four outputs: Output 1 is aimed at putting in place an institutional framework to anchor the FFS programme; Output 2 will consolidate ongoing efforts towards quality assurance; Outputs 3 and 4 are designed to build the requisite capacity to implement FFS programmes. The strategy is to have a critical mass of FFS facilitators within the existing extension service providing institutions.

DFID-Irish Aid BRACC Programme: BRACC ? delivered through the NGO ? UN consortium PROSPER - aims to support poor and vulnerable direct beneficiaries to improve their resilience to climate and weather-related shocks and to achieve their full economic potential. BRACC?s vision is to be a collective and influential voice for innovation, evidence and impact, and to provide a collective platform for enhanced engagement on policy and programme implementation to build the resilience of households and communities, strengthen shock sensitive social protection, expand climate smart agriculture, reduce exposure to hazards and risks, and achieve food and nutrition security by diversifying and improving income generation and economic opportunities. This vision will be achieved through the following four outputs: Output 1- Intensified and diversified agricultural production and improved nutrition for targeted vulnerable communities; Output 2 - Enhanced and inclusive access to the productive resources necessary to develop increased, secure and predictable incomes; Output 3 - Reduced vulnerability and exposure of households and communities to risk; Output 4 - Increased capacity of national, sub-national and non-state actors to plan, coordinate and

monitor resilience programming, including shock-responsive social. PROSPER interventions will take place in the four focal districts of Balaka, Chikwawa, Mangochi, and Phalombe. Additional districts targeting for financial inclusion and/or market interventions will be added.

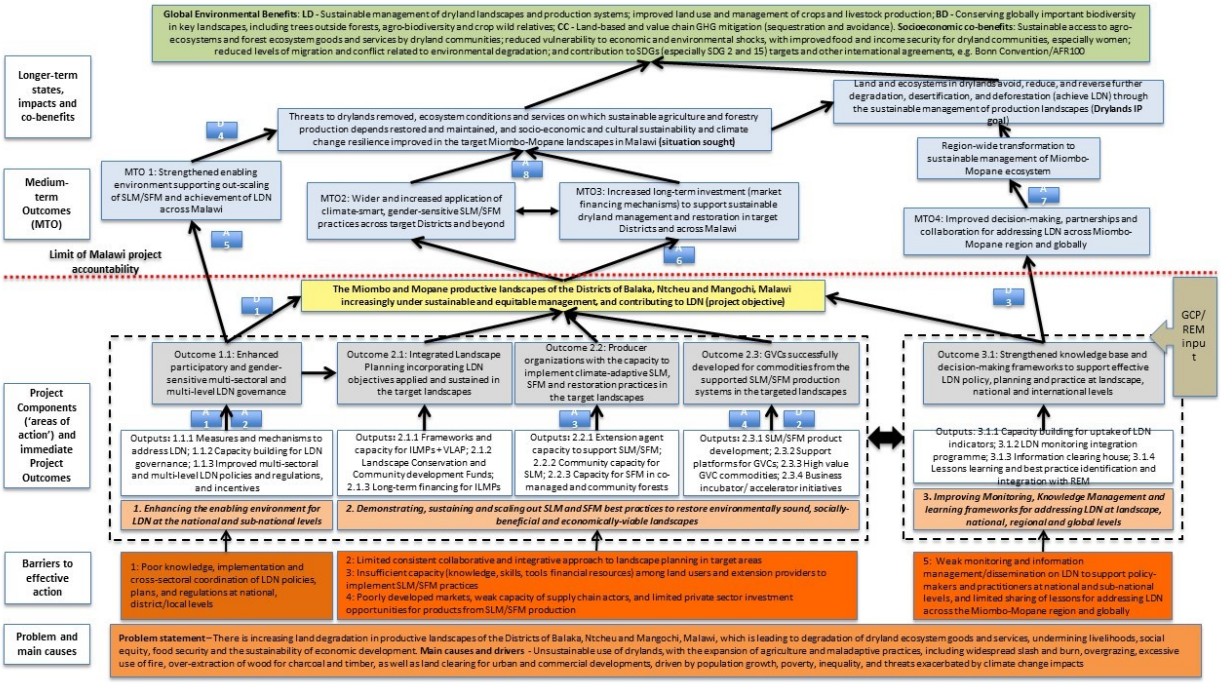
1.c. A brief description of expected outcomes and components of the project and the project?s Theory of Change - and the GEF alternative scenario

This section presents the project?s Theory of Change (ToC), which sets out the causal logic and relationships between the project?s outputs (goods and services delivered by the project) and immediate project outcomes (changes resulting from the use of project outputs by key stakeholders), medium and longer-term changes and states, and the project?s ultimate desired impact (fundamental, durable changes in environmental and social benefits).

As described above, the central problem the project seeks to address is the increasing land degradation in the productive Miombo-Mopane landscapes of the Balaka, Ntcheu and Mangochi districts of Malawi. This is causing the loss of dryland ecosystem goods and services and global environmental values, which is undermining the basis for local agriculture and forestry, and livelihoods, social equity, food security and the sustainability of economic development. The main causes and drivers of this degradation are detailed in the section above but include unsustainable use of drylands resources, with the expansion of agriculture and widespread use of maladaptive practices, as well as clearing of land for urban and commercial developments, driven by population growth, poverty and inequality, and exacerbated by climate change.

The project seeks the transformation to sustainable management of the Miombo and Mopane productive landscapes of the Districts of Balaka, Ntcheu and Mangochi, in line with LDN principles (project objective). Specifically, the project aims to overcome the five barriers identified above which act against achievement of LDN, and thereby address the threats to the Miombo/Mopane woodlands in the target landscapes through three interlinked approaches/strategies. Each of these is reflected in a specific project Component (?areas of action?) comprising sets of project activities and outputs that will deliver the following immediate project outcomes (which are mirrored in the Components of the overall program).

The Theory of Change for the Child Project in Malawi



Component 1 will address Barrier 1 by enhancing the enabling environment for LDN at the national and sub-national levels, through strengthening the governance for sustainable management of the Miombo/Mopane woodlands in the target landscapes, creating a more conducive policy and regulatory environment, with enhanced cross-sectoral and multi-level coordination and cross-compliance (frameworks and mechanisms) and policy and regulation/bylaw formulation and implementation, as well as supportive financial instruments at both national and sub-national levels. Component 1 has one immediate project outcome:

? Outcome 1.1: Enhanced participatory and gender-sensitive multi-sectoral and multi-level LDN governance

Component 2 will address Barriers 2, 3, and 4, through putting in place gender-sensitive integrated landscape-level management systems, plans, tools/technologies and practices for delivering LDN-related priorities, with a focus on identifying areas and actions for climate adaptive FLR/SLM/SFM activities (through Integrated Landscape Management Plans (ILMP)); improving capacity of trainers and land users to implement these measures; and the provision of financial instruments for their long-term financing, as well as support for the development and adoption of innovative, economically viable climate-smart Green Value Chains (GVCs) for SLM/SFM derived products. Component 2 has three immediate project outcomes:

? Outcome 2.1: Integrated Landscape Planning incorporating LDN objectives applied and sustained in the Balaka, Ntcheu and Mangochi Districts

? Outcome 2.2: Producer organizations with capacity to implement climate-adaptive SLM, SFM and restoration practices in the target landscapes

? Outcome 2.3: Green value chains (GVCs) successfully developed for commodities from the supported SLM/SFM production systems in the targeted landscapes

Component 3 will address Barrier 5 through creating a supportive environment for LDN monitoring at national and landscape levels under the National FLR Monitoring Framework, and promoting national, regional and global efforts to improve knowledge management systems and the sharing of knowhow on effective LDN practices across the six Miombo/Mopane countries. Component 3 has one immediate project outcome:

? Outcome 3.1: Strengthened knowledge base and decision-making frameworks to support effective LDN policy, planning and practice at landscape, national and international levels, based on improving monitoring, KM and lesson learning

Several of these Outcomes interlink and work together or are dependent on the progress and results of others (the key relationships between the main elements in the Theory of Change are indicated by arrows in the diagram). For instance, Component 1 will strengthen cross-sectoral and multi-level LDN policies, regulations and incentives that will support the development of the ILMPs under Outcome 2.1, but the implementation of the ILMPs is also dependent on the success of the capacity building efforts directed at producer organizations delivered under Outcome 2.2, and success with the development of GVCs under Outcome 2.3 would likely encourage more SLM/SLM practices. Similarly, there is a strong mutual connection between Components 1 and 2 and Component 3 (indicated by hatched boxes and two-way arrow in the diagram), where results and experiences from the first two Components contribute to building the national knowledge base on LDN under Component 3, while guidance on improved practices and lessons learned identified by the project and gathered from the wider Drylands IP community under Component 3 are fed back into improving policies, regulations, financing and practices to address SLM/SFM and LDN under Components 1 and 2. Together these will contribute to the project objective of the Miombo and Mopane productive landscapes of the Districts of Balaka, Ntcheu and Mangochi, Malawi increasingly under sustainable and equitable management, and contributing to LDN. Apart from national gains, delivery of project outcomes would also improve regional decision-making, collaboration and partnerships across the Miombo-Mopane region (represented by a separate causal pathway in the diagram).

However, the project?s approaches to securing widespread adoption of SLM/SFM practices in the target landscapes rest on a number of premises, most importantly that strengthening tenure, access and user rights and facilitating the development of green value chains and market based instruments are effective in changing the behaviours of land and natural resource users, incentivising them to adopt and invest in SLM/SFM practices.

Also, the achievement of the project outcomes and progress the project objective and longer-term impacts depends on a number of wider assumptions[1] (depicted by an ?A? in the ToC diagram), operating over different scales and at different points along the causal chain, being met. In terms of assumptions that directly relate to achievement of the project?s immediate outcomes these are that:

A1. National and sub-national government agencies, community groups, civil society and private sector institutions are willing to engage in participatory cross-sectoral governance for LDN

A2. Cultural barriers do not prevent women from effectively participating in the sustainable governance of natural resources and SLM, SFM and GVC implementation

A3. Small-holder farmers can be motivated to adopt SLM/SFM approaches and are willing and able to accept potential risk from adopting new practices and products

A4. Private sector is willing (or can be encouraged) to invest in activities to address LDN and has a supporting regulatory and financial environment

In addition, operation of the project itself rests on the assumptions that it can secure the external expertise and technical assistance required for a full and timely implementation of project activities (needed for delivery of all three Components), that there is continued commitment of participating institutions and actors from national to community level during the project lifetime, and continued political stability in Malawi to ensure institutional framework able to carry out the work and achieve project results. In addition, it is assumed that the six countries in the Miombo-Mopane region are willing to cooperate on and participate in the proposed GCP regional-level activities (under Component 3), and that unexpected events, such as Covid-19 pandemic, do not significantly adversely impact institutional and governance arrangements that prevent the project from proceeding.

There are also a number of impact drivers[2] (depicted by a ?D? in the ToC diagram) that may make progress along the causal chain more likely, and over which the project or its partners could exert some influence:

D1. Increased awareness and concern among policy-makers, land users, civil society, and private sector about the impacts of climate change and the need to adopt resilient, climate adaptive development solutions

D2. Increasing global demand and diversified markets for SLM/SFM products

D3. Regional initiatives and forums, such as the Great Green Wall and SADC, promoting regional visions for sustainable land and natural resource use, facilitating increased inward investment, and building capacity for sustainable management of land and natural resources

If the project outcome-level assumptions and impact drivers (A1-5 and D1-3) hold true, and then the interaction between the three project Components will result in further gains along the path to sustainable management of the Miombo-Mopane drylands, represented by four Medium term Outcomes (MTO), with a strengthened enabling environment supporting out-scaling of SLM/SFM and achievement of LDN across Malawi (MTO1); wider and increased application of climate-smart, gender-sensitive SLM/SFM practices across the three target Districts and beyond (MTO2); increased long-term investment (market financing mechanisms) to support sustainable dryland management and restoration in target the Districts which is expected to catalyse interest in other Miombo-Mopane areas

in Malawi (MTO3); and improved (more evidenced-based) decision-making, partnerships and collaboration for addressing LDN both in Malawi and across the Miombo-Mopane region (MTO4).

Achievement of these longer-term outcomes, which is beyond the immediate influence and accountability of the project (shown as dotted line in the ToC diagram), is subject to further assumptions (A5-A8) and an additional driver (D4):

A5. There is sufficient and continued commitment (political support, staff, resources, etc.) by national and local government authorities to address LD and LDN

A6. Domestic and international markets for green value chains products can be sufficiently developed and maintained to support local producer organizations and buyer companies adopting sustainable practices over the long term

A7. Countries continue to see the value of, and commit resources for, regional cooperation and collaboration to address LDN across the Miombo-Mopane ecoregion

A8. Future climate change impacts do not irreversibly affect the structure and function of ecosystem services in productive landscapes

D4. International legal obligations, such as national commitment to the Bonn Convention/AFR100, SDGs, UNCCD, UNFCCC and CBD

Together these, with additional external inputs, these would be expected to lead to the long-term ?**situation sought?** of ?threats to drylands removed, ecosystem conditions and services on which sustainable agriculture and forestry production depends restored and maintained, and socio-economic and cultural sustainability and climate change resilience improved in the target Miombo-Mopane landscapes in Malawi?, and contribute to the goal of the SFM Drylands Sustainable Landscapes Impact Program, which is ?*to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable management of production landscapes*?.

Impacts of COVID-19

On 20 March 2020, President Mutharika declared the coronavirus pandemic a national disaster, and instituted a number of measures, such as limiting the number of people in gathering places, physical distancing, hygiene and sanitation, school closures, closing the airspace to passenger flights, suspension of all formal meetings, gatherings and conferences, allowing restaurants to offer take away service only, the slashing of fuel prices, tax-related measures, among others. After presidential election in June, the new administration updated the previously gazetted containment measures to allow the imposition of a lockdown if necessary. Moreover, the Government of Malawi developed a National Coronavirus Disease (COVID-19) Preparedness and Response Plan, with the objective to prevent, rapidly detect and effectively respond to any COVID-19 outbreak thereby reducing morbidity and mortality in the country. The Plan is led by the Ministry of Disaster Management Affairs and Public Events and the Ministry of Health through the National COVID-Task Force. The Plan includes 11 clusters - Inter-

cluster coordination; Communication; Health; Water, Sanitation & Hygiene (WaSH); Protection & Social Support; Employment; Security & Enforcement; Education; Economic Empowerment; Food Security; Transport & Logistics. Each cluster is led by a governmental department, with the support of international organizations, namely WHO/CDC, UNRCO, UNICEF, WFP, FAO, UNDP and USAID. The Government launched an emergency appeal, requesting financial support from United Nations (UN) agencies and international NGOs to support preparedness and response efforts. As an initial response, the World Bank approved USD 37 million in support to the COVID-19 Plan in Malawi. A private sector-led task force initiated by the Commercial Agriculture Support Services (CASS) platform was established in Spring 2020 with the purpose to coordinate the private sector?s voice on the response to COVID-19, to facilitate dialogue with key ministries, and to address immediate and long-term concerns about the resilience of agri-food systems, food security, and nutrition. The group aims to enhance efforts around the National Plan, which is primarily focused on health, cash transfers, household food security response, and food security and market systems monitoring. The plan does not include targeted assistance for food system actors in the supply chain who are vulnerable and may risk falling into poverty and losing their livelihoods without mitigation and response measures in place.

The National COVID-19 Preparedness and Response Plan describes three distinct categories depending on their risk level, being the highest risk at category 1 and the lowest risk at category 3. The target District of Mangochi is category 1 due to the presence of international airport and the volumes of people travelling from/to. The other two target districts ? Balaka and Ntcheu ? are classified as category 3, with a risk of coronavirus linked to local transmission not directly imported from affected countries. At the subnational level, district civil protection committees serve as the primary coordination structures. For the most part, Malawi?s response plan will be implemented by international agencies and NGOs adopting the cluster system.

The pandemic crisis has negatively impacted production and food supply flows for food security and nutrition, and has slowed trade in cash crop industries, such as tobacco and cotton, due to severe lockdowns in client countries, causing significant falls in prices and income. The national food reserves are extremely depleted, so the Government has requested help from FAO and the African Development Bank, the latter already financing MoAIWD to replenish the maize reserve. Findings from the Emergency Agriculture and Food Security Surveillance System, managed by the MoA with support from FAO, show that households are increasingly adopting negative coping strategies (i.e. limiting number of meals per day). High-Frequency Phone Surveys on COVID-19 (HFPS COVID-19) found that 72% of rural households were moderately or severely food insecure, compared to 53% of urban households, being the most commonly-reported cause the fall in the price of farming/business outputs (66% of households) followed by an increase in the price of farming/business inputs (30%) and the disruption of farming, livestock, and/or fishing activities (29%). According to the Reserve Bank of Malawi (RBM), remittances from Malawians working or living abroad had dropped 33 percent by June, largely as a consequence of the COVID-19 pandemic

A joint declaration of the ministries of agriculture of the African Union (AU) states on 16 April 2020 acknowledged the critical implications of COVID-19 for health but also emphasized the urgent need to address the massive potential impacts of the pandemic on food security and nutrition. In response, MoAIWD established the Agriculture Cluster, with FAO co-chair, with the primary objective to

support the emergency food security surveillance system, personal protective equipment and training to extension providers, COVID-19 training and awareness building, nutrition and food production education, digital platforms, and monitoring transboundary livestock diseases and input supply.

The Agriculture and Food Security Cluster of the National COVID-19 Plan has the specific objectives to provide lifesaving food assistance to people affected by the economic shock consequent to Covid-19 outbreak, and to minimize negative or risky coping mechanisms for affected communities and households that may lead to increasing the risk of COVID -19 infections. The target group includes food-insecure populations that may be affected by limited availability of casual labour and food commodities on local markets as result of COVID-19 outbreak. Priority preparedness and response activities include (i) Remote Market & food security monitoring using mobile technology; (ii) Orient participating partners and affected communities on infection prevention during implementation of food assistance; (iii) mobilize funding to finance required assistance food and/or cash; (iv) Expand livelihoods programmes/ re-orient them to reflect COVID-19 challenges; (v) conduct market assessments to inform response modality choices; (vi) set up a complaints and feedback mechanism for beneficiaries; (vii) coordinate food assistance implementation programmes to the targeted populations affected by COVID -19; (viii) facilitate monthly District-level coordination meetings with Government Departments, District Councils, private sector, and operating NGOs in districts affected by COVID-19.

To address National COVID-19 Preparedness and Response Plan, with special focus on the Food Security Cluster, FAO has helped MoAIWD through the Department of Agriculture Planning Services (DAPs) to establish and run a simple but robust Emergency Agriculture and Food Security National Surveillance System (EmA-FSS) that is generating weekly data on four areas of interest: i) tracking and monitoring cross-border trading, market functionality and prices of major food items; ii) veterinary extension services, disease management and livestock markets; iii) perishables and the functionality of a number of the value chain corridors in critical regions. The EmA-FSS complements other national systems and focuses on generating rapid indicators on weekly basis to help track evolving dynamics in the country.

As an emergency response, the Government has received support by KULIMA and PROSPER programmes for the distribution of seeds, livestock and minor equipment on an emergency basis to more than 35,000 households. Sixteen radio stations are delivering COVID-19 awareness messages to the agricultural sector, coordinated by the Department of Agriculture Extension Services, with support from the FAO and KULIMA programme. The EU-funded Afikepo programme on nutrition-sensitive agriculture, with technical support from FAO and UNICEF, has integrated and disseminated COVID-19 messages within its food diversification, hygiene, maternal, and infant and young children?s nutrition information packages. WFP, the Malawi Red Cross and UN agencies are supporting the Ministry of Education in the distribution of take-home rations for students in several districts. FAO has developed a resource handbook for running farmer field schools (FFS) during the COVID-19 pandemic (FAO, 2020a), that will be used to train extension workers. Moreover, FAO, in collaboration with MoAIWD, the Malawi Forum for Agricultural Advisory Services (MAFAAS), the Civil Society Agriculture Network (CISANET), and other NGOs with projects around the country, has promoted and scaled up access to agriculture advisory services using radio, print media, video, mobile vans, and social media, such as WhatsApp.

Responding to the governmental proposal to accelerate payments under the social cash transfer programme (SCTP), the WB and UN agencies have developed a joint COVID-19 Urban Cash Transfer Initiative with monthly payments equivalent to the minimum wage. The Government will also engage development partners on providing stimulus grants to the financial sector. Microfinance institutions have taken several measures, such as the provision of temporal moratorium on interest and principal repayment of loans by borrowers, restructuring and refining or renegotiating loans for all borrowers affected by COVID-19. The country's mobile money operators, TNM and Airtel Malawi, announced a suspension of user fees and charges on personal transfers for a period of three months to help minimize the use of bank notes.

The Malawi child project will contribute to the implementation of the National COVID-19 Preparedness and Response Plan, through the adoption of work tools, procedures and activities that help mainstream the priorities established in the National Plan Clusters - with special focus on those related to agriculture and food security - into the project components. In this sense, the project will apply the different tools that FAO and other development partners have developed in response to the COVID-19 pandemic in Malawi and will give continuity to interventions that have already been launched by other projects, especially with regard to the baseline investment projects KULIMA and PROSPER. Specifically, within the framework of the project components the following COVID-19 related actions are foreseen:

Component 1:

•Participate to the Malawi?s National COVID-19 Task Force and ensure the mainstreaming of the National Response Plan and Clusters? priorities into the LDN policy development process led by the NCCC&DRM.

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Component 2:

•Take advantage of all participation events for the elaboration of integrated landscape management plans (ILMP) to: (i) counter spread of fake news on COVID-19, (ii) equip and train front-line project facilitators and field workers, and community leaders, about COVID-19 related knowledge; (iii) raise awareness and disseminate information about COVID-19 impacts and response measures in agriculture, forestry, food security and nutrition, (iv) inform about and encourage the observation of the official rules to be followed to avoid contagion and transmission. Apply governmental defined measures during all participatory events and provide kits to participants.

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•In the framework of ILMPs undertake a specific assessment of the COVID-19 impact to vulnerable groups, including women, children, elderly and persons with disabilities, to reinforce the project activities in terms of participation, decision-making, and access to training, extension services, inputs, equipment and finance.

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•Support the delivery of COVID-19 awareness messages on nutrition-sensitive agriculture (e.g. importance of food diversification, hygiene, maternal, and infant and young children?s nutrition) through radio stations in the targeted districts/landscapes, in coordination with the Departments of

Agriculture and Forestry Extension Services, following the initiatives already implemented by FAO and KULIMA programme, and the EU-funded Afikepo programme.

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•Apply the FAO resource handbook for running farmer field schools (FFS) and Forest Management Learning Groups (FMLG) during the COVID-19 pandemic, as a way to raise awareness among school participants about the impact of COVID-19 in natural resources management, value chain development and food security, and build capacity of master trainers, community-based facilitators and other extension agents about effective tools and procedures to train farmers and forest users.

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•Plan for and develop specific activities and tools to ensure the access to agriculture and forestry advisory services during COVID-19 pandemic, such as the use of radio, print media, videos, mobile vans, and social media, such as WhatsApp, to overcome barriers related to social distance, travel limitations and possible lockdown periods.

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•Adopt emergency criteria linked to COVID-19 situation in the targeted landscapes in the procurement windows 1, 2 and 3 to make sure that the purchase and distribution of SLM/SFM/GVC inputs and equipment enhances the preparedness and response capacity of vulnerable farmers and forest users and producers? organizations and enterprises to the pandemic waves.

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•Promote the adoption of safety and health measures linked to COVID-19 in the producer organization and enterprises targeted by the project, to ensure safe working environment, train their employees on safety and health issues for the workplace, and comply with safety and health standards at workplace.

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•Support private sector dialogue in the framework of the Innovative Platforms (IP) under Outcome 2.3 through the setting up of social media tools, such as WhatsApp groups and online platforms to facilitate coordinating assistance to the IP value chain members, the sharing of information, and to respond to funding opportunities for COVID-19 sensitive innovations.

Component 3:

•The Forest Landscape Restoration Monitoring Framework (FLRMF) and the Landscape Monitoring Action Plans (LMAPs) will integrate EmA-FSS gender-sensitive indicators to help track and monitor COVID-19 evolving dynamics linked to agriculture, forestry and food security.

•Develop gender-sensitive knowledge materials in English and the local languages (e.g. printed materials, videos, jingles, radio/TV products) and innovative social dissemination channels (e.g. WhatsApp and other social media groups, theater groups, roadshows) informing about impacts and responses to COVID-19 in sustainable natural resources? management, green value chain development, and food security, and facilitating interactions among farmers/forest users, members of producer organizations, and value chain actors.

Further details of the project Components, outcomes, outputs and associated activities are presented in the following section.

GEF alternative scenario

This project is part of the Sustainable Forest Management Impact Program on Dryland Sustainable Landscapes (the Global DSL IP), approved by the GEF in 2019 and benefitting 11 countries in Africa and Asia, which participate in the Program through Child Projects developed in coordination with each other. The goal of the Program is to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands through the sustainable ? and integrated ? management of production landscapes.

Among the 11 DSL IP countries, seven are part of the so-called ?Miombo Cluster?: Angola, Namibia, Botswana, Zimbabwe, Malawi, Mozambique and Tanzania. In addition, Zambia also joined the Cluster. Zambia is concomitantly developing a LDCF adaptation project with support from FAO and wished to coordinate its design process with the other SADC countries. Countries within the Miombo Cluster share not only similar ecosystems that are unique in Southern Africa, herein referred to as ?Miombo-Mopane Woodlands?, but also similar and common challenges, including trans-frontier ones, with respect to land-use management. Through the effective implementation of Miombo Cluster Child Projects, participating countries will seek strategic and conceptual cohesion, regional collaboration and peer learning opportunities, in order to address these common challenges that are typical of the Southern Africa region, including with the support from regional bodies and partners, in addition to participation in global DSL IP processes and initiatives.

In Malawi, the DSL IP Child Project proposes to address issues such as: the growing demand for agriculture land and charcoal production due to the accelerated population growth trend; the inability of maladaptive management practices to adapt to climate change and respond to the demand for food and other services while ensuring food security and income needs of local communities; enhance conservation, sustainable use of biological resources and ensure benefit sharing resulting from utilisation of biological resources and address the weaknesses of the policy environment and institutions to ensure gender-inclusive land tenure security, community-based sustainable natural resources management, access to rural finance, and the development of green businesses.

Development objective and project objective

The Development Objective of the project is ?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 Objective is ?Sustainable management of the Miombo and Mopane productive landscapes of the Districts of Balaka, Ntcheu and Mangochi, contributing to national land degradation neutrality targets?.

To achieve this objective, the project is structured into three interlinked technical components: Effective governance support on LDN at the national level and in the targeted Mopane/Miombo landscapes (Component 1); Scaling-out SLM and SFM best practices at the landscape level to support

the development of environmentally sound, socially-beneficial and economically-viable green value chains (Component 2); and effective knowledge management, monitoring, and linkages with the SFM-DSL-IP (Component 3). This section describes the scope of the components in terms of outputs and outcomes expected to be achieved.

Component 1: Effective governance support on LDN at the national level and in the targeted Mopane/Miombo landscapes.

Outcome 1.1: Enhanced multisectoral and multilevel LDN planning and governance mechanisms.

The GoM has set national voluntary Land Degradation Neutrality (LDN) targets by 2030 and formulated associated measures to achieve the governmental commitments under the Rio Conventions (UNCCD, CBD, UNFCCC) and the Sustainable Development Goal target 15.3 on Land Degradation Neutrality (LDN). LDN targets in Malawi are defined at sub-regional level. The target for the Shire River Basin sub-region is to attain LDN by 2030 and an additional 2% net gain of land improvement. Additional LDN-related targets have been set in the National FLR Strategy with its commitment under the AFR100/Bonn Challenge to restore 4.5 million hectares of degraded land by 2030. The National Charcoal Strategy (2017?2027) is harmonized with the National FLR Strategy and represents an ambitious and progress reform which sets out a 10-year plan for a climate-resilient and sustainable energy sector. Malawi?s landscape restoration efforts are a direct contribution to numerous regional and global processes, including: AFR100 and Bonn Challenge, LDN under UNCCD, CBD Aichi targets 2-3-4-5-7, SDGs, UNFCCC, UN Sustainable Energy for All (SE4ALL), and the Great Green Wall Initiative (GGWI) that will help SADC countries mobilize resources to combat desertification in the Miombo drylands.

Achieving LDN requires an integrated landscape management perspective addressing trade-offs between the environment and rural development, a mix of actions on land restoration, SLM/SFM, and the creation of an enabling environment - combination of institutional capacity, governance, policy and regulatory mechanisms, knowhow-policy interaction, and financial resources. Malawi has a strong policy framework to support LDN requirements. Sustainable natural resources management and land restoration are quoted as long term objectives in Vision 2020 ? Malawi?s national development perspective ? and the Malawi Growth and Development Strategy III (MGDS III 2017-2022). Integrated landscape management (ILM), ecosystem restoration and SLM/SFM are pivotal elements of several policy frameworks, such as the National FLR Strategy, the National resilience Plan, the Water Resources Act (2013), the Malawian NDC to the UNFCCC, the National Climate Change Investment Plan, the National Biodiversity Strategy and Action Plan (NBSAP) II 2015-2025, and the 2017-2022 MGDS III. The National Forestry Policy (2016) is designed to align the country agreements on climate change, biodiversity and combat desertification, including FLR, SFM and community involvement in the governance of forest resources. Investments in the five Key Priority Areas of MGDS III will contribute to improved nutrition and food security, increased agriculture productivity, diversification and agribusiness/market development, enhanced environmental and climate-risk management, while

increasing technology adaption and reducing unemployment and gender inequality. The National Agricultural Investment Plan (NAIP) (2017-2023), the main implementation vehicle of the National Agriculture Policy (NAP), supports alignment with related policies and investment frameworks to ensure inclusive, environmentally sustainable and climate-smart sectoral growth. The National Land Policy (2016) has a strong focus on formalizing customary systems for land tenure security.

Nevertheless, the National Land Resources Management Policy and Strategy (2000) is outdated and needs to be reviewed to incorporate some emerging issues such as climate change and conservation agriculture, two key sectors for SLM. This is important to address sensitive issues, such as the increasing use of environmentally-fragile areas like steep slopes and riverbanks for agriculture and the trend to expand land under agriculture through clearance of forest land to meet the food needs of the growing population.

Despite the existence of policies in the sector relevant to Integrated Landscape Management, SLM, SFM and LDN, most of them need to be updated/reviewed to improve their alignment with international and regional obligations, as well as their relevance to emerging LDN issues. Major challenges towards a conducive policy environment for the implementation of LDN in Malawi are: (i) lack of cross-sectoral coordination and cross-compliance; (ii) lack of implementation and weak enforcement of existing policies, mainly because these policies are developed without accompanying implementation frameworks; (iii) lack of capacity and sufficient human resources, mainly at the district and local levels; (iv) insufficient and inadequate financing instruments often supporting maladaptive natural resources management practices.

Major challenges towards a conducive policy environment	**Project Outcomes and Outputs**
Lack of cross-sectoral coordination and cross-compliance	? Output 1.1.1 will enable the NCCC&DRM cross-sectoral governmental coordination body to prepare new/improved cross-compliant policies and regulations and apply effective cross-sectoral coordination mechanism. ? Output 2.1.1 will apply cross-sectoral policy compliance and coordination in the framework of ILM planning.
Lack of implementation and weak enforcement of existing policies developed without accompanying implementation frameworks	? Output 1.1.1 will contribute to policy development and specification of accompanying implementation frameworks at national level. ? Output 1.1.2 will raise the knowledge of existing policy framework by public servants and members of committees at district, area and village level, and contribute to the transposition of national frameworks into regulations and bylaws at district and local level.

Lack of capacity and sufficient human resources	? Output 1.1.1 and Output 1.1.2 will increase awareness and understanding of cross-compliant policy frameworks at national and local level, and will enable policy-makers from the public administration and members from the district, area and village committees, to develop cross-compliant laws and regulations. The project will lobby the government to recruit field staff and fill current vacancies in all relevant sectors. ? Output 2.2.3 will support district environment subcommittee, area and villages committees to develop bylaws supporting the effective governance and sustainable use of natural resources by users? groups.
Insufficient and inadequate financing instruments	? Output 1.1.1 will propose recommendations to shift existing governmental incentives for land users on agriculture production and forestry into investment opportunities for SLM/SFM.

The project will contribute to improve and increase understanding within the Malawi administration and policy makers of the multidimensional benefits of ILM, biodiversity conservation, SLM and SFM, and it will strive to create a conducive environment for the mainstreaming of lessons learned from the ILM, SLM and SFM interventions, including landscape restoration, into the policy framework of Malawi, increasing multi-level and multi-sector capacity for cross sectoral planning, monitoring and law enforcement.

Output 1.1.1: The Malawi National Committee on Climate Change and Disaster Risk Management (NCCC&DRM) empowered to mainstream and harmonize LDN into sectoral policies, and to ensure their implementation through the introduction of cross-compliant regulations and incentives.

The National Committee on Climate Change and Disaster Risk Management (NCCC&DRM), will be the key government policy coordination platform for the project. NCCC&DRM currently provides an important information-sharing forum on government policy relating to climate change. It carries the responsibility to mainstream climate change into sectoral policies and programs. NCCC&DRM is co-chaired by the Department of Climate Change Meteorological Services (DCCMS) and Department of Disaster Management Affairs (DoDMA), with its Secretariat in The Environmental Affairs Department (EAD). At Project design, the NCCC&DRM was chosen as the key partner for policy work because of its good track record of work and demonstrated capacity to carry out its institutional mandate, compared to other similar bodies within the administration.

The Project Management Unit (PMU) will partner up with the NCCC&DRM to facilitate and follow up the mainstreaming of LDN from the policy development perspective, and to monitor the effective application of policies and legislation in the implementation of LDN interventions. NCCC&DRM will support PMU to carry out a full policy assessment to analyse challenges and opportunities for mainstreaming LDN objectives and supportive measures ? planning, implementing and monitoring climate-smart SLM/SFM at landscape level ? into current sectoral policies, legislation and regulations, so as to facilitate the achievement of the National LDN Voluntary Targets by 2030, under the UNCCD and Global Mechanism (GM). The priority interventions to achieve LDN are similar or equal to those

defined by the National FLR Strategy, NBSAP, National Charcoal Strategy, INC, MGDS III and other policy frameworks responding to Malawi?s commitments to international conventions (e.g. UNCCD, UNFCCC, CBD) and the 2030 Sustainable Development Goals. This convergence represents an important opportunity to accelerate the process of achieving the national LDN targets, although the lack of harmonization and coordination among agencies responsible for implementing and reporting achievements to international conventions was identified by most interlocutors as a serious challenge.

In the first half of Year 1, the PMU will entrust to the Centre for Environmental Policy and Advocacy (CEPA) the task to carry out a policy review process to:

(i) identify commonalities between national LDN targets and measures within different policy frameworks and international commitments (e.g. sustainable development goals, biodiversity, climate change, combat desertification, Global Partnership on Forest & Landscape Restoration), strategies and agreements between Malawi and its neighbours on regional environmental and development priorities (e.g. Zambezi Watercourse Commission, SADC, etc.), and propose a pathway for harmonization;

(ii) assess gaps in the new national strategies supporting LDN and sustainable development (e.g. National FLR Strategy, National Charcoal Strategy, National Resilience Strategy, MGDS III, NBSAP II) in terms of their translation into concrete policy regulations within sectors and administrative levels;

(iii) assess constraints and opportunities to mainstream LDN objectives and targets within sectoral policies, legislation and regulations (e.g. forest, agriculture, water, energy, infrastructures, land tenure, spatial planning, urban, food security, gender);

(iv) assess multi-level cross-compliance problems within and among existing sectoral policies, legislations and regulations that prevent the effective implementation of the national targets on LDN and other international commitments;

(v) assess the effectiveness of existing policy incentives supporting farmers, forest users and other sectors, towards the sustainable intensification of production and rural development;

(vi) assess constraints in the transposition of national policies, legislation and regulations at the sub-national level and identify knowledge gaps among sub-national civil servants;

(vii) assess legitimacy problems of local-level institutions, such as VNRMC and traditional leaders, identifying policy amendments? needed to improve regulation and accountability;

(viii) assess men and women?s land rights in the context of existing legislation and Malawian patrilineal and matrilineal systems. The pool of CEPA consultants will be asked to use the principles and standards of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT), adopted by the Ministry of Lands, Housing and Urban Development in 2014, to

incorporate in the policy recommendations the internationally accepted practices for systems that deal with the rights to use, manage and control land, fisheries and forests. CEPA will build on the successful results of the Malawian civil society network *Landnet* to raise awareness, build capacity and promote VGGT among district government officers and community members in several districts.

This deep and broad policy review will also look at co-ordination mechanisms across multi-level governmental agencies and departments to address mainstreaming and cross-compliance, with the objective to reduce the likelihood of conflicts in the implementation of LDN interventions. The chair of the NCCC&DRM will appoint contact persons on behalf of the Committee in the different governmental departments at the national, district, and local levels to facilitate the necessary information to the CEPA consultants and contribute to the review. Representatives of the departments of the MoAIWD (e.g. DAES, DCP, DLRC, DWD, DARTS[1]) and the MoNREM (e.g. Department of Forestry, D. of Energy, D. of Environmental Affairs, D. of Climate Change and Meteorological Services, D. of National Parks and Wildlife), MoLGRD, and their counterparts at the district level, will play a key role in this process.

The result of this policy review process will be a Policy Influencing Plan (PIP) including the in-depth policy analysis and a set of draft recommendations to improve the mainstreaming of LDN into the national policy framework. The draft PIP will be presented at a National Seminar that the NCCC&DRM will convey by mid-Year 1, involving policy-makers, civil servants, research/academia, extension organizations, farmer organizations, private sector, international development agencies and NGOs. The outcome of the seminar will be a final, validated version of the Policy Influencing Plan including: (i) an overview of the policy framework relevant to LDN, with an analysis of strengths, weaknesses, gaps and opportunities; (ii) a set of practical recommendations for the creation of a more conducive cross-compliant policy framework; (iii) policy and advocacy objectives and ?priority list? of short-term outcomes to be achieved within the GEF project lifespan; (iv) a pathway for the completion of the ?priority list? policy objectives and outcomes (key actors/target audience, expected results, activities, work plan and timeline, budget, synergies, the support role of the SFM-DSL IP); (v) opportunities and synergies at the regional level both within the SFM-DSL-IP program and other regional frameworks (e.g. the SADC regional policy frameworks) . The short-term outcomes of the PIP will include concrete targets on:

? The responsibilities of different ministries /departments vis-?-vis specific LDN objectives and targets identified and assigned.

? New cross-compliant policies and regulations adopted, improved or modified, incorporating the specific contributions of LDN objectives and targets.

? Increased awareness and understanding of cross-compliant policy frameworks to generate public will or support.

? Increased capacity of ?political champions? and groups or networks to advocate for the required policy changes.

? Increased capacity and cross-sectoral coordination mechanism for policy development and implementation.

? Strengthening of the administration through the recruitment of field staff to fill current vacancies and increase operational capacity on LDN target implementation.

The PIP will be made public through the web site of the project (clearing house run by CEPA), so as to allow comments and inputs of the civil society, the private sector and other concerned stakeholders.

As a following step, as from the end of Year 1 CEPA consultants will support the NCCC&DRM and the other concerned institutions (i.e. district level) in the implementation of the policy and advocacy actions and activities leading to the short-term outcomes of the PIP to be achieved by the end of the GEF project. The support for the PIP implementation under this output will include:

? The development of policy briefs with new/revised cross-compliant policy proposals at national and sub-national levels, and documents with accompanying implementation frameworks that detail the ?what?, ?when? and ?who? of the implementation level, including monitoring. The NCCC&DRM chair, in close collaboration with the MoLGRD, will appoint focal points within the different ministries and district councils to support CEPA consultants in the gathering and analysis of data for the development of policy briefs and documents, and proposal to improve cross-sectoral coordination. Through this process, the appointed ministerial focal points will learn about policy development and cross-compliant mechanisms contributing to LDN.

? The organization of awareness raising events at national, district, TA and landscape/village level, to provide information about existing policy rules and regulations, policy constraints and proposed improvements. Information events will target policy makers, civil servants and public officials, traditional leaders, and members of committees at district, area, and landscape and village level.

? The design and implementation of an advocacy plan to put forward for consultation and acceptance of policy makers the new/revised policy brief and documents, with the support of the project partners. The plan will include public surveys for developing advocacy messages, public events to help make an advocacy case of the revised/new policies and regulations to be approved, inclusion of advocacy-related information in websites, enroll high-profile individuals to publicly advocate for the proposed changes, etc.

This process will also count with the backup and support of the GCP SFM-DSL IP, which will facilitate identification and access to policy experts at FAO, IUCN, WWF and other specialists with recognized experience in the matter that the PMU may hire as international experts for Component 1.

Output 1.1.2: The capacity of concerned agencies/managing bodies in the three target districts is developed to become leading actors in the planning, implementation, and monitoring of LDN at the district level.

The policy revision undertaken in Output 1.1.1 will allow the identification of capacity and knowledge gaps among civil servants at the district level regarding: (i) existing policy frameworks, legislation and regulations with the accompanying implementation frameworks to effectively support ILM/SLM/SFM; (ii) policy-making at district and local level to support local institutions (e.g. ADC, VDC and VNRMC) in the development of regulations and bylaws needed to improve governance and consolidate the effective implementation of SLM/SFM; (iii) operationalization of the bylaws at community and district level with sufficient technical support and budget allocation; and (iv) decentralized institutional capability for LDN monitoring in the framework of the National the Forest Landscape Restoration Monitoring Framework (FLRMF).

The following steps will be followed by the project to address the capacity gaps identified:

Training workshops

Throughout Year 2, the PMU, with the support of the implementing partner NGOs in the target districts (e.g. AICC, Christian Aid, CEPA, Concern Worldwide, Kusamala Research Institute, MEET, WHH, and WRI[2]), will organize workshops in the three target districts to: (i) learn about local knowledge and challenges faced by men and women on land tenure and natural resources governance frameworks; (ii) build understanding of existing/proposed policy frameworks, strategies, and legislation supporting LDN (results from Output 1.1.1), the provisions defined under the different policy frameworks for participation of local communities in climate-smart ILM/SLM/SFM, and how these should be implemented; (iii) acquire lobby and advocacy skills to advocate for the operationalization of the revised/new laws and regulations, including a road map with concrete implementation plans and targets. Learning events will also address the legal and organizational tenure frameworks to introduce the use of the VGGT guidelines and gender-responsive approaches to LDN to district and local actors.

Tuition will be given by civil society and relevant governmental departments, targeting staff from the District Council, the sectoral district departments and district committees, as well as traditional leaders, local men and women leaders, and members of the district, area, landscape and village committees (e.g. DEC, ADC, AEC, VDC, VNRMC, BMC[3]). Gender-specific workshops will be entrusted to women-related grassroot organizations, who will bring together women leaders in each target district in order to learn from CEPA experts about the gender provisions of policies and legislation and how such aspects would affect women?s access, control and ownership of land and resources.

Training activities will follow a participatory learning approach, to encourage participants to share information, learn from each other and work together. WRI will provide technical assistance to design *policy accelerators* ? peer-to-peer capacity development activities ? to help improve implementation of existing policies or design new policies and incentives that promote SLM/SFM. It is expected that a better understanding of the existing policy frameworks at grass-root level will improve compliance and enforcement, and it will empower community members in claiming their rights and the formulation and effective application of laws and regulations on land tenure and natural resources governance.

Awareness campaigns

Awareness work will be carried out by local media firms in collaboration with the Department of Information of the GoM, whose units have personnel entrusted with the development and dissemination of messages. The trained community leaders ? both women and men ? will act as resource persons in the organization of community sensitization meetings to increase local knowledge on governance and legal frameworks about land rights and ILM/SLM/SFM implementation, and to build the capacity of women and men to benefit from the existing laws and regulations and advocate for the improvement of the legal framework. With the support and facilitation of CEPA consultants and the Department of Agriculture Extension Services, key communication messages will be prepared on the basis of the training workshops? results and delivered by various speakers, including public administration officials, traditional authorities, rural men and women leaders, youth group leaders, CEPA experts, among others. A series of performances (e.g. jingles, drama, poems and traditional dances) will be prepared together with grassroot groups to encourage participation and facilitate the transmission of messages, and knowhow about SLM/SFM best practices will be shared through media actors, such as the Farm Radio Trust and its network of 360 ICT farmer hubs in the target districts. The PMU will hire a video marketing agency or freelance to document people?s voices and narrate the awareness raising events to be used in subsequent awareness campaigns.

Bylaws formulation

CEPA consultants will support the district, area and village committees and traditional leaders in the target landscapes in the formulation and implementation of regulations and bylaws for the effective implementation of SLM/SFM. Once the ILM plans are finalized at the end of year 2 (Output 2.1.1) and the FLR/SLM/SFM priorities are defined for each area of the landscape, the implementing partner NGOs in the target districts (e.g. AICC, Christian Aid, Concern Worldwide, MEET, WHH, and WRI[4]), with the support of CEPA consultants, will organize demonstration workshops to show how it work the formulation of policy proposals on a small scale (e.g. community bylaws and regulations) that support the effective implementation of the selected FLR/SLM/SFM priorities in several sites of the landscapes. Staff from the District Council including District Agriculture Development Office (DADO) and District Forest Office (DFO) District Water Officer (DWO) District Environmental Officer, traditional leaders, and members of district, area, landscape and village committees, will be coached by CEPA consultants on the understanding of policy needs for the effective implementation of FLR/SLM/SFM, the revision of pros and cons of the existing frameworks, and the formulation of new/amended regulations and bylaws applicable in each agriculture area and forest block/village area. Specific attention will be given to the regulation of tenure and use rights related to the management of trees in farmland, the use of agriculture waste, farmland-livestock integration, and the governance of wood and NTFP collection and biodiversity conservation in the forest block and forest village area. Specific bylaws will focus on the provision of tenure security for women both in agriculture and forest uses.

Local facilitators hired by the Implementing partner - NGOs[5] - of project Component 2 will organize awareness events in the village agriculture and forest areas where policy development demonstrations take place, during which DADO and DFO officers, traditional leaders and members of area and villages committees will introduce to the local community the contents of the existing and proposed regulations and bylaws, including the sanctions and penalties if not respected, and the procedures that

land users ? specially women ? should follow to benefit from their application. The policy proposals will be tested as part of the implementation of FLR/SLM/SFM and best practices will be transferred to the NCCC&DRM through the PMU to feed into the Policy Influencing Plan (Output 1.1.1).

Output 1.1.3: multi-sectoral and multi-level policies and regulations are improved and disseminated, using the knowledge generated and lessons learned through LDN practice.

Effective policy improvement for LDN also requires the translation of lessons learned from the pilot testing of sustainable landscape management interventions into legislation, regulations, and bylaws. The policy component of the project will take this into account, and will set up a mechanism that will help integrate best practices from ILM/FLR/SLM/SFM/GVC implementation (Component 2) into policy improvement, as part of the ?priority list? of short-term outcomes of the Policy Influencing Plan (Output 1.1.1) to be achieved within the project lifespan. The gathering of this information coming from the field will be part of the project monitoring framework (Outcome 3.1) conceived and tailored to facilitate the periodic collection of data from simple indicators, with the participation of local practitioners, and perform a fast and well-founded analysis of the impact of interventions on biodiversity, the governance of natural resources management, land and forest restoration, improved production, gender disaggregated local livelihoods and food security. The analysis of the collected data will allow to produce best practices that will be communicated to women and men through sensitization meetings, and will be used by the local policy-makers for the refining/production of bylaws. At the national level, the PMU team will mainstream this information into recommendations (policy briefs) for the improvement of laws and regulations, which will be shared with the NCCC&DRM to feed the policy improvement process (Output 1.1.1). During annual NCCC&DRM meetings the policy recommendations will be discussed for their inclusion in the Policy Influencing Plan (PIP).

The best practices from the implementation of the SLM/SFM priorities at the landscape level will play a key role in proposing changes in the existing financial incentives at disposal of the farmers and forest users to improve production. The experience of the Landscape Conservation and Development Fund (Output 2.2.2) in supporting investments in equipment and inputs for the landscape priority interventions, will help test workable alternatives to influence the governmental budget ? e.g. environmental taxes and subsidies ? to better address the national LDN voluntary targets. According to the information gathered during project design, more than 70% of the agriculture subsidies budget goes to the national Farm Input Subsidy Program (FISP), which on one hand has positive impacts on maize yield and household income, but on the other has negative environmental impacts and disincentives the cultivation of legumes (intercropping) and the use of organic-based materials and methods that enhance on-farm soil fertility and water conservation. Best practices on the landscape-level SLM/SFM investments will be used by the PMU to convey to the NCCC&DRM recommendations for the shifting of the national Farm Input Subsidy Program (FISP) from purely inorganic fertilizers and maize seeds, to selective payments that also subsidize agro-environmental measures linked to sustainable tree-crop-livestock agroforestry farming under conservation agriculture and climate-resilient crops and varieties. In the same way, other relevant public subsidies such as the Local Development Fund and Forest Management Fund will be assessed, and policy improvement recommendations will be fed to the annual NCCC&DRM meetings, and will be shared with relevant policy I, such as the Social Support

Committee, and the Parliamentary Committee on Agriculture and Natural Resources which can lobby during budget sessions for more funds allocation into these areas.

The outcomes of the policy development process will be disseminated through policy briefs and other awareness materials (e.g. leaflets, posters and reports with abundant visual elements, PPT and video presentations in the local languages) that will be distributed among project beneficiaries and partners in the target landscapes and districts, at a national level, and in the web, and as part of the project?s communication program (see Output 3.1.3). Information and short training sessions will also be organized for central and local administration officials, including the parliamentary committee on agricultural and natural resources.

Component 2: Scaling-out SLM and SFM best practices at the landscape level, to support the development of environmentally sound, socially-beneficial and economically-viable green value chains.

Outcome 2.1. Integrated landscape management plans (ILMP) incorporating LDN objectives developed and under implementation in the Balaka, Ntcheu and Mangochi Districts.

Integrated landscape management planning (ILMP) is pivotal to the achievement of LDN voluntary targets and its importance is acknowledged in several key national and international policy frameworks: (i) Malawi?s FLR strategy identifies landscape-level restoration needs and cost-effective opportunities to mitigate the underlying conditions of land degradation and ecosystem services depletion; (ii) the National Resilience Plan defines ?catchment protection and management sub-sector? as implementation frameworks; (iii) the Water Resources Act (2013) paves the way for the establishment of River Basin Agencies/committees to enforce integrated catchment planning and management; (iv) the Malawian NDC to the UNFCCC points out integrated catchment management and PES mechanisms as a major target for land-based mitigation plans, and the National Climate Change Investment Plan has a key investment area on integrated watershed management; (v) the National Biodiversity Strategy and Action Plan provides on the need to develop guidelines on integrated watershed management (vi) the 2017-2022 MGDS III addresses the need for an innovative landscape management approach under a development area on ?human settlement and physical planning?. ILM ensures that by managing the underpinning natural resource base and ecosystem services in a coordinated way, societal needs can be met in the short and long term.

The Landscape Approach is about balancing competing land use demands in a way that is best for human well-being and the environment. Common characteristics of Integrated Landscape Management[6] principles and tools are shared by the main global landscape planning initiatives ? specifically the Global Partnership of Forest Landscape Restoration (FLR) and Integrated Watershed Management Planning (IWMP) under the Global Water Partnership. In the case of IWMP the landscape unit in the watershed, while in the case of FLR it can be the same or another *broad territorial unit with a mosaic of land uses and nature protection areas, which is defined based on ecological integrity and socio-economic sustainability criteria*. The ILM interventions will build on the available landscape assessment and planning tools of the National FLR Strategy and the National Catchment Management Guidelines, as well as on the global experience of GCP SFM-DSL IP partners, such as the

FAO FLR Mechanism, the IUCN Global Actions for Drylands, the EverGreening the Earth Campaign, and WRI Global Restoration Initiative.

The target districts of Mangochi, Ntcheu and Balaka are located in the upper Shire River Basin. This basin was chosen by the World Bank [7]to pilot landscape planning and management through the establishment of the Shire River Basin Agency (SRBA) and the development of pilot multi-stakeholder and multi-sectoral Catchment Management Plans, as an umbrella landscape vision and planning framework for Village-Level Action Plans. By the end of the SRBM Program Phase I in 2019, the SRBA was successfully set up within the framework of the Water Resources Act, but the hiring of adequate and qualified staff is still pending and its annual operational budget is not fully funded. The SRBMP also developed national guidelines for ?Integrated Catchment Management?, and piloted the development of Catchment Management Plans in four landscape units in the lower and middle Shire River basin, including the establishment of the Community Environment Conservation Fund (CECF) to the benefit of beneficiary communities. The fund triggered the implementation of the sustainable land management priorities identified in the landscape plans, with a positive impact on adoption rates.

The project will scale out the lessons learned on the implementation of ILMPs under the SRBA, focusing on landscape units from the upper Shire River Basin in the districts of Mangochi, Ntcheu and Balaka, and it will make use of the harmonized, participatory landscape planning methodologies and tools already applied successfully in Malawi by the following initiatives:

? The Forest Landscape Restoration Opportunities Assessment, supported by WRI and IUCN, and led by the Government of Malawi in the framework of the National FLR Strategy, adopted the ROAM methodology[8] and applied the multi-criteria analysis (MCA) to identify priority areas where forest landscape restoration (FLR) interventions might jointly achieve food security, increase resilience, and support biodiversity. This exercise yielded the information needed to design restoration interventions according to the severity and type of degradation in each site, and established five FLR priority categories: (i) climate-smart agriculture technologies, including conservation agriculture, FMNR and tree planting supporting tree-crop farming systems; (ii) demarcation, institutional arrangements and bylaws, and protection measures for the natural regeneration of community forests, and the planting of communal/private woodlots; (iii) co-management of forest reserves with institutional arrangements and bylaws for forest regeneration and sustainable use of wood and NTFP; (iv) soil and water conservation infrastructure, assisted natural regeneration and forestation in areas with soil erosion problems; (v) tree planting and assisted natural regeneration along streambanks. The FLR assessment has identified and mapped the priority areas suitable for each of the five intervention types in each district and performed a cost-benefit analysis outlining intervention costs and projected benefits in terms of higher yields and increased household income.

? FAO has successfully applied worldwide a set of methodologies and tools (Collect-Earth, SHARP, simplified WOCAT) for the participatory assessment of land degradation and households? resilience at the landscape level. This approach was tested in two pre-selected sites in the districts of Mangochi (Monkey Bay) and Ntcheu (Dzonzi), to map priority areas for LDN interventions (results available in section 1.a Project Description of the PRODOC).

? The National Guidelines for ?Integrated Catchment Management? developed by the WB Shire River Basin Management Program were applied in four sub-catchment landscapes in the lower and medium river basin.

During design phase, the SFM-DSL IP project chose to prioritize landscape units including watersheds whose catchment areas are established as forest areas, so as to mitigate the impact of the different land uses on the forest ecosystem services supporting local livelihoods. Because of the increased fragmentation of the forests and the growing encroachment by expanding agriculture, the project will focus on landscapes that integrate the following type of land uses: (i) agriculture buffer zones around forested catchments; (ii) forest areas, and (iii) the mosaic of agriculture and forestland that connect nearby forest reserves. The project will prioritize the development and adoption of integrated landscape management plans (ILMPs) in landscape units of Mangochi, Ntcheu and Balaka where partial assessments on land degradation and household resilience (baseline sites represented with red dots in the figure bellow) were undertaken during the project formulation phase:

? The landscape of the Liwawadzi river basin spreading over the two districts of Ntcheu (upper part of the landscape, spreading over parts of TA Mpando, TA Phambala, TA Kwataine, SC Champiti, SC Makwangwala) and Balaka (lower part of the landscape, spreading over parts of TA Kalembo, TA Kachenga, TA Sawali and TA Nsamala), and discharging its waters to the Shire river. This landscape includes the nearby Mvai and Dzonzi Forest Reserves (FRs) in the Liwawadzi catchment area with the agriculture land buffering them in the Ntcheu district, and the mosaic of agriculture land and unprotected forest patches in the middle and lower part of the basin between the Ntcheu and Balaka districts. The landscape covers an area of 318,864.35 hectares, of which approx. 60% of the area is in the Ntcheu district and 40% in the Balaka district.

? The landscape that extends between the forest areas of Phirilongwe, Masaka-Chembe and Nkopola covering large parts of the Traditional Authorities (TA) of Nankumba, Chimwala and Mponda in the Mangochi district. The landscape includes four river basins: (i) Lisangadzi river basin between the forest areas of Phirilongwe (upstream) and Masaka-Chembe (downstream), and the proposed new forest reserve providing connectivity between them; (ii) three neighboring small river basins in its eastern side, one of them including Nkopola forest area. The four river basins feed their waters to the Lake Malawi. The total surface of the landscape is 101,675 hectares.

Output 2.1.1. Integrated Landscape Management Plans (ILMPs) developed in the target landscapes of Mangochi, Ntcheu and Balaka districts.

The landscape planning exercise will follow the land degradation assessment methodology used by the National FLR strategy, the national guidelines for ?Integrated Catchment Management? developed by the WB SRB program, the FAO landscape assessment tools already tested in two pre-selected sites in the districts of Mangochi and Ntcheu, and the WRI experience in Malawi on multi-stakeholder landscape planning implemented. The Integrated Landscape Management Plans (ILMPs) will define the baseline scenario and problems, an alternative scenario and landscape vision, a landscape management strategy, a cost-benefit analysis of the proposed LDN-related landscape restoration, sustainable management and biodiversity conservation interventions, an implementation workplan and

corresponding investment plan, and a monitoring and evaluation plan. The ILMP process will follow the following road map:

Step 1: Establishing the Landscape Management Committees. The preparation of comprehensive integrated landscape plans is a complex process, which requires coordinating the contribution of many actors representing different stakeholder groups and sectors. The project will setup a task force or Landscape Management Committee (LMC) in each district, made up of representatives of the District Councils (DC), other district- and area-level public bodies (e.g. DEC, ADC, AEC, VDC, VNRMC, BMC, DADO, DFO, DARS[1]), traditional leaders, representatives of users? organizations, local entrepreneurs, NGOs, researchers, youth group leaders, the implementing partner NGOs in the target districts (e.g. AICC, Christian Aid, Concern Worldwide, MEET, WHH, and WRI), and other actors with demonstrated competences related to Integrated Landscape Management (ILM) planning. The Landscape Management Committees will be chaired by the District Councils, who will contract a technical facilitator and a finance and administration assistant to assist the members in facilitating the committee activities. The LMCs will include members of existing committees at the district, area and village levels, with the idea of integrating the decision makers that already exist in each landscape unit, and serve as a decision-making forum to plan, implement and monitor the priorities identified in the framework of the Integrated Landscape Management Plans (ILMPs).

The PMU and the implementing partner/NGOs will share tasks for contacting the selected organizations and institutions to get their agreement to join the task force and designate a representative of each organization. Given the administrative complexity of the ?Liwawadzi and its tributary Rivirivi river basin? landscape, which spans over two districts and 9 Traditional Authorities, the project will establish two LMCs ? one in Ntcheu district and another one in Balaka district ? which should work in an integrated manner, through sub-landscape planning workshops for each LMC, and joint meetings with the two Landscape Management Committees to integrate and harmonize the analysis for the entire landscape.

Step 2: Learning on Integrated Landscape Management Planning. By mid-Year 1, once the LMC task force and its members are established, the Implementing partner NGOs will organize a three-days workshop on ILM planning in each of the target districts. The PMU will prepare the workshop agenda and hire national and international consultants to provide the contents of the different workshop sessions.

Step 3: Refining the landscape boundaries. By mid-Year 1, as a follow up of the learning workshops, the Landscape Management Committees will meet to discuss about the pre-defined boundaries of the landscapes and the implications regarding the integral or partial representation of the different customary, private and public land plots that are cut by the boundaries of the landscape. As a result of the debates among landscape committee members, the boundaries of the landscape may be maintained or expanded in some areas to ensure full inclusion of the lands that LMC members consider that should be part of the landscape.

Step 4: Mapping and baseline analysis. In the first half of Year 1, a multidisciplinary landscape assessment team will be appointed, including local, national and international experts covering all the required areas of expertise ? land degradation, biodiversity, agriculture, forestry, nature protection,

climate change, water/watersheds, energy, urban, infrastructures, food security, land tenure, gender, etc. The team will perform a desktop baseline assessment of the environmental, social, economic and governance features of the predefined landscapes based on the existing land degradation reports (e.g. National FLR ROAM assessment results in the target districts; Malawi Spatial Data Access Portal/MASDAP; FAO Collect Earth, SHARP and simplified WOCAT assessment in the baseline sites of Monkey Bay and Dzonzi areas). The assessment will also integrate available information on the landscape biodiversity ? protected areas, distribution and conservation status of priority habitats and key flora and fauna species populations, including tree/shrub species with high agroforestry value, as well as social, economic and cultural values. Climate change scenarios and adaptation/mitigation priorities will be assessed as a cross-cutting component of the analysis. Finally, the exercise will incorporate the results of the assessment of sectoral policies and institutional arrangements and their alignment with the national and Shire-basin sub-national LDN targets undertaken in Output 1.1.1. The mapping exercise will also refine the limits of the landscape, to ensure the inclusion of key areas for biodiversity conservation ? or key areas for another sector ? bordering the proposed limits of the predefined landscape which according to experts requires their inclusion. The mapping exercise will be complemented with an inventory in the target landscapes of populations of selected Miombo and Mopane woody species threatened at the local, national and regional levels, and an identification of potential areas for their reintroduction or to increase the existing populations. Additionally, the mapping exercise will identify areas where invasive species are widespread, in order to define measures for their control and / or eradication.

The desktop analysis phase will last two months and will be followed by a three months fieldwork phase including data validation, household surveys, and detailed stakeholder identification and analysis in the landscapes to validate and complete the mapping exercises. The outputs of this step will be: (i) stakeholders? analysis and mapping; (ii) SHARP report with the socio-economic and climate-resilience assessment of the landscape actors; (iii) and a series of maps for each landscape with the overlapping of the different layers, the identification of priority areas for land uses (e.g. biodiversity conservation, agriculture production, forest management, water conservation), the landscape pattern of land uses and connectivity among land use patches that brings more resilience, the status of conservation/degradation, and the identification of priority areas to restore favourable conditions for each land use. The produced maps will include the boundaries of the sub-landscape units (e.g. sub-catchment), to be defined at a subdivision level suitable for the establishment of village-level action plans (**Step 6**). The maps will be accompanied by a document outlining the results and providing detail information on the most appropriate type of intervention for each priority area, its cost-benefit, and the necessary resources. The information about LDN interventions will build on the National FLR assessment, whose priority interventions coincide with the SLM and SFM priorities for LDN that will be supported by the project.

At programme level, FAO will support the mapping processes among all the SFM-DSL IP child projects from the Miombo & Mopane Ecoregion, with the production of harmonized maps based on the feedback from the multidisciplinary team and on remote sensing information. The different layers will be overlapped to visualize the impact of land degradation on key landscape features. The mapping and baseline analysis phase will be completed in the second half of year 1 and will be shared with the Landscape Management Committees.

Step 5: Production of the Integrated Landscape Management Plans. The LMCs will make use of the outputs of the previous steps and will work with the pool of consultants to: (i) develop a shared landscape vision for LDN; (ii) agree upon site-specific intervention priorities that help increase landscape resilience, biodiversity conservation and sustainable utilisation and (iii) define a roadmap towards the production of full Integrated Landscape Management Plans with clear objectives, activities, expected results, implementation measures, timeframe, roles and responsibilities, costing, funding mechanism, indicators and monitoring system. The project follows an ecosystem-based approach, which implies that sustainable natural resources management and restoration interventions will ensure that no invasive species are introduced and that existing ones will be controlled and prevented from further spread in biodiversity value areas, such as the forest reserves and national parks that occur in the landscapes. The analysis of the threat status of key woody species of Miombo and Mopane will not only serve to define measures to restore their populations in the landscapes, but will also support a policy and advocacy plan for the inclusion of critically endangered species, such as *Colophospermum mopane* (tsanya), on the CITES list.

By the end of Year 1, step 4 results will be introduced to the landscape management committees in workshops organized by the Implementing partner NGOs at district level, to learn about findings, incorporate stakeholders? views and needs, and agree on the priorities for each landscape. In the Liwawadzi and its tributary Rivirivi river basin landscape, a second workshop will be organized bringing together the Ntcheu and Balaka Landscape Management Committees to share results and define a harmonized vision and priorities for the two sections of the landscape. The final outcome will be the redaction of two Integrated Landscape Management Plans that will be validated during a final multi-stakeholder workshop by early-Year 2. The Landscape Management Committees will develop a stakeholder engagement strategy to mainstream the landscape-level priorities into existing/new Village-level Action Plans and District Development Plans.

Step 6: Production or amendment of Village-level Action Plans. The Village-level action plans (VLAP) are plans for applying site-specific SLM/SFM/Green VC priorities identified in the Integrated Landscape Management Plan for the territory of the village or villages that are part of a sub-unit within the landscape. Plans provide for in-field activities, and typically cover a period of five years. The focus of the VLAPs is on the restoration and enhancement of the ecosystem services supporting sustainable agriculture and forestry production in the sub-catchments, through: (i) assisted natural regeneration and tree planting in degraded forestland and river/stream banks; (ii) planting community woodlots; (iii) restoring/enhancing agriculture land productivity based on tree-crop-livestock agroforestry systems managed with conservation agriculture technologies, pigeon pea-cereal intercropping and multipurpose tree planting and farmer-managed natural regeneration (FMNR); (iv) climate-smart infrastructures to store water and prevent soil erosion; (v) protection and preservation of existing high-value biodiversity areas and high value species.

Based on the outputs of step 5, in the first half of Year 2 the Landscape Management Committees will organize intensive community mobilization, awareness raising and consultation events in the sub-catchment areas of their respective districts to introduce the planning process and the landscape plans (ILMPs). The objective will be to get the commitment of village members to mainstream the ILMP priorities into the Village-level Action Plans (VLAP). Available information from previous VLAP

mapping exercises supported by the government and development agencies in the target districts will be collected and analyzed its alignment with the ILMPs. It will be important that from the very start of the planning process, those who have gathered to develop the VLAP are informed that by developing an acceptable sound plan, they will become eligible for accessing funding (*Landscape Conservation and Community-Development Fund)*, as a way to encourage a good turnout and active support in plan development. The Landscape Management Committees will support the village-level planning process so that people have both input into and a clear understanding of what their responsibilities are to develop VLAPs that feed into the Integrated Landscape Management vision and plan. Workshop discussions will facilitate a debate on the concrete site-specific climate-smart SLM/SFM interventions to stop and reverse land degradation at the village level. The set of participated Village-level Action Plans will be produced by mid-Year 2 of project and will cover a period of 4 years. The VLAPs once developed will be submitted to the Landscape Management Committees for their approval. The village or set of villages involved in each VLAP will define the most appropriate mechanism to manage the VLAP through a village-level committee, building on existing community governance institutions.

The Landscape Management Committees will support the VLAP development process to make sure they are well aligned with the overall ILMP framework, and will facilitate that the identified priorities under ILMPs/VLAPs are well integrated into the District Development Plans and District Investment Plans. This will strengthen the positioning of integrated landscape planning among the political priorities of the District Councils, and increase ILMP/VLAPs sustainability through access to funding from available financial mechanisms (e.g. District Development Fund and Local Development Fund). The Integrated Landscape Management planning processes will contribute to consolidate the functioning of the SRBA, and to scale out integrated catchment planning in the upper part of the Shire Basin.

Step 7: Implementation of the ILMPs and VLAPs. The implementation of the Integrated Landscape Plans and Village-level Plans will be carried out through Outcome 2.2 and Outcome 2.3. The project will make resources - training, technical support, equipment and inputs ? available for smallholder farmer organizations, forest user groups and sub-national institutions to apply the priorities established in the ILMP plans ? the where, what and how to implement landscape-level restoration, protection and sustainable management of forests, sustainable intensification of diversified agricultural production, and marketing of high value commodities in the framework of green value chains.

The project will allocate a total amount of USD 2,820,000 (approx. one third per each landscape/district) for the procurement of the equipment (e.g. nursery equipment, soil and water conservation equipment) and inputs needed to implement the ILMP priorities in the target landscapes of the three districts. An implementation manual (IM) will be prepared as part of the ILMP planning activities, to assist the LMCs with guidance for the planning, implementation and monitoring of all SLM/SFM/GVC activities, including the procurement of equipment/inputs and the technical assistance and services. The implementation manual will define procedures, criteria and procurement conditions in line with the SLM/SFM/GVC priorities identified and agreed by the landscape partners under the ILMPs and VLAPs, with an ecosystem-based, climate-adaptive and gender-inclusive approach. The project will strengthen women?s access to equipment and inputs with the definition of gender criteria in the implementation manual.

The National Local Government Finance Committee (NLGFC) ? constitutional body with the mandate to facilitate fiscal decentralization, financial management and local development in local governments - will provide the procurement services to the project, being in charge of investigating sources of supply, obtaining price quotations, negotiating with suppliers on price and delivery, preparing contracts, arranging of documentation, and monitoring the transfer and installation of procured equipment and inputs to the project beneficiaries. This will facilitate accessibility for innovative technologies for the restoration, sustainable management, production and manufacturing of agriculture and forest products. The project team will prepare ToRs and conditions for applicants that will be published in local mass media and online. The LMCs will establish a Selection Committee (SC) in charge of evaluating applications through rigorous field and desk reviews of documentary evidence and final scoring. Applicants will commit to the good use and maintenance of the equipment during the project timeframe for the specific project objectives and outputs. The LMCs will monitor the use of the procured equipment and inputs to ensure compliance with the FLR/SLM/SFM guidelines defined under the ILMPs.

The eligible equipment to implement the FLR/SLM/SFM priorities defined in the ILMP, and specific to each VLAP, will be specified in the following procurement windows for each type of intervention:

Window 1: is for procuring inputs for Hybrid FFS/FBS for SLM/SFM and business trainings (Component 2). It is for running capacity building initiatives implemented by the FFS and the FMLGs. It is estimated that USD 118,666 per landscape (USD 356,000 for the whole project). Participants to the training (Community based facilitators or lead farmers will have to demonstrated their willingness to support learning about the priority SLM/SFM/GVC practices defined in each VLAP, under the ILMP overall framework in each district.

Window 2: is for procuring inputs supporting the implementation of the SLM/SFM for LDN and Landscape Restoration. (Component 2). This will enable the implementation of the SLM/SFM priorities identified by the VLAPs under each ILMP, and in line with the SLM/SFM priorities and estimated costs defined by the National FLR Strategy[2]. Under SLM, the equipment and inputs needed to run: (i) conservation agriculture with pigeon pea-cereal intercropping; (ii) farmer-managed natural regeneration (FMNR); (iii) multi-purpose agroforestry tree planting in farmland; (iv) vegetable gardens; (v) climate-smart community seed banks ensuring seed security and improving farmers' access to seeds. It is expected that 7,845 ha of degraded farmland will regain good conditions for sustainable, diversified agroforestry production by the project end. Individuals wishing to access equipment and inputs will need to join a group of other interested members, who will be trained on operations (e.g. business plans, holding meetings, electing leaders, allocating tasks, and keeping basic records), as well as on the benefits of the equipment and proper use. Applicants will be asked to prove that they request SLM equipment and inputs defined in each VLAP, under the ILMP overall framework in each district. Under SFM, The FLR activities will help restore degraded land, reduce pressure on forest fuelwood, and increase ecosystem services (including biodiversity improvement and recovery of threatened tree species populations) in the village-level areas throughout the landscape: (i) community-nurseries for the production of seeds and seedlings of native plant species with high biodiversity, social and economic value, from the dry miombo & mopane reference ecosystems, including locally/nationally/regionally endangered species (e.g. key legume tree species such as

Colophospermum mopane, Pterocarpus angolensis, Dalbergia melanoxylon, Brachystegia spiciformis, Faidherbia albida, Julbernardia spp., Isoberlinia spp., Acacia spp., among others; high value edible fruit trees, such as *Uapaca kirkiana, Adansonia digitata, Strychnos cocculoides, Ziziphus mauritiana, Parinari curatellifolia, Azanza garckeana, Sclerocarya birrea, Vitex doniana, Vangueria infausta, Flacourtia indica*, among others); (ii) native tree/shrub planting and natural regeneration enhancement through temporary enclosures in degraded forestland and river/stream banks; (ii) green infrastructure, such as check dams and infiltration ditch, to reduce soil erosion and increase water harvesting and storing; (iii) planting community woodlots with multipurpose native and naturalized tree and bamboo species; (iv) modern efficient cookstoves and alternative energy sources by women associations. Additionally, this window will support the procurement of equipment and inputs to support sustainable forest management interventions, such as: (v) beekeeping; (vi) mushroom harvesting and drying; (vii) harvesting and preserving food and medicinal plant material (e.g. baobab, moringa, masuku, musawu?), and insects; (viii) forest fire management; (ix) forest thinning. It is expected that 8,454 ha of degraded forest areas will regain good conditions for biodiversity conservation and sustainable community-based NTFP production by the project end. This same window will include inputs for bamboo, irrigation, and greenhouse farming for addressing distressing situations. Groups of farmers, forest users, men and women committed to the implementation of the FLR/SLM/SFM priorities defined in the ILMPs/VLAPs will be eligible to apply for equipment and inputs to embark on irrigation or reen house farming in order to meet their immediate need. It is estimated that each ILMP will have allocated a total of USD 325 276 (USD 975 828 for the whole project) under window 2.

Window 3: is for procuring inputs to support producer organizations and cooperatives participating in the targeted green value chain commodities (Component 2) either by setting new enterprises or the improvement of existing ones.. Eligible equipment and inputs will be: (i) post-harvesting and processing equipment to reduce perishability, increase quality and help diversified production (e.g. cold storage equipment, solar driers, honey extractors and other processing equipment, oil press, etc.); (ii) marketing and labelling equipment. It is estimated that each ILMP will have allocated a maximum of USD 166,666 for procurement under this window (USD 500,000 for the whole project), benefiting around 10,000 members of producers? organization and cooperatives. The applications will have to be submitted by groups of people who are part of an association, cooperative or producer group. Applicant may use the procured equipment as collateral in case they plan to access to loans to upscale their businesses. The project will support producers? organization and cooperatives with training on business and financial management capacity, and loan application skills.

The Landscape Management Committees and VLAP committees will organize introductory meetings for the community members and all concerned local actors about the objectives, benefits and conditions to access equipment and inputs under the different windows in each landscape. Information about the application conditions will also be disseminated through local media (e.g. local radio news with District Council representatives invited to speak about the landscape/village plans and landscape fund), community groups and business incubators.

Step 8. Lobby and advocacy for ILMP endorsement by the District Councils. The ILMPs will be proposed to the District Councils as the long-term vision for the conservation of biodiversity and sustainable development in the areas of the districts that are encompassed in the three landscapes. The

LMCs will propose to the District Councils that ILMPs (and their respective VLAPs) become the basis for the annual budgeting process for those development sectors (e.g. agriculture, forestry, water, biodiversity conservation, infrastructures, education) that are planned under the ILMPs. This will not only make the decision-making process on District Development Plans priorities more democratic in the three landscapes - allowing community committees to influence decision-making on plans, priorities and budget - but which will also ensure funding to implement the ILMPs in the long term.

The project lessons learned from the integrated landscape management planning of the three target landscapes will be used as a model to be applied in other landscape units in the three districts, and in other regions of Malawi.

Step 9: Monitoring the implementation of the ILMPs and VLAPs. The Integrated Landscape Management plans (ILMPs) developed for the target landscapes will include a flexible and practical monitoring plan, using agreed-upon indicators and harmonized with the FLR monitoring framework those of the FLRMF (see output 3.1.2). Basic indicators in regard of implementation of bylaws, village-level action plans, and household oriented actions will be set in place and be part of the criteria for accessing funds to implement ILMPs/VLAPs (Output 2.2.2). The analysis of the collected data will allow the PMU, the implementing partner NGOs in the target districts (e.g. AICC, Christian Aid, Concern Worldwide, MEET, WHH, and WRI) and the members of the Landscape Management Committees to understand if the application of sustainable landscape management practices is being done properly, and if there is an adequate integration with other practices and uses in the landscape. This will allow the revision and improvement of the FLR/SLM/SFM application protocols throughout the project, and it will inform future decisions about landscape interventions.

The ILMPs monitoring plans will be participative, involving land users and the Area and District Executing Committees ? with the mandate to monitor and evaluate projects implemented at TA and village level - in the collection of data. The implementation of the monitoring plan will be coordinated by the monitoring officers of the PMU and the implementing partner NGOs. Monitoring data will be collected annually, shared and analyzed to extract lessons learned. At the landscape level, the best practices will be communicated to women and men through sensitization meetings, and will be used by the local policy-makers for the refining/production of bylaws (Output 1.1.3).

Outcome 2.2. Climate-adaptive natural resources management systems and technologies for resilient landscapes applied and sustainably financed.

The project will help minimize the trade-offs between forest conservation and agriculture development needs, through a livelihoods? diversification and income generation strategy based on the sustainable intensification of productive agricultural and forestry systems and the diversification of the economy with the support to green value chains with enhanced market access capacity and competitiveness.

The project interventions on FLR/SLM/SFM will respond to the Malawian LDN sub-regional targets for the Shire River Basin, which seeks to stop and reverse land degradation and reach a 2% net land restoration gain through SLM/SFM. Project interventions will also respond to the site-specific priorities defined under the FLR National Strategy for the target districts regarding: (i) agriculture technologies, including tree-crop agroforestry through FMNR, tree/shrub planting, and conservation

agriculture; (ii) the planting of community forests and woodlots with demarcation, community by-laws and protection agreements; (iii) forest restoration and adaptive forest management including fire prevention, enforcement against tree cutting and natural regeneration protection; (iv) infrastructures for soil protection and water harvesting/infiltration; and (v) natural regeneration protection and tree planting for river- and stream-bank restoration. The FLR National Strategy estimates that: (i) the three proposed SLM agriculture technologies can generate MKW 1.5-2.1 million of additional benefits per hectare over 20-year period compared with conventional maize farming; (ii) the planting of communal forests and woodlots can generate MKW 5.7 million additional benefits for smallholder farmers; (iii) soil and water conservation infrastructures can generate additional MWK 1.5 million per hectare over 20-year period. In the target districts of Balaka, Mangochi and Ntcheu, the National FLR Strategy provides the following estimates for each priority intervention:

District	Improved Agriculture Technologies (ha)	Community forests and woodlots (ha)	Forest restoration & management (ha)	Soil & water conservation (ha)	River- and stream-bank restoration (ha)
Mangochi	250,000	44,000	260,000	68,000	2,600
Ntcheu	190,000	24,000	45,000	81,000	1,600
Balaka	150,000	1,000	20,000	10,000	1,000

The Malawian National Determined Contribution (NDC) to the UNFCCC is also aligned with the LDN targets, and prioritizes the same type of interventions on forest conservation, restoration (2% increase of forest cover nationally) and sustainable management (including sustainable alternatives for charcoal, such as biomass briquettes and woodlots plantation, and the promotion of an energy mix). As far as agriculture, it prioritizes the upscaling of climate-resilient practices for drought resistant crop species and varieties, namely conservation agriculture under an agroforestry farmland system, and the development of market-based policies/legal instruments and extension services supporting climate-resilient agronomic practices.

The project will create enabling conditions for the effective adoption of FLR/SLM/SFM by smallholder farmers and forest users, in particular by supporting the implementation of the following:

? the establishment of interactive and learning-by-doing Farmer Field Schools (FFS) to build groups of farmers and forest users with good understanding of land degradation and climate-risk problems affecting the agro-ecosystems in the landscape and apply the best locally-adapted harvesting/production, processing and marketing solutions ? the SLM, SFM and Green VC priorities identified in the Integrated Landscape Management Plans ? through continuous season-long experimentation and analysis, coupled with peer-to-peer communication and discussion. The skills of

extension providers (public institutions, community leaders, CBO, NGO, research and private organizations) in SLM/SFM/Active Restoration/GVC will be developed, so that a critical mass of trainers will have the capacity to support farmers in the implementation of the ILMP? priority interventions.

? The establishment of a ?procurement programme? that removes barriers to accessing SLM/SFM equipment and inputs among community members who have collectively agreed to implement the ILMP/VLAP priorities through several windows: (i) Window 1: is for inputs for Hybrid FFS/FBS for SLM/SFM and business trainings (Component 2) (ii) Window 2: for procuring inputs supporting the implementation of the SLM/SFM for LDN and Landscape Restoration. This will also include inputs for irrigation, greenhouse farming (for addressing distressing situations such as Covid19, targeting community urgent needs beyond the SLM/SFM priorities) and for procuring bamboo for woodlot establishment (Component 2); (iii) Window 3: for procuring of inputs to support producer organizations and cooperatives participating in the targeted green value chain commodities (Component 2).The procurement investments will be coupled with continuous coaching of farmers? and forest users? organizations to effectively apply the purchased items, acquire business skills and properly manage funds and collection of repayments.

Output 2.2.1. Three pools of extension agents created in each target District and empowered to deliver training and extension support on climate-resilient restoration, adaptive management and conservation priorities to sustain ecosystem services at the landscape level.

This project output focuses on overcoming the inadequate numbers and low capacity of public extension agents in the target landscapes, who also lack the necessary qualification in climate-resilient restoration, management and conservation systems and technologies to support farmers and forest users dealing with complex problems from a LDN, landscape-level perspective. The Farmer Field School (FFS) methodology is recognised as an excellent complementary and reinforcing approach to traditional agricultural advisory services to foster livelihoods in highly diverse smallholder and subsistence farming systems[3] like those in Malawi. Over the recent past FAO has systematically supported the government to introduce the FFS approach in Malawi increasing farmers? access to extension services, which represented a good platform for promoting sustainably manage and diversified agriculture, building resilience, and increasing food security and nutritional status of children among vulnerable households in the target villages.

Thanks to these promising results, FAO has recently secured financing to expand the presence of FFS in the country, under the baseline investment program ?KULIMA: Revitalising Agricultural Clusters and *Ulimi wa Mdandanda* through Farmer Field Schools in Malawi?. KULIMA aims at putting in place an institutional framework to anchor the FFS programme on the District Agricultural Extension Services System (DAESS), consolidate the efforts towards FFS quality assurance and gender inclusiveness, and build the requisite capacity of a critical mass of men and women FFS Master Trainers and Facilitators to address critical issues linked to enhancing production, productivity and diversification in ten districts. FAO and DAES will be responsible for the full strategic, technical and operational coordination of KULIMA?s action. The GEF project will help mainstream LDN priorities into KULIMA?s FFS development programme, while benefiting from KULIMA?s existing pool of FFS master trainers to provide the required training of community-based facilitators. This will help

scale out FFS implementation in the three target districts with an expanded pool of FFS trainers and facilitators supporting farmers and forest users in the effective development and implementation of SLM, SFM and Green Value Chains (GVC).

The farmers consulted at project design highlighted the need for more tailored training and knowledge on SLM/SFM know-how and cost-benefits. Currently, most extension agents (e.g. AEDOS[4], lead farmers, youth groups, FFS facilitators, private companies, NASFAM members, researchers, NGOs) do not have enough familiarity, knowledge or experience on the landscape approach to integrate land restoration, sustainable forest management, conservation agriculture and agro-forestry practices and technologies, which hinder dissemination among the grassroots beneficiaries. In order to fill this knowledge gap, the project will design and implement a set of TOT modules specifically tailored and fine-tuned to the technical requirements of the project and geared to the existing KULIMA master trainers and to community-based facilitators, and to other extension provides active in the target districts. The project will help connect the trained actors with national and international networks of SLM/SFM/Active Restoration/Green Value Chain Development practitioners.

At the start of the project the PMU will meet the KULIMA?s project focal points at the Department of Agricultural Extension Services (DAES) and the FAO country office in Malawi to agree on a coordination framework among the FFS interventions of the GEF and KULIMA.

In the first half of Year 1, the project will hire international and national (e.g. WRI, FAO, IUCN, CEPA, Malawi Bureau of Standards, Kusamala Institute, LUANAR, NASFAM) experts with demonstrated solid experience on successful solutions for the long-term adoption and effective implementation of FLR, SFM and SFM and green value chains. The requested expertise will be on:

? Landscape restoration: innovative protection, management and active restoration interventions, with a cost-benefit view, aiming to regain landscape resilience and help conciliate multiple functions for multiple benefits, including biodiversity conservation needs..

? SFM: effective solutions for community-based governance and climate-adaptive management of wood and NTFP in Miombo & Mopane forests, including bylaws and regulations, economic valuing, natural resources management techniques, etc.

? SLM: climate-smart tree-based farming systems in the Miombo & Mopane cultural landscapes (e.g., FMNR/assisted natural regeneration and multipurpose tree planting; conservation agriculture applied to pigeon pea intercropping with sorghum or other cereals, based on drought-resistant crop varieties; crop-livestock integration; IPM; community-nurseries for the production of high-quality plant material, both seeds and seedlings).Development of Green Value Chains (e.g. policy framework, institutional development of farmer organizations and forest user groups, VC assessment, production, processing and business skills, linkage with new markets, product standardization and certification standards for healthy high-quality products).

The experts will: (i) assess gaps and needs in terms of knowledge, experience and pedagogical methodologies of the providers of extension services in the three target districts, defining gender and age specifications; (ii) identify nodes of excellence and women and men experts with best practices on

the landscape approach to reconciling development and biodiversity conservation needs, innovative landscape restoration approaches in drylands, co-management of forest blocks, and tree-crop based SLM farming systems; (iii) map and profile all FFS initiatives in the three target districts. As KULIMA, FAO and DAES are about to map and profile all FFS initiatives in the country, the project might be able to use the results of this exercise; (iv) design the required training of trainers (ToT) modules for the master trainers and the community facilitators.

By mid-Year 1, the implementing partner NGOs in the target districts (e.g. AICC, Christian Aid, Concern Worldwide, MEET, WHH, and WRI) will undertake a stakeholder mapping and identification of potential candidates for the ToT training program, and will organize awareness-raising events to explain the initiative. Particular emphasis will be placed on making clear that the participation of trained trainers in FFS activities will enhance their professional skills in view of future job opportunities. The baseline capacity of the selected participants will be analyzed to fine tune the contents of the modules.

Five ToT modular programs will be designed addressing the applicability to the local agroecological and social context of: 1) Farmer Managed Natural Regeneration (FMNR) and tree planting supporting tree-based farming systems, including assisted regeneration techniques for a wide range of native shrubs and trees, innovative community-nurseries production techniques for high quality plant material (seeds and seedlings) and tree-planting techniques to improve soil water harvesting and storage; 2) Conservation agriculture (CA) systems and technologies applied to agroforestry systems with crop intercropping of drought-resistant crops and crop varieties, including organic fertilization, sustainable pest management, tree-crop-livestock integration, and agriculture waste management; 3) Community-based agrobiodiversity management through community seed banks (CSB) for increased access to and knowledge about the promoted neglected and underutilized varieties and crop species (NUS); (4) Climate-adaptive forest co-management systems, including: users? capacity to assess the economic value of forest ecosystem services and the carrying capacity of the different forest resources, and define sustainable harvesting methods for wood and NTFPs; apply active forest restoration interventions through innovative native tree nursery production and planting techniques to enrich degraded forests with for multi-purpose native tree/shrub species; enhance the natural regeneration through temporary fencing and biomass, livestock and fire management; (5) Developing sustainable, climate-proof, green and inclusive value chains for the target commodities (Farmer Business School), including institutional development, entrepreneurial skills, post-harvest handling, processing, standardization of products and certification requirements, marketing and value chain analysis, savings mobilization and other key issues for the target commodities. Value chain modules will engage partners including One Acre Fund, mHub, and the Malawi Investment and Trade Commission which have extensive private sector expertise and can deliver business development support, expand existing outgrower schemes, and direct investment to projects. The ToT programs will build on the knowledge and materials generated by KULIMA and previous and on-going initiatives led in the country by partner organizations like USAID, FAO, IFAD, WB, etc. Learning methodologies from the FAO/IIED/IUCN Forest and Farm Facility will be incorporated as a way to well integrate the linkage between farm and forest users. (6) Access and Benefit Sharing based on the guidelines on ABS and Non-detrimental findings

National organizations with demonstrated capacity to organize training activities on SLM/SFM, such as LUANAR, the Malawi Collage of Forestry and Wildlife, and the Kusamala Institute of Agriculture and Technology, will be appointed to host the training program, with the double objective to benefit from their facilities and resources, and build their own long-term capacity to provide training on SLM/SFM.

The project will organize different ToT programmes depending on the target group: (i) specific ToT for master trainers mentoring Farmer Field Schools (FFS) and Forest Management Learning Groups (FMLG) based on the FFS approach; (iii) training for extension providers active in the target landscapes ? e.g. AEDOs, Forest Extension Officers, AVOs, NASFAM members, researchers, lead women and men farmers, youth group leaders, private companies, CBOs and NGOs ? whose role will be to provide backstopping support to the farm and forest groups that have collectively agreed to implement the SLM, SFM, Active Restoration and GVC priorities defined in the Integrated Landscape Management Plans.

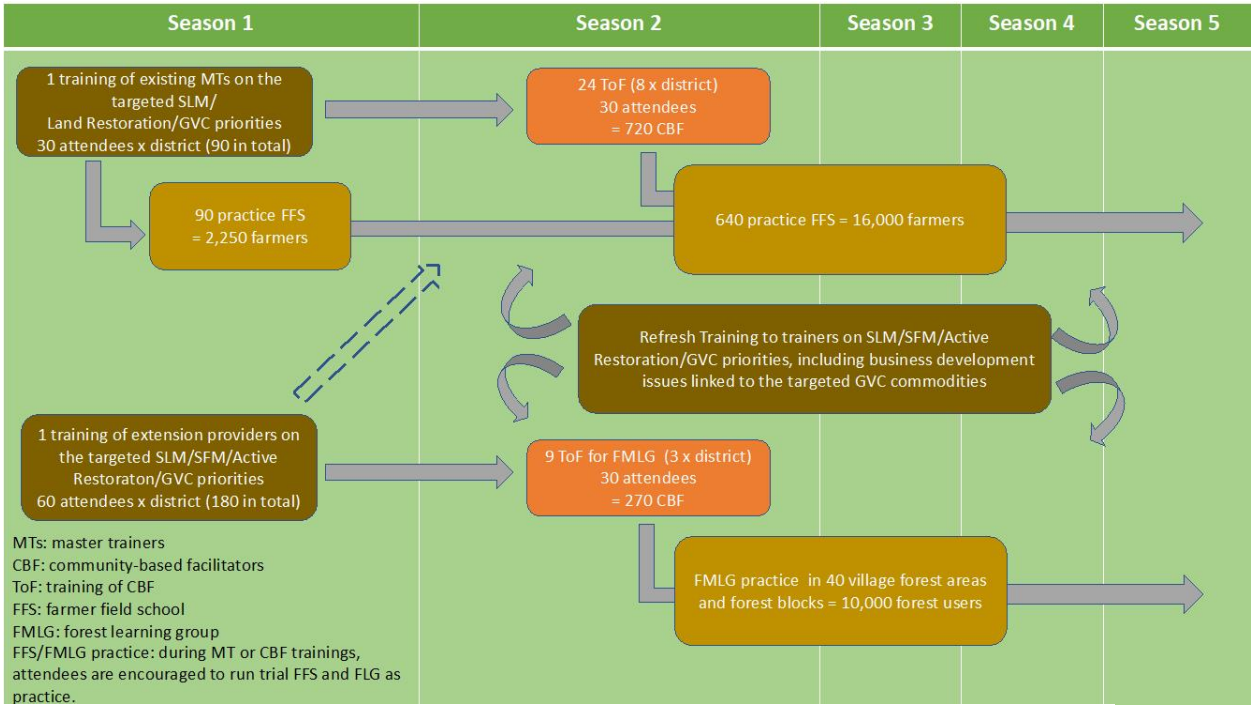
The ToT participants will follow theoretical sessions as well as very practical seasonal-long training sessions starting in October Year 1. In the case of ToT for master trainers, the programme includes FFS and FMLG simulations established in the neighbouring farming communities and community forest areas, to provide hands-on exposure to the trainees on how to establish and facilitate FFS and FMLG. The modules will consist of several sessions in which the different production phases will be addressed (from seed-to-seed). It is expected that 30 master trainers will be trained in each district once completed the first seasonal-long training in May Year 2. A second training program will be implemented during the following season (October Year 2 ? May Year 3) for the same number of trainees and will help refresh knowledge. As a result of the training program, a number of simple and well-illustrated training materials (e.g. handbook, leaflets, videos, posters) will be produced, including images, video shootings, farmers? stories with their lessons learned, etc. All the materials will also be available in the web, as part of the project?s communication program (see Output 3.1.3) and in the different partners? web pages.

As from Year 2, season-long training of community-based facilitators will be conducted by the master trainers on the basic concepts on the FFS methodology, how to organize and facilitate learning under FFS and Forest Management Learning Groups, technical knowledge on SLM/SFM/Active Restoration/GVC systems and technologies, and the necessary analytical tools to enable productive farmers and forest users analyse their own production practices and identify possible solutions to the problems they face. Facilitators will be selected among grassroot government or non-government extension workers, and lead farmers. Continuous seasonal-long learning sessions will also take place over the different production phases of the targeted agriculture and forest commodities, also including knowledge of policy frameworks and farm and forest businesses. Training will be led by the master trainers and will make use of the training materials produced as a result of the master trainers? program. It is expected that training programs for 30 community-based facilitators each will take place during the second season (October Year 2 ? May Year 3) resulting in about 720 facilitators. During the third and fourth seasons the knowledge and experience to those who are already trained will be refreshed. The trained facilitators will play a key role in identifying the various local best practices/knowledge to be combined with the proposed SLM/SFM systems and technologies, test them and incorporate local practices that prove to be effective in the FFS participatory learning process.

Experienced facilitators will be upgraded as master trainers after successful demonstration of knowledge and skills.

The training of trainers? process will last throughout the project lifetime, following the model in the graphic below. It is expected that by the end of the project 90 master trainers and 720 community-based facilitators will undergo training in the three Districts. The mass of master trainers and facilitators will help compensate staff constraints in the district public extension departments, and in this way FFS will become a key delivery mechanism for extension services within DAESS. Additionally, ToT will build capacity of the extension providers in the target landscapes, as a way to ensure their capacity to transfer knowhow and effectively support land users in the SLM/SFM/Active Restoration/GVC implementation process.

Example of scaling up extension support to FFS and FMLG



Output 2.2.2: Community SLM actions for the sustainable intensification of diversified agro-ecological food production systems.

The FFS master trainers and facilitators will support the organization of FFS activities, involving 25 farmers each. It is expected that 16,000 farmers will participate in FFS activities throughout the project timeframe, and thanks to procurement investments, the number of FFS initiatives is expected to continue to grow beyond the project timeframe (e.g. the number of farmers participating in FFS activities is estimated to double two years later). FFS learning modules will include climate-smart land restoration, conservation agriculture intercropping with drought resistant pigeon pea-cereal varieties under agroforestry production systems, processing and marketing of the targeted green value chain commodities (e.g. pigeon pea, sorghum, moringa, and/or other native multipurpose trees). As a diversification and food security strategy, learning modules will also include production, processing

and marketing products from vegetable gardens. FFS training will follow a ?foci model? through which participants grow in the immediate neighborhood of the farmland plots that host FFS learning activities. The ultimate aim is to spread SLM knowhow and implementation among farmers within each Village-Level Action Plan area, and consequently gradually expand throughout the target landscape areas. The FFS learning approach and tools will have as a major objective to build the associative capacity of farmers and promote the creation of strong producer groups among FFS participants, as the best strategy to improve production and increase market bargaining power.

By mid-Year 2, once the first group of FFS lead trainers and facilitators have been trained, the Landscape Management Committees and VLAP committees will organize awareness events to inform farmers about the available project resources through procurement investments to start the operation of FFS (with one trainer / facilitator and 25 members each) and to help in the purchase of the equipment and necessary inputs. Open calls will invite applicants to ask for funding to start a Field Farm School activity. Eligibility criteria will include:

? Restrict the use of funding for learning activities around the SLM defined priorities, including: (i) the integrated application conservation agriculture technologies (joint implementation of no till/mini till, mulching/permanent soil cover and intercropping with legume/cereal crop rotation), farmer-managed natural regeneration (FMNR) and tree planting supporting tree-crop agroforestry systems; (ii) the establishment of community tree-nurseries and community seed banks; (iii) the establishment of vegetable gardens with climate-smart improved water provision techniques to enhance environmentally-sound income generation and food security. In addition to learning about sustainable agronomic practices, FFS will include learning on business development to ensure that the FFS? group of farmers has the ability to participate actively and successfully in the value chain of the commodities on which they have received training, and thereby enable them to commercialize high-quality products.

? Applications should demonstrate that farmers are part of informal or formal producers? organizations as a way to catalyse collective action.

? Funding for FFS must be gender sensitive, covering at least 50% women

The calls for applications to procure equipment and inputs will be advertised through the Village Development Committees, who will also carry out a preliminary screening of the applications. The procured equipment and inputs will cover the needs of establishing and rolling out the FFS/FBS for SLM/SFM and business trainings. The project will spend approx. a total of USD 356 000 for procurement window 1

Part of the resources under Window 2 (Output 2.1.1) will cater for equipment and inputs for irrigation and green house farming for emergency or distress situations, such as Covid19, targeting community immediate needs beyond the SLM/SFM priorities. This support indirectly delivers FLR/SLM/SFM because it helps remove social barriers that may prevent community members to invest time and efforts in FLR/SLM/SFM due to lack of options to meet their immediate needs.

FFS trainers will provide continuous coaching support through knowhow sharing and facilitation of exchanges and debates among participants to monitor progress and better adapt the production systems

and technologies to each context. The FFS initiated by the project will remain active throughout the project timeframe, with the ultimate goal to be formalized in the framework of the KULIMA baseline investment.

Complementary equipment and inputs will be available for FFS participants and already established producer groups in the VLAP area to support the effective implementation of SLM for the production, processing and marketing of the selected green value chain commodities. Procurement window 2 (Output 2.1.1) in the three target districts will facilitate access to equipment and inputs needed to apply: (i) conservation agriculture with pigeon pea-cereal intercropping; (ii) farmer-managed natural regeneration (FMNR); (iii) multi-purpose tree planting in farmland; (iv) vegetable gardens. Eligible applicants will be FFS members and other community members organized as users? groups, in need of financial assistance to match the costs necessary to apply pigeon-pea-cereal intercropping under conservation agriculture and restore the ecosystem services provided by the tree component of agroforestry land ? increasing soil fertility and soil water availability, improving micro-climate conditions in the farmland plot, and increasing food nutrition and livelihoods through a diversified production from tree products for self-consumption and commercialization.

The committees of the Village-level Action Plans will support FFS beneficiaries in the effective implementation of SLM systems and technologies and land restoration interventions through the formulation and approval of strong community by-laws governing critical issues such as the protection and use of trees across the landscape, the regulated use of fire, effective crop- livestock integration, etc.

The Integrated Landscape Management Plans (ILMPs) and their respective VLAPs will guide the design of the applications by specifying the site-specific production systems and technologies to be prioritized in the village-level areas within the landscape, depending on the agro ecological conditions, productive potential and state of degradation. Applicants will receive technical support from the FFS master trainers and facilitators, as well as from lead farmers, staff of CBO, NGO, private organizations, research centres, NASFAM, and the technical departments of DADO (e.g. Crops, Land Resources, Extension, Agricultural Gender Roles Extension Support Services (AGRESS) and Agribusiness) who attended the ToT programmes. The project will produce information materials on the eligible investments, application rules and selection criteria for the procurement window 2 in each district. The implementing partner NGOs in the target districts will organize information events in the different villages of each landscape and will make use of popular tools - community meetings, village meetings, radio ? so that the information reaches as many local actors as possible. Information materials will also be accessible in the project offices, governmental offices in the districts and in landscape partners? offices.

The project will coordinate efforts with the baseline investment project PROSPER to ensure that both initiatives develop a coherent approach to adaptation to climate change at the landscape level, and that all actions for the restoration and sustainable intensification of agricultural productivity are based on decisions to increase agro-ecological, social and economic resilience. PROSPER will support smallholder farmers to reduce exposure to climate shocks through catchment-level interventions, including ?food for assets? support, the promotion of climate-smart agriculture practices and

postharvest handling technologies, and farmers? participation in a weather index insurance scheme. The projects will coordinate efforts to improve landscape-level integration of climate resilient approaches which will be facilitated by the fact that FAO staff is implementing both efforts.

It is estimated that during the project lifetime 16,000 farmers will benefit of FFS learning in the target landscapes of the three districts, and the procured equipment and inputs will allow the restoration of 7,845 hectares of integrated tree-crop-livestock agroforestry systems under conservation agriculture and using climate-resilient crop varieties by the end of the project. The foci model promotes the integration of farmers working together in the neighboring FFS into producer organizations, and in this way enhance their capacity to access more competitive high value markets. The farmer organizations that throughout the process have acquired a greater organizational capacity and an improvement in the high-quality production of the project?s target commodities, will be candidates for procurement investments for green value chain development (Outcome 2.3).

Output 2.2.3: Forest landscape restoration, co-management and protection interventions implemented by the landscape forest practitioners in co-managed forest blocks and community forest areas.

In the second half of Year 1, the PMU will assess information about the successful elements of restoration, protection, and forest co-management pilot experiences in/around forest reserves in Malawi that contribute to the National LDN/FLR/Charcoal strategies, National Biodiversity Strategy and Action Plan and in neighboring countries of the Miombo & Mopane ecoregion. The PMU will contact the organizations supporting this type of initiatives to get more details about challenges and opportunities, as for instance : (i) at the national level, the ?Improved Forest Management for Sustainable Livelihoods Program? (IFMSLP) implemented with communities adjacent to Mua-Livulezi Forest Reserve ? not far from the target districts, - and in Dzonzi and Mvai Forest Reserves in Ntcheu district; (ii) at the regional level, the members of the AFR100 initiative in southern Africa with best practices on FLR implementation. In the specific case of charcoal production groups operating in the Forest reserves, the PMU will assess initiatives promoting bioenergy alternatives to fuelwood collection in natural forests and charcoal production (e.g. plantation of woodlots of bamboo and mixed native and naturalized tree species; briquettes from agriculture and forest waste; solar equipment and biogas) in Malawi, transboundary and in neighboring countries. The implementing partner NGOs in the target districts will organize visits to the only two legal charcoal production initiatives (Kawandama Hills and Dzalanyama) in Malawi based in woodlots plantations, and to the carbon credit project in Neno district (led by Clinton Foundation and following Plan Vivo voluntary carbon credit standards) to learn about them and discuss potential collaboration and exchange of knowhow. The implementing partner NGOs in the districts will also visit forest reserves with forest co-management arrangements inside and outside the target landscapes to learn from local actors about effective ways to address users? perceptions and needs around restoration, protection and co-management actions that increase benefit-sharing while protecting forest biodiversity.

By mid-Year 2, the Landscape Management Committees and VLAP committees will organize awareness events to inform the community members about the site-specific forest conservation, adaptive management and restoration priorities defined in the ILMP/VLAP plans, and the available project resources to support active landscape restoration interventions, and the consolidation and

establishment of forest block committees for the management of public forest reserves and community forests (village forest areas)

The project will make funds available to forest user groups to help establish Forest Management/Business Learning Groups and to support investments in equipment and inputs. The learning groups will be organized with the members of the existing and newly established forest user groups in charge of the management of village forest areas and forest blocks in the forest reserves of the landscapes. The trained forest trainers under Output 2.2.1 will facilitate the proper functioning of the learning groups, following a similar approach as the FFS learning-by-doing approach, to guide forest practitioners (e.g. user groups, producer organizations, local forest management boards, block management committees, VNRMC, public extension departments, Department of National Parks and Wildlife, women associations, youth clubs, and other grass-root organizations) through capacity development services, including the technical aspects of climate adaptive SFM, the economics of valuing ecosystem services, community-bylaw formulation and advocacy, governance mechanisms, business incubation, access to financing and links to social services. The District Forest Offices (DFO), Department of National Parks and Wildlife (DNPW) and village communities within the buffer zone of the forest areas will be coached to develop or update forest co-management plans in line with the ILMP/VLAP priorities.

The learning groups will give special importance to increasing local knowledge about the ecosystem services provided by the forests on which the local communities depend. User community members will learn about suitable FLR interventions to restore degraded areas (e.g. degraded forests, stream/river banks and wetlands). User groups and producer organizations will also learn about the quantification and management of key provisioning services derived from wood and NTFP (e.g. honey, mushrooms, wild fruits, edible insects, medicinal and edible plants) whose sustainable use would improve and diversify local livelihoods, and about how to conduct economic valuations of the array of benefits, whether market or non-market, provided by the forests.

Procurement window 2 (Output 2.1.1) will provide access to SFM/SLM equipment and inputs to support community groups in the implementation of sustainable forest management, sustainable land management and restoration interventions for LDN and Landscape Restoration.. Effective implementation of SFM/SLM /FLR by the learning groups will be reinforced by the formulation and approval of local by-laws (Output 1.1.2). It is estimated a total procurement investment of USD 975 828 for forest restoration interventions in degraded forests and stream/river banks, and management of village forest area and co-managed forest blocks and village forest areas and conservation of cropland.

Eligible applicants will be members of forest block and village forest committees, forest user groups, producer organizations, women associations, youth clubs, and other grassroot organizations in need of financial assistance to match the cost of restoring priority degraded sites that have been identified in the VLAPs, and to prevent further degradation of forest areas through communal woodlots and efficient stove technologies that consequently help reduce local demand and pressure. Eligible applicants should present a proposal that complies with a series of criteria and conditions prior to its approval. For instance, they should demonstrate that: (i) all concerned members of the community are aware of the co-management initiative and its objectives; (ii) demarcation of the forest block and/or village forest area and its users is done in an inclusive way; (iii) institutional arrangements and bylaws for the management of NTFPs are developed; (iv) roles of users in the protection (e.g. regular patrolling) of the co-managed forest bock and village forest area is defined and agreed by the committee members;

(v) forest management committees must be gender-inclusive with equal representation of women and men, and specification of their different interests in the use of NTFPs and needs for financial support.

A Selection Committee (SC) will be in charge of evaluating applications through rigorous reviews and final scoring, and LMCs will monitor the effective use of the investment funds. Hired experts will provide technical advice on key issues, such as: innovative technologies on nursery production of native plant species and planting techniques; bio-engineering techniques for the construction of green infrastructures; development of sustainable and climate-adaptive forest co-management plans; quantification and economic valuation of the goods and services provided by target forest areas, as a way to understand the economic potential for local livelihoods and the needed balance to avoid overuse of one resource ? such as fuelwood ? to the detriment of the others and consequent degradation of the forest block. Applicants will invest about 3 months? work to develop a sustainable plan for the effective use of equipment in the implementation of priority FLR and SFM actions.

The project will coordinate the restoration interventions with the focal point at the Department of Forestry in charge of the Malawi Youth Forest Restoration Program (MYFRP) initiative and the Department of Energy, making sure that young unemployed youths from the target landscapes are trained and organized in local youth clubs to participate in the implementation of field restoration interventions, such as tree planting in degraded forests and stream/river banks, the establishment of temporary enclosure areas to enhance natural regeneration, and the construction of green infrastructures in eroded areas. Forest restoration will focus on Miombo and Mopane species diversification in degraded forest areas, with special focus on the threatened species identified and inventoried during the planning phase of ILMPs. Tree planting activities will include seedlings of several key native woody species in the same restoration areas, and in the case of the lowland mopane woodlands the highest percentage of seedlings will belong to the much endangered *Colophospermum mopane*. Forest management interventions ? e.g. temporary enclosures, forest thinning techniques and sustainable fire management methods - will also have a strong focus on facilitating and enhancing the natural regeneration of the different defining species of Mopane and Miombo. Field restoration interventions will also include the inventory, control and monitoring of invasive species in the target landscapes. In the case of forest restoration interventions aiming to reduce pressure on fuelwood collection from natural forests, the project will align its priority interventions with the strategic pillars of the National Charcoal Strategy (2017?2027): adoption of alternative energies for cooking/heating and fuel-efficient cookstove technologies; promotion of sustainable wood production; strengthening law enforcement. Since the start of the project, the PMU will coordinate the work to reduce pressure on fuelwood collection from natural forests with the USAID focal point for the baseline investment contribution ?Modern Cooking for Healthy Forests? (MCHF) Project. The project will build on the most suitable efficient cooking technologies identified and tested by MCHF. The project will also build on expertise from MCHF to support the capacity development of forest trainers and the forest learning groups on key SFM and regulatory and enforcement issues supporting sustainable fuelwood production and use.

Forest restoration interventions will be implemented in about 8,500 ha of degraded forests and stream/riverbanks and will improve the efficient use of fuelwood in the targeted villages, with direct and indirect benefits for 150,000 people in the landscapes. It is estimated that during the project lifetime 10,000 members of forest users, women associations and producer organizations will benefit of

the Forest Learning Groups and procurement investments in the target landscapes of the three districts, resulting in 4,000 hectares of forest blocks and village forest areas with improved co-managed systems. The producer organizations that throughout the process have acquired a greater organizational capacity and an improvement in the high-quality production of the project?s target commodities, will be candidates for procurement investments for green value chain development (Outcome 2.3).

Output 2.2.4: Long-term financial sustainability to implement ILMPs secured by harnessing existing domestic public finance and at least one new financial initiative to regain landscape resilience through payment for ecosystem services (PES).

On year 2, a specialist consultant will be hired to develop a ten-year business plan for the ILMPs with the objective of ensuring the sustainability of this funding scheme beyond the lifetime of the project. The business plan will identify: (i) governance and management procedures of the ILMPs after finalization of the project, including recommendations on a suitable national managing authority; (ii) potential sources of funds and funding mechanisms for the replenishment of the annual implementation needs and the subsequent, long-term implementation of the ILMPs and VLAPs.

As a following step, consultancy services will be hired by the PMU to lead the development of at least one bankable project, with the support of the GCP SFM-DSL IP, the implementing partner NGOs and the Landscape Management Committees in the target districts.

During the project design phase, the following opportunities were identified:

? Payment for carbon credits on the voluntary market. The Clinton Foundation supported the carbon credits project ?Trees of Hope? in the Neno and Dowa districts under Plan Vivo certification standards. Thanks to this project, the Clinton Development Initiative (CDI) has sold certificates for more than 30,000 tons of carbon and 875 farmers have received more than USD 100,000 in Payments for Ecosystems Services, accessing carbon finance for landscape restoration activities such as the planting of woodlots to reduce fuelwood collection in natural forest and the implementation of income-generating agroforestry. The geographic proximity of ?Trees of Hope? could facilitate the extension of the PES activity to the project districts. Contacts are already in place with Pan Vivo and the Clinton Foundation team to learn about the experience and identify opportunities for its replication during the lifetime of the GEF project. This payment mechanism will mainly focus on the charcoal producer groups operating in the target landscapes, supporting alternatives to fuelwood collection the forest reserves through the planting of trees. New carbon stocks may include FMNR and the planting of native and naturalized tree species well integrated in the ecological landscape, around a combination of activities: woodlots with the planting of bamboo species; woodlots with the planting of a mixed of multipurpose trees such as *Colophospermum mopane, Khaya anthoteca, Azadirachta indica, Albizia lebbeck, Senna spectabilis, S. siamesa and Toona ciliata*); tree interplanting with crops with nitrogen-fixing native trees such as *Faidherbia albida*, *Acacia polyacantha, A. galpini, Albizia lebbeck*; as well as the planting of fruit trees such as moringa, mango and other indigenous fruit species that are or used to be common in the area (Ziziphus mauritiana, Adansonia digitate, Uapaca kirkiana, etc).

? Payment for water services. The project will collaborate with the Shire Basin Ecosystem Environmental Support Trust (BEST), established to pilot PES for water services that will be funded by an additional tariff on electricity generated by hydropower facilities at Kapichira in the lower Shire. The project will investigate whether PES for water services is a viable option to set up a payment scheme supporting the adoption of LDN interventions such as tree planting/assisted natural regeneration in agroforestry and forestland, and conservation agriculture. This is especially relevant for the catchment area of the Liwawadzi river landscape in Ntcheu, where the Mpira Dam supplies water for domestic use to over 500,000 downstream users in Ntcheu and Balaka districts. A recent study has assessed the impact of the project entitle ?Agglomeration Payment Scheme for Catchment Conservation in Malawi?[1], implemented in three districts of Balaka, Machinga and Zomba, through which a PES scheme ? an agglomeration payment with bonuses for each adopting contiguous farmer, following a similar FFS ?foci model? ? helped increase adoption rates of conservation agriculture within the landscape at 170% above control (absence of payment scenario). Adoption rates suggested that if the scheme was scaled up (e.g. the electricity provider ESCOM[2]as the buyer of water services) the estimated cost between USD7 and USD 2,000 per ton of sediment avoided will be vastly lower than EGENCO annual sediment management costs (about USD 150,000 per ton). The project will build on lessons from this tested PES scheme, and look for workable options to link the adoption of SLM in the target landscape of Ntcheu and Balaka with a potential PES scheme related to the Mpira dam in the framework of the SRBA.

? Access and Benefit Sharing Funds. Through Mutually agreed terms, sharing of monetary and non-monetary benefits from utilisation of biological resources will contribute to revenue for: (i) conservation and sustainable use of biodiversity, (ii) the development, education and training of local communities, and (iii) the support to Projects and institutions working to improve research and protection of the traditional knowledge and heritage, (iv) community livelihoods.

In collaboration with Plan Vivo, the Project will venture into a PES initiative in Malawi. An expert will be hired by the PMU to analyse the possible options, through consultations with the different actors that are involved in the two aforementioned PES initiatives, and will develop a proposal for submission to the identified donor or counterpart by the end of year 3.In addition to the voluntary carbon market opportunities addressed by the project, the GCP will support all Miombo and Mopane Child Projects to identify opportunities for emission reduction projects in the framework the newly defined Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6 of the Paris Agreement to come into effect as of 2020. The GCP will assess the evolution of the international carbon markets under the Paris Agreement, and identify opportunities to guide targeted countries in exchanging ITMOs and pursuing mitigation projects under Article 6.

On the basis of the Nagoya Protocol on Access and Benefit-sharing, the project will identify international and domestic-level benefit-sharing opportunities for the fair and equitable sharing of benefits arising from the utilization and commercialization of NTFP resources associated to the traditional knowledge of local communities in the target landscapes. By setting-out clear provisions on access to traditional knowledge associated with selected Miombo & Mopane NTFP resources with high commercial value for food and pharmaceutical enterprises, the project will assist the project

beneficiaries in developing community protocols on access and benefit sharing. Protocols will define minimum requirements for mutually agreed terms and contractual clauses related to access and benefit-sharing of traditional knowledge associated with the selected NTFP resources. Community protocols will be used to negotiate at least one benefit-sharing agreement with companies interested and involved in the development of new cosmetic, pharmaceutical and food products, which are based on traditional knowledge and heritage. The agreement may include payments during the product development period and royalty income in the case of successful commercialization of the selected product, which can manage within a Fund used to support community development and education needs, and support for the conservation and sustainable management of the habitats and species populations providing the targeted NTFP resource.

Outcome 2.3 Increased presence of community-suited green value chains (GVC) in the targeted landscapes WHO?S commodities come from the supported SLM/SFM production systems.

During project design , the formulation team defined criteria for the selection of value chains for all Miombo & Mopane countries that are part of the SFM-DSL IP, targeting neglected and underutilized species (NUS) and non-timber forest products (NTFPs) with high potential to expand its production in the target landscapes, due to: (i) their adaptability to climate change (identified as more adaptable in the climate change scenarios for southern Malawi), (ii) their presence and agro-ecological potential, (iii) their high value in terms of livelihoods? diversification and food security; (iv) the existence of moderate production marketed locally and at a national level through commercial relations between producers and buyers operating at national and international level.

A thorough consultation process was undertaken to select priority value chain commodities for the project, based on ecological, social and economic criteria and ranking system, including multi-stakeholders? workshops, focus groups? discussions, and meeting with key informants of key value chain stakeholders (e.g. local producers? organizations, district public departments, village-level committees, NASFAM, national buyer companies and retailers, research organizations, NGOs, National Forestry and Agriculture departments, Ministry of Industry, Trade and Tourism, Malawi Bureau of Standards, International Aid Agencies, etc.). As a result, the following value chains were selected:

? Two NUS crop species ? Sorghum and Pigeon Pea ? which are drought-resistant and better adapted to future projected conditions according to climate change scenarios in the target districts. Varieties with greater productive potential against climatic risks are already produced in Malawi with the engagement of the National Association of Smallholder Farmers of Malawi (NASFAM) through member and non-member farmers applying conservation agriculture with cereal-pigeon pea intercropping in Ntcheu and Balaka. The participation of farmers in the National Smallholder Farmers? Association of Malawi (NASFAM) has positively impacted household access to credit for equipment, seeds and inputs, leading to an increase in profits.

? Four NTFPs, including fruits and leaves from the naturalized moringa tree, baobab fruits, bee keeping and mushrooms. Moringa, baobab and honey are produced and commercialized by the producers? organizations at the local level and through traders and national buyer companies who operate nationally and internationally (e.g. Naturals Limited marketing baobab and honey; Honey

Products Limited and Africana General Trades marketing honey). Mushrooms have so far a more restrict, locale market devoid of a properly structured value chain.

? Fuelwood, mainly for charcoal production. Although charcoal production groups operate in the target landscapes, charcoal production is usually an unregulated illegal activity ? the collection of wood for charcoal from forest reserves is prohibited ? with limited capacity to be part of a green value chain. The project will coordinate efforts with the USAID baseline investment contribution ?Modern Cooking for Healthy Forests? (MCHF) Project to contribute to the implementation of strategic pillars of the National Charcoal Strategy to help reduce pressure on fuelwood collection from natural forests: the adoption of alternative energies for cooking/heating and fuel-efficient cookstove technologies; the promotion of sustainable wood production; and the strengthening law enforcement. The project will build on the MCHF expertise on policy enforcement and sustainable use of fuelwood forest resources, and on the adoption of efficient cooking technologies. The project will also build on the experience of the only two charcoal production companies involved in legal charcoal value chain ? Kawandama Hills plantation and Dzalanyama ? whose businesses consists of fuelwood production using planted woodlots, and other experiences such as the Trees of Hope carbon credit PES initiative. The project will support investment opportunities for community groups to mitigate the impact of illegal charcoal production from the natural forests, including the upscaling of legal charcoal value chain development based on the planting of woodlots, the promotion of fuelwood alternatives (e.g. the production of briquettes with biomass from tree pruning and non-utilized agriculture waste[3]; solar energy) to reduce natural forests? charcoal demand, and the improvement of charcoal production and consumption efficiency through efficient kilns and stoves.

The project formulation team has undertaken a preliminary analysis of the selected value chains and a mapping exercise of the key VC stakeholders already operating in the target landscapes/districts (see Annex N2). During project implementation, additional NUS and NTFPS with high potential for green value chain (e.g. *Strophanthus kombe* and *Ziziphus mauritiana* (masau) which are also produced in the target landscapes, and other high value NTFPs) will be further investigated and, if the target beneficiaries identify more attractive options, the PMU will propose their inclusion in the work plan of this component.

The project will follow an integrated value chain development strategy by: (i) promoting the membership of farmers and NTFP collectors in existing or new producers organizations that are active in several targeted value chains; (ii) supporting farmers active in SLM for tree-crop agroforestry production including several targeted value chains (e.g. sorghum and pigeon pea intercropping with the planting of multi-purpose trees including moringa that are also beneficial for bee keeping); (iii) promoting the diversification of processed products within each value chain, based on market opportunities; (iv) targeting a diverse set of market segments for a more diverse set of products, including local and national markets, school meals? programs, fair trade international operators, international food, cosmetic and pharmaceutical companies and retailers, and the ecotourism sector. vi) development of community protocols for Access and Benefit Sharing for the communities and capacity building of farmers on Access and Benefit Sharing and Bio-trade. The participatory field assessments carried out during the project formulation have identified some members of producers? associations

and local cooperatives in the target landscapes who already follow an income and livelihood diversification strategy being active in two or more value chains.

Output 2.3.1: High value GVC commodities of producers? organizations in the target districts comply with market requirements opening a wider range of market segments and players.

The project formulation team has gathered and analysed information on the targeted value chains ? Baobab, Moringa, Pigeon Pea, Honey and Mushrooms ? at the national level. In February 2020, a FAO scoping mission analysed a range of pre-selected commodities and held meetings and interviews with key informants and stakeholders of each value chain, to gather information on strengths, weaknesses and entry points for the project[4]. The scoping process was not fully completed because of the travel constraints related to COVID-19, so supplementary analysis, especially centred on the engagement of the national private sector, will take place during the first half of year 1 of the project, including the conduction of analyses and non-detrimental findings on the preselected species and other Miombo and Mopane woody species with high potential for green value chain development. In the second half of year 1, the PMU will use this information to develop a green value chain (GVC) development strategy, identifying product diversification opportunities within each VC, mapping key market segments, actors and marketing opportunities, and defining priority interventions at various levels, including: (i) a gender-inclusive associationism or cooperatives? promotion among producers at the landscape and district level; (ii) the gradual increase of ecologically-sound high quality production through investments in SLM/SFM; (iii) the quality improvement of a diverse set of GVC products with investments in conservation and processing equipment, and packaging and labelling materials; (iv) business development and presence in different national and international market segments, through PPP with special focus on organic food/cosmetic/pharmaceutical companies and retailers, fair trade, school meals? programs, and ecotourism; (v) supportive policy improvement.

By the end of Year 1, the PMU will introduce the GVC development strategy to the implementing partner NGOs in the target districts to validate it and jointly produce an action plan for GVC development in the target landscapes. Throughout Year 2, the implementing partner NGOs will complete the mapping of producers? organizations that are active on the selected value chains in the target landscapes and districts, and will involve them in awareness raising events to introduce the GVC development strategy and the human and financial resources that the project has at the disposal of the producer groups to help diversify production, improve the quality/quantity of products and facilitate market access. Through the participation of producer groups in FFS and Forest Learning Groups and the improvement of their organizational and production capacity with investments in SLM and SFM equipment and inputs (Outputs 2.2.3 and 2.2.4) , the project will generate groups of ?champions? with a more solid market vision and who are more open to innovation. They will be key actors to initiate GVC development activities, making use of the available equipment and inputs under procurement window 4 (Output 2.1.1) in the three districts, and in this way catalyse the involvement of further members in high quality production and commercialization of the target commodities.

Once the GVC development plans of the different Innovation Platforms are developed and validated by the IP members by the end of year 2, the Landscape Management Committees in each district will invite producer groups from the platform members to develop collective applications to procurement window 4 (Output 2.1.1) for business investments on Green Value Chain development for the target

commodities (e.g. product conservation and processing equipment, packaging and labelling materials, building facilities and employees equipment to comply with Quality management, food Safety management, environmental management, occupational health and safety). Applications should demonstrate that the proposed business meets the green aspects of chain development, as well as the standardization and quality assurance for certification of the MBS. The Landscape Management Committees will screen candidate applications to select those that best meet the selection criteria. If needed, the implementing partner NGOs in the target districts will provide technical assistance to the selected applicants to prepare bankable proposals to cover the requested matching funds and guide the submission process to financial institutions.

Procurement window 3 will have a total USD 500,000 for an estimated 40 to 120 applications. Priority in the selection process will be given to those beneficiaries who involved in the FFS and Forest Learning Groups actions under outcome 2.2.

The project will also support applicants in the diversification of market opportunities for the target commodities based on a market analysis for raw and processed products and services within each value chain (e.g. honey and other apiculture products such as propolis, pollen, royal jelly; moringa seedlings, fruits and leaves; etc). The PMU, in collaboration with the Global Coordination Project (GCP) of the SFM-DSL IP, will identify market segments and players at the national and international level, including international fair-trade operators, international organic food and pharmaceutic/cosmetic companies and retailers, and the ecotourism sector in Malawi, operating in the Miombo & Mopane region. The project will look at examples of private-public-partnerships such as the one promoted by GIZ in the Shire River Basin involving a PhytoTrade member in Malawi and the multinational organic cosmetic company Weleda for the cultivation of Strophanthus komb?. Other examples are the members of the Southern African Natural Products Trade Association ?PhytoTrade Africa? in Botswana, Malawi, Namibia, South Africa, Zambia, and Zimbabwe, the UK Company Aduna and Minvita involved in baobab and moringa manufacturing, and other multinationals that operate in the countries of the SFM-DSL IP in the Miombo & Mopane Ecoregion.

During the second half of Year 1, the PMU will contact the most promising market operators for the target commodities to inform them about the project, check interest about potential commercial links with the project beneficiaries, and understand the conditions that must be met to establish commercial agreements with the producer organizations supported by the procurement investments. In the event that there is interest, the PMU will agree on a roadmap with a timeframe so that the necessary conditions to establish these agreements are fulfilled, and it will support producer organizations in completing the necessary requirements to apply for equipment and inputs and make effective use of it according to the GVC commodity. In the case of the target landscape in Mangochi, the PMU in collaboration with the implementing partner NGOs will contact ecotourism players to discuss opportunities to link the commodities of the producer organizations with the already established tourism circuits in the Lake Malawi National Park. The collaboration may entail the sale of products in the resort shops and restaurants, or the identification of opportunities to include the existing circuits/tours the visit to the producers? organizations supported by the project.

The PMU will also prepare a list of natural and organic trade shows, fairs, exhibitions and conferences that are relevant to the project commodities. The project will cover the travel expenses for members of

the producers? organizations that are involved in the GVC commodities, to attend those events that have the greatest interest to promote the project and its products.

In the case of the charcoal value chain, the project will coordinate its work with the USAID baseline investment MCHF project, to make sure interventions are harmonized and respond well to the strategic pillars of the National Charcoal Strategy. On the one hand, the project will support local communities and producer groups interested in establishing woodlots, being eligible for procurement investments for the creation of community nurseries to produce high quality plant material of multipurpose native and naturalized trees and bamboo, and the necessary equipment for the nurseries and planting activities. Applicants who have developed good proposals will be supported in the preparation of bankable projects that cover the matching contribution and that help to offset the investment made during the time necessary to obtain economic benefits from the plantations, based on different wood products (charcoal, poles) and NTFP. The option of a PES project proposal on carbon credits will be analysed and, if the necessary conditions exist, developed under Output 2.2.5.

On the other hand, the project will reduce consumption and support the efficient use of fuelwood through the provision of equipment and inputs for women associations to adopt efficient cooking technologies and alternative energy sources (procurement window 3 for forest restoration and sustainable management equipment and inputs, in Output 2.1.1). The project will also contact the tobacco farmers associations and companies in the target districts to raise awareness about fuelwood consumption reduction needs and alternatives for an efficient use of bioenergy for drying tobacco leaves. The PMU will undertake an assessment of cases in Malawi and abroad in which cost-effective bioenergy alternatives have successfully substituted traditional fuel systems. The information gathered will be introduced to the tobacco associations and companies in the target districts to initiate discussions about how the GEF project could facilitate the piloting of the most promising alternatives through procurement investments and training support, to support the tobacco smallholder farmers? associations or local companies in developing a sustainable bioenergy plan for the business.Moreover, and considering the current trend of decreased demand for tobacco in Malawi and associated declining tobacco prices, the project will raise awareness among smallholder farmer associations about adopting a shifting strategy towards alternative VC, such as pigeon pea and sorghum, with greater market and livelihood improvement opportunities, and environmental sustainability (e.g. water-efficient crops better adapted to climate change). Interested associations will be invited to apply to project investments on FFS and GVC development, so that they can access the training, technical assistance and resources necessary to face a gradual change in the production system.

Output 2.3.2: Capacity development program implemented for producers? organizations in the target landscapes on product diversification, processing, value chain management, business planning, quality standards and marketing.

The implementing partners/ NGOs in the target districts will hire international and national experts to provide coaching to applicants (Procurement Window 4 for Green Value Chain development) on business development and marketing issues. Training modules will be implemented through a series of learning workshops as from Year 2. Training will include theoretical sessions in the premises of partner organizations (e.g. Research centres, NASFAM offices, CUMO[5] Entrepreneurship Training Centre) with tuition from national and international experts with high experience in business innovation and

marketing, and product quality standards and certification of the targeted green value chain commodities. Among the trainers will be experts from NASFAM, Malawi Bureau of Standards, CUMO, Kusamala Institute of Agriculture and Technology, LUANAR, experts from departments at MoNREM and MoAIWD, and the buyer companies that have stipulated contract agreements with the producers? organization. The master trainers and facilitators running the FFS and Forest Learning Groups under Output 2.2.3 will also provide learning on the development of business plans, the reduction of the perishability of the produce through conservation techniques, the use of processing equipment and the development of market links with Green Value Chain players.

Field demonstrations will take place in the warehouses of producers? organizations with best practices in the use of conservation, processing and marketing equipment and materials, so as trainees can learn how to use the acquired items. The beneficiaries of the procurement investments will commit to act as demonstration sites for other producers so as to spread capacity on the effective use of the equipment, business management and marketing. Experts from NASFAM, Malawi Bureau of Standards and buyer companies will visit their equipped warehouses/buildings to help them identify problems and solutions in their production chain and make an effective use of the acquired conservation/processing/marketing equipment. Training support will be continuous through periodical visits to the facilities of the producer organizations and refreshing theoretical sessions.

Output 2.3.3: Three innovation platforms established to connect and promote dialogue between value chain actors, leading to the formulation of integrated green value chain (GVC) strategies and action plans at the District level.

By mid-Year 2, the implementing partners/ NGOs will activate Innovation Platforms (Ips) in each district to address challenges and opportunities for GVC development for the targeted NUS and NTFPs. Building on the example of the existing Balaka Innovation Platform, the implementing partner NGOs will organize workshops at district level, inviting key value chain players, including individual smallholder farmers and members of local producers? organizations, representatives of CIAT, District Agriculture Development Offices (DADO), District Forestry Offices, Department of Agricultural Research Services (DARS), Agricultural Commodity Exchange for Africa (ACE), NASFAM, Agricultural Development and Marketing Corporation (ADMARC), key national private sector actors with a major role in domestic and export markets such Naturals Limited, Honey Products Limited, Africa Generals Trade, Moringa Miracles, Chibuku Products limited, and several other potential members.The project team, with the support of the GCP, will identify key international private sector players, including members of the GEF Private Sector Advisory Group (PSAG), who are active and interested in the commercialization of commodities from the project's value chains. Selected companies will be contacted to introduce business opportunities from the targeted value chains, and in case of possible synergies are identified between your business activity and the project, they will be invited to participate in the IP. The objective will be to concretize opportunities and a road map to develop partnership agreements between buyer companies with social and environmental responsibility and the producer organizations who are assisted by the project in improving their production capacity in line with the necessary standards. During the workshops, the PMU and implementing partner NGOs will introduce the GVC development strategy of the project, showcase the existing Balaka Innovation Platform example and enquire about the interest of the participants to develop Innovation Platforms in

their districts (or join the existing IP in Balaka district). A road map will be agreed upon, to formulate integrated GVC strategies and action plans at the District level, defining roles and responsibilities, membership conditions, expected results for the following 3 years of project implementation, timeframe and business plan. Initially, the platform will be hosted by a member organization in each district and it will act as an informal body to periodically gather platform members and activate communication and joint actions. Throughout the project?s life, IP members may agree on a more formal governance and registration system.

The Innovation Platform members will periodically meet and discuss about GVC development needs and opportunities. The PMU, with the support of the GCP SFM-DSL IP, will identify regional and international opportunities such as public-private-partnerships for the target green value chain commodities that will be introduced and discussed with the members of the Innovation Platforms in the three districts. The project will also facilitate the access to relevant information about GVC development opportunities through the information clearinghouse (Output 3.1.3).

The Innovation Platform will be a forum to share information, identify opportunities and catalyse linkages among value chain actors. In the framework of the district innovation platforms, the PMU will discuss with NASFAM and pigeon pea and sorghum producers? organizations their interest to join the School Meals Program in the schools of the project area. The PMU will negotiate a possible collaboration with the WFP, who manages this initiative. Through the district councils, the PMU will establish partnerships with the schools to purchase high quality GVC products from the farmers involved in the project. Participating schools will sign contracts directly with the producers? organizations to procure specific quantities of diversified foods within an agreed time frame, based on the school menu and with the seasonally available fruit and vegetables. Parent and teacher committees will oversee the business agreement, the procurement plans and purchases, and will be responsible for the handling, storing and preparation of the meals.

Output 2.3.4: Support program for buyer companies implemented, making use of existing business incubator/accelerator initiatives.

The PMU, in collaboration with WRI and the GCP SFM-DSL IP, will identify national and international opportunities for business innovation for the local and national entrepreneurs that are members of the Innovation Platforms from the three districts.

The project clearing house will disseminate periodical information about business incubator or accelerator opportunities for the supported business players. Special attention will be devoted to the local producers? organizations benefiting from procurement investments on business development and national buyer companies agreeing contracts with them through PPPs. The PMU and implementing partner NGOs will raise awareness of key market players ? such as NASFAM, Naturals Limited, and other key companies ? about the value of applying for business innovation programs, and it will support the filing of applications for the annual calls.

Some opportunities, like the WRI-led Land Accelerator for African countries, the Malawi?s first technology and innovation hub (mHub), and the Malawi Investment and Trade Centre (MITC), provide guidance to FLR-related business throughout the formulation of viable business plans to launch an

ecologically-sound and socially beneficial enterprise. Participants join starter workshops to blueprint and refine their business plans with the support of peer-learning and expert guidance. The program provides travel grants and has a duration of several months including intensive week-long workshops.

The project will support companies and producers? groups with interest to attend business incubator and accelerator programs through the provision of expertise for the development of high-quality applications and financial support to match travel and subsistence expenses. It is expected that at least 5 buyer companies and/or producer organizations have participated in available programs by the end of the project.

Component 3: effective knowledge management, monitoring, and linkages with the SFM-DSL-IP.

Component 3 responds to a number of barriers to transformational change towards sustainable management of the Miombo-Mopane landscape in Malawi, namely:

(i) Poor knowledge, implementation and cross-sectoral coordination of LDN policies, plans, and regulations at national, district and local levels;

(ii) Limited consistent collaborative and integrative approach to landscape planning in target areas;

(iii) Insufficient capacity (knowledge, skills, tools, financial resources) among land users and extension providers to implement SLM/SFM practices;

(iv) Poorly developed markets, weak capacity of supply chain actors, and limited private sector investment opportunities for products from SLM/SFM production; and

(v) Weak monitoring and information management/dissemination on LDN to support policy-makers and practitioners at national and sub-national levels, and limited sharing of lessons for effectively addressing LDN across the Miombo-Mopane region and globally.

Consequently, Component 3 has a strong focus on knowledge management, including information flow at and between district, national, regional and global levels, identification of lessons and best practice, M&E for informed decision-making and adaptive management, and promoting regional and global collaboration to strengthen national efforts to stop and reverse land degradation, while creating green growth opportunities to make economically viable and socially beneficial the sustainable management of the Miombo-Mopane ecosystems. Component 3 also seeks to promote programmatic consistency, cohesion and synergies.

Component 3 will support the systematic creation and sharing of knowledge related to best practices on sustainable dryland management and contribute to increasing the capacity of Malawi to meet its national targets on LDN. Opportunities for exchange with other DSL-IP child projects in the Miombo-Mopane region and with the global IP platform will be an important aspect of this component. It also seeks to enhance collaboration between both DSL-IP and non-DSL-IP countries to achieve a less piecemeal and more coherent approach to dryland management regionally, including exploring opportunities for potential joint initiatives targeted at addressing common challenges across neighbouring country borders and throughout the Miombo-Mopane region. Component 3 will also support project M&E for effective project coordination and adaptive management and provide important information and knowledge on project results of relevance to national and global knowledge platforms on SLM/SFM and LDN. This will help the project in achieving the anticipated impact at wider (transboundary/regional/ ecosystem/global) scale.

Outcome 3.1: Framework in place for monitoring and the transfer of lessons learned on LDN to multi-level policies at the national and international levels.

Failure to monitor and evaluate ILM/SLM/SFM actions may lead to underestimate their impact and prevents the adjustment of unsustainable/inadequate governance and management systems and technologies with others that are environmentally-sound, socially-beneficial and economically-viable. A good example of underestimated impact in Malawi, is the Land Use and Land Cover (LULC) mapping exercise supported by USAID in 2019, which unexpectedly showed that farmers in many areas of the country are having a positive effect on the protection of trees in/around their farmland plots.

The Forest Department, with support from WRI and USAID, developed a Framework for Monitoring Progress for Malawi?s National Forest Landscape Restoration Strategy. The framework defines goals, core indicators, metrics, data sources, and some baseline data for monitoring progress on FLR. The current FLR monitoring framework needs further refinement to: (i) convene stakeholders to agree upon and set measurable, achievable benchmarks for progress; (ii) develop a system for collecting, storing and analyzing data; (iii) secure high-level buy-in for the framework from multiple ministries; (iv)establish a multi-sectoral task force dedicated to developing the FLR monitoring system.

This Outcome will cover the operational costs, equipment, capacity development and technical assistance to enhance national capacity to monitor the impact of LDN in the long-term. The project will add value to the existing FLR monitoring framework to make sure that indicators and metrics well-capture the achievement of neutrality based on the quantified balance between the area of ?gains? (significant positive changes/improvements) and area of ?losses? (significant negative changes/degradation) relative to the baseline, within the Miombo & Mopane landscapes, at the end of the project implementation. This will help mainstream LDN into the data collection and analysis system, creating learning opportunities for all concerned stakeholders and for reflection, correcting mistakes, and prioritizing the use of scarce resources to meet changing needs and/or circumstances.

This Outcome will facilitate reporting on progress on SDG target 15.3 from the Impact Program countries and national LDN reporting responsibilities under the UNCCD. This Outcome also responds to calls from the UNCCD Science-Policy Interface and GEF-STAP for consideration of the effectiveness of land degradation data and monitoring systems, as well as wider consideration of the three global LDN indicators.

Thanks to the close integration and regular exchanges with the GCP of the SFM-DSL IP, the Malawi monitoring framework will be informed by the experience and lessons emerging from similar platform development being undertaken by other DSL IP child projects, as well as experiences from other relevant national, regional and global platforms and information sources of relevance to SFM, SLM and LDN objectives, e.g., WOCAT, CAADP and DRIP. It is expected that the framework will be linked with and consolidate information from these other information sources, as well as being open to other experiences from SADC, AFR100 countries, TRI, and elsewhere. The effectiveness of the platform will be regularly monitored through usage tracking and interviews with target stakeholders to ensure it is addressing their needs and leading to tangible improvements in good practice.

Output 3.1.1: National stakeholders are trained on LDN M&E to incorporate LDN-related indicators in multi-level policies at national and international levels

Recommendations for the harmonization of LDN indicators within policies and strategies will be presented at the *National Seminar on supportive policies for achieving the national LDN targets in Malawi,* which will be organized by the NCCC&DRM in Year 2 (Output 1.1.1). The PMU will gather the workshop recommendations and discuss with the M&E experts of the GCP of the SFM-DSL IP about harmonized mapping and monitoring tools to report on progress on SDG target 15.3 from the Impact Program countries.

The PMU will join the multi-sectoral Forest Landscape Restoration Monitoring Framework (FLRMF) Task Force led by the Forest Department to agree on a work plan to ensure that the LDN monitoring needs are well captured into the FLRMF and implementation mechanisms. The PMU will gather the information gaps and needs from the Task Force members to well capture LDN monitoring into the FLRMF and communicate results to the M&E experts of the GCP. The GCP will support to the PMU in the organization of a training workshop (workshop agenda and tuition) targeting the members of the FLRMF Task Force and other M&E officers from relevant ministries, research centres and civil society organizations. The workshop will provide training about the LDN monitoring system defined by the UNCCD, including: the specific definition of LDN indicators; LDN baseline mapping; data quality standards and specifications; methodologies and tools for estimating and measuring LDN indicators; mechanisms for validation in the ground; data analytics. The workshop also addresses the harmonization of LDN indicators with other existing monitoring frameworks for reporting on national commitments to SDGs, CBD, UNCCD and UNFCCC. In this workshop, the FLRMF task force will be introduced to the tools used by the Dryland Resilience Initiative and Program (DRIP)[6] an interactive web portal with an online tool to support practitioners, project managers, policy-makers and decision-makers in compiling and analysing data and capturing and sharing lessons learned from restoration initiatives, thus advancing the monitoring and assessment of these initiatives globally. The DRIP platform is useful for documenting and monitoring the different transformation projects and programmes (TPPs) and initiatives implemented in contributing to LDN achievements in dryland

The FLRMF task force will adopt the workshop guidance and tools to make sure the framework provides monitoring results with the appropriate data and format to report on progress on SDG target 15.3. The GCP will support LDN monitoring data collection and analysis, and will organize at least one event involving M&E focal points from the country child projects from the Miombo & Mopane Region to help track progress and ensure harmonization among countries.

The DSL-IP Regional Exchange Mechanism (REM ? see Outcome 3.2) will assist the PMU and the FLRMF Task Force in the implementation of the training program and in the upgrading of the FLRMF. The project will cover the operational costs, equipment, capacity development and technical assistance.

Output 3.1.2: LDN monitoring integrated into development planning and monitoring processes at the national and district, traditional authorities and village committees? level.

By mid-year 1, the PMU will organize meetings with the implementing partner NGOs and the Landscape Management Committees in the target districts to introduce the LDN monitoring

requirements defined under the FLRMF. As part of the Integrated Landscape Management (ILMP) planning processes, the PMU will hire national experts to gather baseline information and elaborate the initial values for the selected LDN indicators. The implementing partner NGOs will support the Landscape Management Committees in the three districts to develop Landscape Monitoring Action Plans (LMAPs) and establish monitoring working groups for piloting the use of the LDN indicators defined under the FLRMF. The Landscape Management Committees (LMCs) will organize awareness events in all the Village-level Action Plan (VLAP) areas within each landscape, to ensure good understanding about the implementation of the priority interventions defined in the ILMPs and VLAPs *vis-?-vis* LDN monitoring requirements. The Landscape Management Committees (LMCs) will discuss and agree internally about members? participation in the monitoring activities, with specific tasks for project beneficiaries (FFS/Forest Learning Groups, user and producer organizations) and for the local institutions with M&E tasks at the district, Traditional Authority and village level (e.g. District Executing Committees, Area Executing Committees, and several village committees).

The LMAPs will embed the standard operating procedures and M&E system documentation proposed by the FLRMF, such as: formulation and correct use of indicators to measure LDN performance and impact in the target landscapes, definition of task of the different actors, data flow and data management. The monitoring working groups in the landscapes will assess the suitability of the proposed tools to gather data, based on value added, costs, scope, data type and easiness of implementation.

At the beginning of Year 2, the PMU, with the support of the FLRMF Task Force, will organize training courses on LDN monitoring for M&E practitioners from the target landscapes in the three districts. Each course will last approximately one week and will target participants from the monitoring working groups ? e.g. district and area committees, District Agriculture Development Office (DADO) and District Forest Office (DFO), traditional leaders, local-level committees, private sector and NGOs involved in the project, among others. The beneficiaries will learn about tools and best practices for monitoring LDN long-term impacts. They will also be introduced to approaches for fostering collaborative partnerships for M&E. The LMAPs will define roles and responsibilities for the different actors involved in the monitoring program and will negotiate their involvement, making sure they have the will, capacity and tools to implement the task. The methods for collecting field data will be tested during year 2 to evaluate pros and cons and adapt them, if necessary, to the time- and capacity-constraints of the collectors, to ensure that monitoring does not involve too much extra-work to add to their daily tasks. The data collected in the field on a periodical basis will be fed to the M&E Specialist hired by the PMU. The M&E Specialist will liaise with: (i) the FLRMF Task Force to feed the M&E data from the project and consolidate them in the national system, and (ii) the Global Coordination Project to consolidate data in the global SFM-DSL IP.

The field monitoring data will be matched with remote sensing data collected by the FLRMF at national level. This will be facilitated by FAO, through capacity building of the FLRMF using the SEPAL[7] tools for straightforward monitoring. These tools combine high-resolution imagery with a cloud-based architecture and user-friendly interface for monitoring. The Global Coordination Project of the SFM-DSL IP will also assist the PMU and the FLRMF task force in the establishment of a remote sensing data collection system that will complement the field data.

A suitable implementing partner NGO will be tasked to design a communication strategy to tailor the data according to the different audiences. The monitoring data from the Landscape Monitoring Action Plans will be collected periodically (monthly, quarterly, or annually, depending on the periodicity defined for each indicator), results will be analysed (M&E experts from the PMU/implementing partner NGOs and the FLRMF Task Force) and disseminated formally (e.g. web, presentations, written reports) and informally (e.g. phone, email, fax, conversations) for the perusal of decision-makers, practitioners, donors, etc. The PMU, implementing partner NGOs and Landscape Management Committees will annually to discuss about the monitoring results and revise the project workplan for the following year.

Output 3.1.3: Information clearinghouse and focal node for knowledge management created and operational.

The documentation and dissemination of information and knowledge about LDN methodologies, tools and best practices will be a critical component of the project. Materials and tools will be produced and disseminated to relevant stakeholders using the most appropriate means to the target audience. The project will establish a partnership with a suitable implementing partner, such as the Centre for Environmental Policy and Advocacy (CEPA[8]), to set up an information clearinghouse for knowledge management, as from the Year 2. The implementing partner will be asked to design a participatory Communication Strategy that can effectively address different audience needs. It is anticipated that the clearinghouse will create a database of LDN-related practices and lessons learned, with a focus on the results of the project, and the information supplied by the GCP and other SFM-DSL IP countries, but open to other experiences from SADC, the AFR100 countries, TRI, and elsewhere. The database will build on the experience of WRI, FAO and other SFM-DSL IP partners on knowledge management systems and will be designed in close coordination with the PMU and Executing Entities in charge of Component 2. The FLRMF task force, and the PMU M&E expert will agree on appropriate mechanisms for the sharing of monitoring and evaluation data at various levels (national, sub-national, regional and international) as a vehicle for adaptive management, learning, knowledge dissemination, and policy and advocacy actions.

The implementing partner will organize a communication training exercise to develop the capacity of all the project staff on effective information and knowledge management. The aim of this exercise will be to underline that KM and effective communication should be viewed as a fundamental part of each team members? job, and not as an ?extra effort?. This will allow the project staff at national and landscape level to disseminate the project to targeted stakeholders through communication events with beneficiaries (e.g. information days, on-farm demonstrations, local fairs, brief radio programs, information vans and community announcers) and national audiences (e.g. organization of workshops and conferences, web dissemination).

Outcome 3.2: National and sub-national measures to deliver LDN enhanced through shared collaborative opportunities at regional and global levels.

This Outcome aims to both support the Malawi project?s national and sub-national efforts as well as leveraging its results, experiences and lessons learnt for wider impact at the regional and global scales and enhancing its contribution to South-South cooperation. It seeks to enhance the delivery and impact

of the Malawi child project both at the country and regional and global levels through engagement with additional wider opportunities available through collaboration with other DSL-IP countries and the global DSL-IP. It seeks to connect the Malawi project and its partners to additional shared support for knowledge exchange and mutual learning, networking and partnership development, as well as, potentially, offering increased opportunities for market development for SLM/SFM products and collaborative and coordinated actions to address common challenges in sustainably managing the region?s natural resources to maintain the ecological integrity of the Miombo-Mopane ecosystem, including exploring the possibility of new cross-border and regional initiatives and investments. As a member of a program (the DSL IP), the Malawi child project has the possibility to access additional resources and opportunities that would likely not be available to a stand-alone project.

Activities under this Outcome are largely developed through partnership with the REM, which aims to ensure that the project and its partners can benefit from these additional shared opportunities and which will play a key role in supporting the project in delivery of all Component 3 outputs.

Box: Miombo/Mopane Regional Exchange Mechanism (REM) and opportunities offered to child projects

The role of the Miombo/Mopane REM is to increase the magnitude, durability and scope of impacts of the GEF-7 investments in sustainable drylands management in the DSL IP countries (Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zimbabwe). The REM will offer individual child projects increased access to capacity development, knowledge exchange, and outreach and scaling out opportunities, as well as facilitating multi-country collaboration and synergies. In doing so the REM will enhance both the delivery of results and benefits at national and landscape levels as well as the regional dimensions of the DSL IP child projects. This effort will particularly focus on improving the availability of technical assistance to child projects (offered on a demand basis) and ensure that demand for services is coordinated and met through the best and most cost-effective means available (offering economies of scale for common capacity development across countries). A harmonized, programmatic yet flexible approach to delivering comprehensive and targeted support to child projects in the DSL IP is expected to significantly improve outcomes for capacity development and knowledge sharing in the participating countries, as well as at the regional and global levels, and supports South-South Cooperation. The REM will also support sustainability of project results and impacts through helping to identify financial support options to target projects/countries (including mapping suggested pathways to ensuring access to finance beyond and outside DSL IP for long term sustainability). REM activities will be financed largely through the GCP but also child project contributions. The following five outcomes are expected:

Outcome 1: Increased collaboration and coordination among Miombo/Mopane child projects resulting in new or strengthened synergies, enhanced impacts and efficiencies, and avoidance of duplication. This outcome will focus on facilitating the identification and strengthening of synergies among child projects to avoid duplication of country efforts, including: facilitating engagement between countries to identify common challenges where collaboration might yield benefits; assisting countries in identifying, developing and applying solutions to common management challenges/barriers; and supporting/ensuring linkages to regional value chain opportunities (particularly supporting project Outcomes 2.3 and 3.3).

Outcome 2: Improved availability and delivery of demand-driven technical, methodological, financial and other capacity development support to child projects. The REM will assist countries in identifying child project capacity development needs, captured in a regional capacity development program, and channeling technical support resources to target projects/countries based on their agreed needs. Common capacity development topics may include, for example, integrated approaches to land use planning and landscape management, applying the LDN framework at landscape level and undertaking LDN assessment and monitoring in accordance with global best practice, implementation of specific good SLM and SFM practices, green value chains/regional business development, and more. Capacity support will be provided through national or Miombo/Mopane regional experts where possible/appropriate. Activities associated with this REM Outcome are expected to support delivery of most project Outcomes under Components 1-3, but particularly Outcome 2.1, 2.2 and 2.3.

Outcome 3: The program and its child projects contribute to knowledge access and knowledge exchange on DSL options. Activities associated with this outcome will focus on improving knowledge access and exchange, including: facilitating coordinated knowledge management (KM) to support capacity development and awareness raising by gathering, collating and making available the knowledge products created through the projects under the IP in the region; and facilitating the capturing and sharing of key results, lessons and promising/successful/good practices and other innovative approaches by child projects (e.g. SLM/SFM best practice in Miombo/Mopane countries). This REM Outcome will support delivery of project Outcomes 3.1 and 3.2, but also contribute to delivery of many others.

Outcome 4: Impacts scaled out in and beyond IP countries in the Miombo/Mopane region. REM activities under this outcome focus on: connecting key stakeholders working across the region to promote discussion and sharing of best practices related to DSL (e.g. through facilitating conferences and networking events and peer-to-peer learning); and promoting integrated landscape management through the supranational bodies that are involved in regional ?policy setting? as well as related programs, projects and other initiatives regarding DSL in the region. This Outcome mostly supports project Outcomes 3.2 and 3.3.

Outcome 5: Regional level M&E allows adaptive response to regional impacts and trends. The REM will provide centralized technical advisory support to the child projects on the design and execution of their

As mentioned in the previous Box and in Annex M, the REM functions as a mechanism to strengthen national- and landscape-level project delivery through its service function provided on a demand basis across all components of the project, as well as facilitating regional and global exchange of knowledge, lessons learned and best practices, acting as a conduit for information flow and exchange between national, regional and global stakeholders to accelerate and amplify the uptake of such practices. However, a key role of the REM is also to support and promote opportunities for regional collaboration and coordination on sustainable land management between neighbouring countries that share Miombo-Mopane ecoregion concerns.

The project will use part of the DSL IP incentive to ?access? these additional services and opportunities offered by the program at the global level through the REM on a demand and adaptive basis, to enable the Malawi child project to achieve the anticipated impact at wider (transboundary ecosystem) scale. This support will be available to meet technical capacity needs (e.g. improved access to SLM and SFM technologies, tools and practices) identified under Components 1 and 2, but also under Component 3 to access opportunities for exchange and knowledge sharing, explore and develop new commercial possibilities for SLM/SFM products promoted through the project, networking opportunities for market development. The REM will also support for development of joint initiatives between the countries to promote sustainable drylands management of the Miombo-Mopane eco-region (and indeed the REM also supports cooperation and collaboration between neighboring countries through its shared technical advisory provisions).

Output 3.2.1: Actions and investments identified to address transboundary land and environmental degradation priorities in Miombo-Mopane ecoregion and bi-/multi-lateral initiatives strengthened/established to progress towards LDN

This output aims to support and further develop regional and cross-border collaboration and coordination to maintain the ecological integrity of the Miombo-Mopane eco-region, involving both DSL-IP countries and non-DSL-IP countries, and develop joint solutions to common challenges in sustainably managing the region?s natural resources, including exploring the possibility of new cross-border and regional initiatives and investments. In doing so it also facilitates the sustainability and scaling up and scaling out of project results across the region.

The output begins with the identification of common or transboundary land degradation, sustainable drylands management and other environmental challenges across the region and progresses to prioritizing actions to jointly address them.

Key activities under this output:

? Key project stakeholders participate in regional review and identification of priorities for transboundary and regional collaboration to address threats from environmental degradation and unsustainable natural resource use (e.g. due to veldt fires, charcoal, extraction of indigenous plant resources, conflicting watershed management) in the Miombo-Mopane region and identify solutions to address them in a collaborative manner with development of an action plan (activity organised through the REM).

? Identify and develop proposals for trans-boundary and regional initiatives to address common challenges to managing the Miombo-Mopane system, such as biodiversity (e.g., endangered species? ranges covering several Miombo-Mopane countries), protected areas with a shared national border and addressing common water systems shared between countries (e.g. between Malawi and Mozambique).

In addition to identifying and responding to regional priorities, collaborative actions with other child projects promoted by the project may also include participation in review (organised by the REM) of regional and global initiatives and investment sources (including private sector companies and institutions) with a mandate to cover sustainable drylands management (e.g. Miombo Forum SADC-GGWI) to identify potential financing (sources, innovative financial tools) in support of both regional priorities identified through the activities above and the national LDN targets (database held by REM).

Output 3.2.2: Collaborative actions to support business and market development for SLM/SFM products across the Miombo-Mopane region undertaken.

This output addresses, through the support of the REM, the identification of, and networking with, cross-border, regional and global markets for LDN-compliant land-use products promoted by the project. Activities under this output support those under Outcome 2.3 on green value chain development, enabling the selected SLM/SFM products from the project?s target landscapes ? moringa, honey, baobab, pigeon pea, sorghum - to be better marketed across the wider region and beyond.

Key activities under this output:

? Provide national inputs into REM assessment of market analysis and business opportunities for further development of trans-boundary, regional and global markets (with a focus on linkages with other DSL countries) for SLM/SFM products such as charcoal and NTFPs (building on the preliminary work undertaken during the PPG period on value-chain activities), including identification of potential sources of commercial financing.

? Engage with REM-promoted regional business networking events for support of value-chain development and promotion of products from target areas under SLM/SFM practices.

? Provide national input to any proposed development and promotion of a Miombo-Mopane ?brand? for SLM/SFM products, delivered through the project to support market development.

The REM will provide a dedicated ?business development facility? function, supporting the (largely) underdeveloped value chains for SLM/SFM products from the target areas. Amongst other support the REM will compile information (on a database) on potential products, businesses, sources of financing and markets, which will be available to the Malawi and other DSL-IP child projects. The REM will also explore the possibility of developing a Miombo-Mopane ?brand?, drawing FAO?s experience with developing Geographical Indication (GI) schemes.

Output 3.2.3 ? Opportunities for national and landscape-level stakeholders to exchange knowledge, experiences, and lessons learnt at regional and global levels identified, developed and supported.

This output seeks to identify and promote opportunities for project stakeholders to exchange knowledge, experiences and lessons learnt and enhance mutual learning with other DSL-IP projects, as well as connecting them with other relevant regional and global knowledge sources and learning opportunities. This will further strengthen evidence-based decision-making capacity for LDN in Malawi. This output will particularly assist with, and add value to, project efforts under Outcome 3.1 to inform and be informed by the expanding body of global knowledge and practice on SLM and SFM practices and measures to address LDN.

The project?s framework is closely aligned with the DSL-IP?s global framework, as well as harmonized with that of the other Miombo/Mopane child projects, which should facilitate the sharing of evidence-based good practices across initiatives. The REM will play a major role in assisting the Malawi project to engage in and deliver this output.

Key activities under this output:

? Liaise with the REM, other DSL-IP countries and other relevant initiatives and platforms to identify appropriate exchange, learning and capacity development opportunities being offered through the DSL-IP to improve Malawi?s access to regional and global knowledge and expertise in relation to sustainable drylands management and LDN.

? Organise (supported by the REM) national and sub-national participation in regional and global ?cross-fertilisation? exchanges, study tours and peer-to-peer learning opportunities, including exchange-learning visits (with cross-site visits at local, national and regional levels) for key project participants and partners to other DSL-IP projects in the Miombo-Mopane ecoregion, and to other projects providing best practices under the AFR100 network to improve mutual learning.

? Develop linkages (supported by the REM) and engage with key global forums and working groups on drylands and related platforms (e.g. Collaborative Partnership on Forests, Global Landscapes Forum, Global Soils Partnership, Global Agenda for Sustainable Livestock, FAO?s Family Farming Platform, GEF-6 IAP Policy and Science Interface, and the World Overview of Conservation Approaches and Technologies ? WOCAT) and regional-level platforms (e.g. SADC GGWI, Miombo Network), with specific training provided on a demand basis to relevant departments on the use of existing sources of information (e.g. WOCAT, TerrAfrica) and develop associated user-friendly guides where necessary.

? Ensure close coordination with FAO?s Committee on Forestry (COFO) Working Group on Dryland Forests and Agro-silvo-pastoral Systems, including support for country?s representative to participate in relevant meetings in order to help channel knowledge and policy support between the child project, regional level and GCP steering committee.

? Organise (facilitated by the REM) participation of the Malawi project team and partners to the annual meetings of DSL IP and other capacity development events and networking opportunities organized by the GCP, SADC, UN COPs (particularly UNCCD), IUCN Global Congress, among others.

? Malawi?s participation in CBD meetings and Landscape restoration meeting sat Regional and International Level to benefit from collaboration with other countries.

The project and the REM will jointly identify the most suitable learning opportunities in other DSL-IP countries and organize at least two visits of approximately one week to relevant sites, with the help of the host partner. Visits are expected to involve between 8-10 participants from Malawi. Participants will be required to prepare a report for dissemination and conduct post-return workshops or meetings to share the knowledge acquired on returning to Malawi and identify how it might be applied in a brief action plan. Actions will then be monitored and reported to the PSC. In return for the Malawi project participating in wider learning opportunities, the PMU will liaise with the GCP to host similar learning visits for other DSL IP partners, based on the most successful achievements of the project in Malawi.

1.d.ALIGNMENT WITH GEF FOCAL AREA AND/OR IMPACT PROGRAM STRATEGIES

The Drylands Sustainable Landscapes Impact Program (DSL IP) is a multifocal, integrated initiative that will create multiple benefits in the land degradation (LD), biodiversity (BD) and climate change (CC) focal areas. It is also aligned with the general IP strategies to address key programmatic issues including transformation, impact, collaboration, coordination, and private sector engagement, and is aligned with DSL IP goal of addressing the nexus between local livelihoods, land degradation, climate change and environmental security.

The Child Project in Malawi, together with the other Miombo & Mopane Child Project countries of the SFM-DSL IP, will respond to the Drylands IP novelty objective to maintain the ecological integrity of the entire unique and globally important ecoregion, through comprehensive and large-scale set of investments and efforts over large landscape units, in some cases cutting across important transboundary areas of regional watersheds. The Child Project in Malawi respond to the LND goal of the GEF Dryland Sustainable Landscapes Impact Programme, to avoid, reduce and reverse land degradation and deforestation, through the sustainable management of production landscapes. The Child project is structured around three components that are aligned with the DSL IP objectives:

DSL IP Objectives	Malawi Child Project Components
1) Integrated landscape management with particular focus on sustainable forest management and restoration, rangelands, and livestock production.	? Component 2 will adopt an integrated landscape management approach addressing the complex nexus of local livelihoods, land degradation, climate change, and environmental protection. The project will support the development of integrated landscape management plans (ILMP) for large landscape units in three districts of the upper part of the Shire River Basin characterized by dry miombo & mopane ecosystems. The landscapes are shaped including several watersheds puring their waters into Lake Malawi and the Shire river, to well address the interlinks between forested catchment areas (Forest reserves) and downstram agroforestry systems. ILMP planning will address climate change impacts and multisectoral degradation drivers to help identify landscape restoration, SLM, and SFM priorities that generate multiple environmental benefits and secure local livelihoods.

2) The promotion of diversified agro-ecological food production systems in drylands.	? Component 2 will support climate-smart SLM, SFM and Green Value Chain investments for the diversification of agro-ecological food production systems in agriculture and forest land, mainly through the enhancement/restoration of agroforestry tree-crop systems (combining the planting of multipurpose trees and FMNR with conservation agriculture applied to pigeon pea intercropping with cereals, based on drought-resistant crop varieties) and the restoration, protection and sustainable community-based management of forest areas, as a key strategy to reduce climate change risks and enhance ecological, social and economic resilience in the target landscapes. ? The project will address the gender specificities of smallholder farmers and forest users in CC adaptation and SNRM, through participatory learning programmes (FFS and Forest Management/Business Learning Groups) aiming to enhance the integration of users into producers? organizations and enable them to effectively apply FLR/SLM/SFM/GVC systems and technologies.
3) The creation of an enabling environment to support the two objectives above.	? Component 1 will create an enabling environment for mainstreaming LDN into the policy framework at national, district and local levels, and enhancing the capacity of policy makers and local community members to become knowledgeable about the exiting LDN-related policies and regulations, formulate the necessary accompanying implementation frameworks to enforce the legal framework, formulate regulations and bylaws, and advocate for the necessary policy improvements to support integrated landscape restoration, SLM, SFM, and Green Value Chain development. ? Component 3 will create an enabling environment for LDN monitoring at the national level (embedded in the National FLR Monitoring Framework) and at the landscape level, and enhance the capacity of national, district and local actors to participate in gathering and analyzing monitoring data, developing lessons learned, and contributing to a knowledge management system to share knowhow among countries in the Miombo & Mopane Ecoregion.
Private Sector: promote innovative and sustainable financing mechanisms for conservation, development, peace-building, and benefits for local communities	? Component 2 will strengthen and I responsible and sustainable green value chains from the local communities to the markets in the target landscapes: (i) the NTFP of bee products, baobab, mushrooms and fuelwood/charcoal, and other to be selected during project implementation; (ii) the diverse set of climate-resilient agroforestry commodities including drought-resistant varieties of pigeon peas and cereals, moringa, and vegetable gardens. The project will enhance business capacity, certification and marketing skills of producers organizations and buyer companies, through training, technical assistance, investments, private-public partnerships and the participation to business incubation and acceleration programmes.

Malawi and the other Child Project countries of the SFM-DSL IP will build on the global initiatives that provide a basis for collaboration under the GEF Dryland Sustainable Landscapes Impact Programme, such WOCAT, the FAO Drylands & Forest and Landscape Restoration, and the Great Green Wall Initiative.

1.e.Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing.

The GEF incremental finance will build upon the baseline programmes to support the country in shifting from unsustainable forest and agricultural exploitation practices towards integrated FLR, SLM and SFM practices at the landscape level emphasizing on agro-biodiversity. This will be done by implementing an integrated cross-sector approach following the LDN impact pathway to address land degradation in a comprehensive manner:

(1) Effective governance support on SLM and SFM. Leveraging on structures and government commitments for the country?s LDN target setting process, the incremental finance will support aligning the country?s efforts to address land degradation and national investments with the LDN impact pathway. It will increase understanding of the government regarding the multidimensional benefits of SLM and SFM, support the identification of priority SLM and SFM interventions including land rehabilitation and land restoration interventions, and increase capacity for cross sectoral planning, monitoring and law enforcement.

(2) Scaling up FLR, SLM and SFM and Green Value Chain development best practices at landscape level. The availability of climate-resilient innovative approaches, practices and technologies to serve as models will be increased. Landscape restoration interventions ? including forest protection measures; the production in community nurseries and planting of high quality plant material in degraded areas; the construction of bioengineering green infrastructure to stop and reverse soil erosion; the adaptive management of diversified agroforestry systems, natural forests and community woodlot plantations by users and producer organizations ? will be implemented in landscape units of Mangochi, Ntcheu and Balaka districts to increase ecosystem services, sustainably intensify productivity, and support smallholder farmer organizations to develop ecologically sound, socially beneficial and economically viable green value chains. The project will also build on existing efforts by the Government of Malawi and WRI to identify private investors active in relevant sectors (forestry, sustainable agriculture) and businesses with FLR and Green Value Chain commodities as core part of their business model. The project will promote private-public-partnership frameworks involving these businesses and community groups and producer organizations from the target landscapes, and further support the participation to business incubation and acceleration programmes.

(3) Effective monitoring, knowledge management and evaluation. The incremental finance will enable the harmonisation of M&E tools and approaches, effective knowledge management, alignment of LDN efforts and the replication of evidence based best practices at national (DF FLR monitoring framework) and regional through SADC?s GGWI and AFR100 platforms. The project will therefore have an impact across the integrity of the entire Miombo & Mopane ecosystem.

The project?s incremental reasoning follows a two-pronged approach: (i) Add value to ongoing efforts towards the strengthening/expansion of both landscape-level restoration of degraded areas and climate-resilient agroforestry and forest management supporting green value chain development embedded in baseline initiatives; (ii) Enable conditions for sustainable investments in ecosystem management. Without GEF support, baseline interventions would lack the landscape-level planning layer needed to identify landscape restoration hotspots and define LDN priorities emphasizing the restoration of ecosystem services and the sustainable use and conservation of agrobiodiversity, through innovative SLM/SFM systems and technologies and green value chain development. This would increase the environmental and social risks potentially embedded in unsustainable rural development drivers, aggravating pressures on the Miombo & Mopane resources. With GEF funding, the project will complement baseline interventions with: (i) additional resources to capacitate key stakeholders for an integrated planning and implementation of sustainable landscape-level interventions and for mainstreaming biodiversity and LDN into relevant policies and practices, enabling the

upscaling/outscaling of SLM and SFM; (ii) enhancing agricultural know-how and leveraging investments for sustainable value chains with focus on gender and youth inclusion, diversification of production, and restoration via tree planting, soil and water conservation; and finally (iv) fine-tuning technologies and management systems through regional and global collaboration.

The following table summarises the incremental/additional contribution of the GEF Child Project to the baseline investments:

Baseline Investment	Baseline Contribution	GEFTF incremental/additional Contribution
KULIMA	? KULIMA will put in place an institutional framework to anchor the FFS programme on the District Agricultural Extension Services System (DAESS), consolidate the efforts towards FFS quality assurance and gender inclusiveness, and build the requisite capacity of a critical mass of men and women FFS Master Trainers and Facilitators to address critical issues linked to enhancing agriculture production, productivity and diversification in ten districts.	? The GEF project will help mainstream the LDN priorities in terms of landscape-scale integration of protection, restoration and sustainable management of natural resources in diversified agroforestry and forestry production systems into KULIMA?s FFS development programme. The GEF will help build learning modules for landscape-level FLR/SLM/SFM/GVC interventions/technologies/inputs, incorporating gender-inclusive climate change adaptation needs, and upstream-downstream landscape interlinks between forests and agriculture land. ? The GEF contribution to the learning programme for master trainers and facilitator with influence KULIMA?s capacity to expand knowhow on LDN-related issues (FLR/SLM/SFM/GVC) to the pool of FFS trainers and facilitators in the 10 KULIMA?s target districts in addition to the three GEF target districts. This will have a major magnification effect to scale out knowhow on LDN approaches and technologies and spread its implementation by smallholder farmers in the 13 districts. ? The GEF will help connecting FFS to business incubators, developing targeted curricula on business development, or market linkages (i.e. through the Forest and Farm Facility methodology or a similar approach). ? The GEF will also benefit from KULIMA?s FFS approach to develop learning programmes for Forest Management/Business Learning Groups, also building on the FAO/IIED/IUCN/Agricord Forest and Farm Facility approach, ensuring coherence and harmonization in the learning system for master trainers and land users at the landscape level (integrated forestry and farming system). ? The GEF will promote learning visits among practitioners in KULIMA?s and GEF target districts and with the SFM-DSL IP countries to help spread knowhow and share best practices suitable for the Miombo & Mopane ecoregion.

MCHF	? The main objectives of Modern Cooking for Healthy Forests are: (i) to increase demand for alternative and efficient energy options and technologies; (ii) promote sustainable management of forests; and (ii) to increase the capacity of the GoM to improve/enforce the policy framework, and on low emissions development in REDD+ and/or other Land Use. MCHF will also provide PMC related cofinancing including project management staff time dedicated to the establishment and operation of the Government of Malawi?s National Forest and Landscape Monitoring Unit (the National Monitoring Unit, or NMU), which will be located, at least initially, within the Department of Forestry, and includes office space, equipment, etc.	? The GEF project will coordinate efforts with the MCHF to harmonize efforts and have positive feedback: On the one hand, the project will benefit from the experience of MCHF in new technologies and market studies to increase demand for alternative bioenergy sources and efficient use of fuelwood/charcoal, and promote its adoption by local people in the target districts through the procurement windows scheme. On the other hand, the best practices from the project in terms of policy development from national to local level, and landscape-level implementation of FLR/SFM/SLM interventions, will be used by MCHF to demonstrate effective ways to support low emissions development in forest landscapes. ? The GEF project Component 1 will help mainstream LDN targets into cross-compliant sectoral policies, addressing in an integrated way the root-causes of forest degradation, and supporting policy makers in the formulation of policies at national, district and local levels with the specification of accompanying implementation frameworks, whose frequent absence is one of the main causes of lack of enforcement. ? Component 1 will also support women and men from village-level committees and producers and users? groups to formulate and apply local bylaws supporting the effective implementation of the landscape priorities on forest restoration, protection and sustainable management that will be implemented through the procurement investments. Moreover, forest users ? with special focus on women and charcoal organizations ? will receive information and training on the existing regulation supporting sustainable forest management and protection, on bylaws formulation and on advocacy skills to lobby the local institutions responsible for approving regulations and bylaws. Better informed forest users, and their involvement in bylaw formulation will improve law enforcement therefore reducing unsustainable timber, fuelwood and NTFP collection. ? Component 2 will support land users? organizations with training, technical assistance and investments for the implementation of integrated LDN-interventions (FLR/SFM/SLM) at the landscape level to reduce forest loss and degradation (e.g. planting woodlots to reduce pressure on wood harvesting from natural forests; sustainable intensification of agroforestry systems to reduce demand for agriculture land through forest encroachment; combination of waste biomass from forest and agriculture for bioenergy), while improving forest cover (e.g. temporary enclosure areas to enhance natural regeneration; production and planting of native trees and shrubs).

PROSPER	? PROSPER will support smallholder farmers to reduce exposure to climate shocks through catchment-level interventions, including ?food for assets? support, the promotion of climate-smart agriculture practices and postharvest handling technologies, and farmers? participation in a weather index insurance scheme.	? The GEF project will coordinate efforts with PROSPER to address resilience to climate change in an integral way at the landscape level, ensuring that the upstream and downstream interconnection between forests and agriculture is reflected in adaptation measures and that there is coherence for mainstreaming adaptation within the cross-sectoral landscape plans. ? The GEF project will build on the expertise of PROSPER on climate-smart agriculture practices and contribute to PROSPER in the scope of adaptation referred to integrated landscape planning and forest restoration and management. GEF beneficiaries will have access to the weather index insurance scheme developed under PROSPER, which will significantly increase the GEF project contribution to social and economic resilience ? Good integration between GEF and PROSPER will be facilitated by the fact that the two projects share implementation areas (the districts of Mangochi and Balaka), and that FAO staff is implementing both initiatives.

1.f. Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The project will help deliver the following global environmental benefits:

Global Environment Benefits (GEBs)

Objectives and Priorities to be addressed through the IP	**GEF 7 Core Indicator Targets**	**Expected contribution of the Malawi Child Project of the SFM-DSL IP**
Sustainable management of forest landscape and dryland production systems ? integrating the LDN targets into planning processes, focusing mainly on improved land use and management for crop and livestock production.	6 million hectares of land restored.	16,299 hectares of degraded Miombo & Mopane forestland and river/stream banks restored.
	320 million hectares of landscape under improved practices to benefit biodiversity (excluding protected areas).	420,539 hectares of degraded land under improved management practices (intercropping of drought-resistant pigeon pea-cereal varieties in agroforestry farmland with FMNR and multi-purpose native/naturalized tree planting) to benefit ecosystem services and people?s livelihoods.

Land-based and value chain GHG mitigation (*sequestration and avoidance*) ? GHG emissions reductions from landscape forest conservation.	1,500 million tons of CO_{2e} of GHG emissions mitigated .	A total of 712 288 tCO2eq sequesteredover 20-years in the AFOLU sector, as per to direct project interventions on FLR/SLM/SFM.

The above GEBs are based following on the following considerations:

●Sustainable Forest Management and Biodiversity Conservation: Project activities will include improved co-management of 4,000 ha of forest areas in medium and lightly-degrade forestland in the Lake Malawi National Park, five Forest Reserves in Mangochi and Ntcheu districts, and several forest village areas in the landscapes of the three districts. Priority interventions will include: (i) improvement of forestland through active restoration interventions, protection measures such as enclosure areas, assisted natural regeneration, climate-adaptive fire and biomass management, and sustainable use of wood and NTFPs); (ii) reduction of pressure on fuelwood from natural forestland through the planting of woodlots with bamboo and a mix of native and naturalized multipurpose tree species, and the promotion of bioenergy alternatives and efficient use of fuelwood and charcoal.

●Landscape restoration: Project activities will include the restoration of 4,464 ha of degraded forest areas in the target landscapes (e.g. eroded lands and degraded forest land and river/stream banks). As a result of the Integrated Landscape Management Plans, priority areas for restoration interventions to enhance the ecosystem services and resilience of the landscape will be identified, and site-specific restoration techniques will be applied. Priority interventions will include: the production and planting of high quality plant material (seeds, seedlings and cuttings) from native and naturalized trees/shrubs, and the implementation of effective field restoration interventions to increase water availability and seedling survival.

●Sustainable agroforestry production systems: Project activities will include restoration and sustainable intensification of agroforestry production systems in 7,845 ha of degraded and/or poorly managed agriculture land. Priority interventions will include a mix of management systems and technologies supporting diversified agroecological food production systems: (i) FMNR and the planting of native/naturalized multipurpose tree species (e.g. moringa, neem, acacia) supporting agroforestry production; (ii) intercropping of drought-resistant pigeon pea-cereal varieties under conservation agriculture management systems and technologies.

● Climate Change Mitigation: The project will provide direct mitigation benefits ? through the direct implementation of the above mentioned FLR/SFM/SLM activities ? of 712 288 tCO2e over a period of 20 years. The project will address climate change mitigation and adaptation in an integrated manner: (i) reduce carbon emissions through forest conservation and sustainable management, the promotion of bioenergy alternatives and efficient use of fuelwood and charcoal, and the conservation and improvement of soil carbon and tree carbon stocks in agroforestry farmland under SLM (ii) enhance carbon stocks in restored forestland and planted woodlots; (iii) reduce climate change impacts through climate-adapted crop varieties under conservation agriculture and FMNR/tree that help, that help reduce soil water evaporation, improve micro-climate, increasing soil fertility and soil water infiltration, and reducing runoff erosion).

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1.g. Innovativeness, sustainability, potential for scaling up and system-wide capacity development[1] . ?

Innovativeness

The GEF/SFM-DSL IP project offers the following aspects of innovativeness:

? A National Forest Landscape Restoration (FLR) Strategy for Malawi was developed in 2017, identifying landscape-level restoration opportunities to mitigate the underlying conditions of land degradation and ecosystem services? depletion, and quantifying the economic returns from the restored degraded landscapes against the cost of inaction. Furthermore, The GoM has committed to the FLR Bonn Challenge and Africa100 to restore 4.5 million ha of degraded land, which represents approximately 59% of the suitable areas with opportunities for restoration. Even before the adoption of the FLR Strategy, several scattered interventions have addressed sustainable land and forest management, introducing practices such as conservation agriculture, agroforestry, farmer-managed natural regeneration etc. In the framework of the Shire River Integrated Catchment Management Strategy, several pilot actions have been implemented to put in place sub-catchment management plans.

? The GEF/SFM-DSL IP project represents the first attempt to integrate and harmonize the practices and techniques embedded into the above concepts under the overarching approach of Land Degradation Neutrality, at a multi-scale level going from landscape to national, to regional. The project will build a unique platform bringing together the range of interventions nested under the concepts of forest landscape restoration, sustainable intensification of agriculture, green value chains, and

integrated watershed management, making use of the full toolbox of activities available to achieve global land degradation neutrality objectives. The application of the most cutting-edge approaches will be led by FAO, whose extensive experience and comparative advantages will ensure that a full range of techniques and the best know-how is put at the disposal of this endeavour.

? The Child Project in Malawi is framed within the wider SFM-DSL IP, which is highly innovative in bringing together different climate-adaptive conservation, land management and restoration approaches within one programmatic framework addressing the Miombo-Mopane ecoregion and spanning over six countries of Southern Africa, with a transboundary focus. The SFM-DSL IP is strengthened by the diversity of country situations and challenges, enabling the aggregation and sharing of a broader suite of solutions, based on a combination of traditional agro-ecological knowledge and science The project in Malawi will tap into this wealth of knowledge, approaches, and practices.

? The Child Project will identify gender constraints and needs to overcome barriers for the effective participation and engagement of women in the selection, testing and fine-tuning of SLM and SFM innovative systems and technologies. And priority setting of innovative management systems and technologies. The project will build on the specificities of women farmers and forest users as innovators by supporting fair representation of women in the FFS and Forest Learning Groups or the support of women groups? own farm experimentations. Capacity development activities will address the social and cultural barriers limiting women?s access to innovation in natural resources management and agrobusiness, through gender-specific information, education, extension and training, to increase the number of women leaders in the target landscapes? institutions, extension services and communities, which help catalyse the participation of women in producer organizations, and their equitable access to land and natural resources, and to finance for investments in new technologies.

? Another important aspect of innovation is the partnership-building effort involving all sectors of the society, which the project will foster under the framework of LDN. Key players in the development scenario of the country, such as international agencies (USAID, EU, DFID, GIZ, FAO), small, medium and large private enterprises and companies, producers? associations, research institutions and the civil society (NGOs and CBOs), will join forces together with the GoM, the Districts and the local communities to meet the LDN challenge. This variety of partners will enrich the bodies set up or reinforced by the project, such as the Landscape Management Committees, the National Committee on Climate Change and Disaster Risk Management, and the Project Steering Committee, and will be engaged in a joint learning effort through the capacity building program and the workshops, meetings and events organized by the project.

? Through the LDN financing tools created under Component 2, the project will be highly innovative in its effort to: (i) create a more conducive financial framework to LDN by improving existing policies and institutional tools; (ii) catalyse private sector engagement with the development of private-public partnerships for the reinforcement of green value chains and the establishment of PES schemes for the long-term sustainability of SFM-SLM intervention in the landscapes; (iii) empower the local communities in the landscape with the setup of a procurement programme and training on finance and business management to producers with limited or no access to financial services due to lack of colateral, so that the project can attract and catalyse long-term funding support.

? Finally, the project is also innovative in its support for the institutions of Malawi to mainstream LDN into national and sub-national policies, by making available inspiring examples and best practices from the global arena.

Potential for Scaling-Up

In line with GEF STAP recommended guidance on scaling out, up and deep[2], the project is designed to generate models combined with system-wide capacity development that can be upscaled and amplified to increase impact. The up-scaling potential of the project activities and results is high, given its complementarity with national policies, plans, and programs, the strong commitment of the Department of Forestry to integrate project results into its long-term FLR Strategy and the National Charcoal Strategy, and the broad range of partnerships triggered by the project, including all representatives of the national society (institutions, communities, civil society, private sector).

The project approach of developing integrated landscape management plans based on accurate and participatory preliminary assessments and with strong and committed partners should be broadly replicable throughout the country. The actions for economic diversification through green value chains and the sustainable NRM practices to address forest and land degradation implemented under Component 2 also have a high up-scaling potential, as they address critical problems that are widely felt in Malawi and captured by the NFLR and LDN targets, such as the degradation of forests and the unsustainable use of forest fuelwood, the impact of maladaptive agriculture practices, and the weak economic opportunities linked to the agro-forestry sector.

Scaling up will also be facilitated by knowledge management and dissemination of best practices. The main project partner and government counterpart, the Department of Forests, building on the improved enabling framework and techniques/practices implemented through the project, will lead the scaling up throughout the country, according to its institutional mandate. In addition, FAO will disseminate information on the results and lessons learned with other countries in the Miombo-Mopane ecoregion with similar characteristics and problems through the SFM-DSL IP.

Sustainability

It is expected that by the end of the project, institutions, communities, private enterprises and other stakeholders will be able to give continuity to the activities undertaken by the project. Factors that encourage sustainability in its social, environmental, economic, and capacity-development dimensions are listed below:

Social Sustainability and Gender Equality

In the context of the project development phase, FAO carried out a SHARP exercise that included a social and gender analysis, in order to make the proposed project interventions more people-centred and socially inclusive, by ensuring a close fit with local contexts, culture and livelihoods, and to safeguard the interests of the weaker sections of the population, including women. A key challenge to social sustainability in LDN projects is the development of the communities? capacities to access land and natural resources in an equitable and sustainable way and to take active action in the implementation of integrated landscape management plans. This challenge will be addressed by ensuring that all participation is voluntary, that all user groups especially women are represented in the process of design of the ILM plans and in the actions to promote economic diversification, that women entrepreneurs and institutions with a balanced gender component are involved in the green vale chains projects, and that the capacity development work promoted by the projects targets a balanced and equitable share of social groups, with a special focus on women and youth.

The project will intentionally promote gender equality. In general, Malawi?s female farmers are less productive compared to their male counterparts, mainly because of unequal access to key agricultural inputs such as land, labour, knowledge, fertiliser, improved seeds, and mechanization. Women will be fairly represented in the participatory processes to design ILM plans ? thus they will have their say over how they are designed, and they will be in the position to defend their interests through the governance systems put in place. Criteria will be developed to make sure that women have equitable access to the equipment and inputs channelled through the procurement windows (Output 2.1.1), and all the capacity development programs delivered will ensure that half of the participants are women. Gender and social equitability criteria will also be paramount in the strengthening of producers? associations and in the development of private-public partnerships for the green value chains under Component 2 of the project.

Environmental Sustainability

The project promotes good restoration, management, and protection of ecosystems to contribute to SLM-SFM in the Miombo-Mopane ecoregion. In this way, the project directly contributes to environmental sustainability. The project aims to demonstrate how the forests and farmlands of Malawi can be managed to secure their essential ecosystem services, the production of commodities based on a sustainable and inclusive economy, and for carbon sequestration. The project will be implemented in areas under severe threat of degradation and in an ecoregion that is highly vulnerable to the impacts of climate change. Pressures on the forests and farmlands will be reduced by improving the efficiency in the use of resources ? including the valuing and sustainable harvesting of NTFP, and the provision of alternatives to unsustainable fuelwood collection and charcoal ? and the sustainable intensification of agro-forestry production. This coupled with FMNR and other active restoration and assisted natural regeneration techniques will allow the rehabilitation of native vegetation as well as sustainable agriculture. Environmental sustainability will also be enhanced by the project?s emphasis on integrating resiliency planning into all restoration investments. The SFM-DSL IP will combine collaborative, stakeholder-driven integrated landscape management planning with the best science and analysis on how resiliency to anticipated climate impacts can be strengthened in LDN investments.

Economic and Financial Sustainability

The financial and economic sustainability of the project will be achieved to the extent that these activities are financially and economically viable for the parties involved, including beneficiaries at the community levels, and the private sector. The restoration and sustainable management of productive natural and semi-natural systems, such as Moringa and Baobab agro-forestry landscapes, will support and improve the economic activities that depend on their functionality. Economic sustainability will also be ensured through the maintenance and improved use of forest wood and non-wood products upon which livelihoods of poor community groups rely. Integrated landscape management plans will be designed and implemented with the communities in order to ensure that the needs and the aspirations of these communities are met. The achievement of a more favourable framework for LDN financing through Component 2 will also contribute to keep supporting and upscale LDN in Malawi.

Sustainability of Capacities Developed

Sustainability will be enhanced by the project?s capacity development efforts and support for key institutions who will be responsible for carrying on the project work following project closure. The enabling and empowerment of the NCCC&DRM and the Department of Forests will be instrumental at this respect, as the mainstreaming of LDN know-how in this institution will facilitate the long-term provision of the minimum level of ongoing support services to grassroots beneficiaries and stakeholders that is the key challenge to sustainability. The involvement of the producers? organizations and the buyers? companies through the working line on green value chains (production, processing and marketing of diverse products from the sorghum, pigeon pea, honey, mushrooms, moringa, baobab, fuelwood and other priority commodities identified during project implementation) will also contribute to sustainability.

System-Wide Capacity Development

This Project will incorporate a system-wide capacity development approach to maximize country ownership, sustainability and scale of intended results[3].The project formulation phase highlighted several capacity gaps across individual, organizational, institutional and the enabling policy environment capacities at national and sub-national level , especially related to the nature, scope and complexity of the LDN-related implementation tools (e.g. FLR, ILM, SLM, SFM, PES, Green Value Chain development). This lack of capacity is mainly due to: (i) the fact that no previous project/initiative has dealt with LDN-related tools in a comprehensive way in Malawi; (ii) the fact that the country has a very limited number of extension human resources ? especially at the District level ? and little knowledge of LDN-related tools, that prevent the circulation of lessons learned and good practices to practitioners. The formulation team also identified gaps for the establishment of an enabling environment to the implementation of LDN, including the (i) lack of cross-sectoral

coordination and cross-compliance; (ii) lack of implementation and weak enforcement of existing policies developed without accompanying implementation frameworks; (iii) insufficient and inadequate financing instruments often supporting maladaptive natural resources management practices. All these gaps will be tackled through the capacity development work that is strongly embedded across the work plan of the project.

At the beginning of the project, the capacity gaps and needs of all stakeholders belonging to institutional, private, civil society, and community sectors across national and sub-national levels will be analysed, based on the information previously gathered during the formulation phase. Methodologically, FAO Capacity Needs Assessment Tools will be applied including implementing a system-wide capacity assessment of all concerned stakeholders in the target landscapes across the three CD dimensions ? individual, organizational and enabling environment. As a result of the assessment, a capacity enhancement strategy will be designed informing and guiding the fine tuning of the capacity development actions throughout the three project components. This will include a mix of tools ? the training of trainers; the establishment and running of FFS and FMLG; training on ILM planning, PES,; training and demonstrations on policy formulation and advocacy work; with the assistance of the GCP of SFM-DSL IP, learning visits to successful experiences and best practices in the Miombo & Mopane Ecoregion, and the participation of producers organizations and buyer companies from the Child Project in learning programmes for Business incubator and Accelerator, in collaboration with FAO Sub-Regional Office.

Under Component 1 the project will enhance the organizational and institutional capacity for LDN at national level, strengthening the National Climate Change and Disaster Risk Management Committee (NCCC&DRM) as a forum for mainstreaming LDN into cross-compliant sectoral policies, and enabling its members in policy formulation and advocacy for policy improvement. The members of the NCCC&DRM will be familiarized to the concept, methodologies and practices of LDN, and to the state of the art on its implementation tools (FLR, ILM, SFM, SLM) in Malawi. The NCCC&DRM will become the main vehicle to support and steer LDN work, and one of the key beneficiaries of the capacity development work that will be implemented under Component 1. Women will make up at least 1/3 of the Committee members. At the sub-national level, Component 1 will provide substantial support to institutions, local communities, civil society, and the private sector, to learn about existing LDN-related policies and regulations, formulate bylaws supporting the effective implementation of landscape restoration/SLM/SFM/green value chain development, and advocate for policy improvement. The project will follow an iterative process through which the development of best practices from ILM/FLR/SLM/SFM implementation in the target landscapes will feed policy improvement, and the improved policies will facilitate the formulation of new regulations and bylaws to scale out the best practices throughout the landscapes, Malawi and the SFM-DSL IP Miombo & Mopane countries.

Under Component 2, All concerned stakeholders in the landscape will be trained to design and implement integrated landscape management plans and monitoring systems, and to participate in the effective implementation and monitoring of FLR/SLM/SFM interventions following an adaptive management approach. DAES, DADO and DFO will support intensive training of trainer's activities to create a critical mass of women and men master trainers and facilitators among different stakeholders

(e.g. AEDOS[4], lead farmers, private companies, NASFAM members, researchers, CBOs and NGOs), to facilitate the organization and implementation of FFS and FMLG. This will be the main vehicle for practitioners to learn-by-doing how to adapt and effectively apply landscape restoration interventions (e.g. community-nurseries for the production of high quality plant material, effective field restoration interventions to increase water availability and seedling survival, bio-engineering green infrastructures such as eco-friendly flexible check dams for soil and water conservation), climate-resilient agronomic systems and technologies, (e.g. such as conservation agriculture with intercropping of drought-resistant crop varieties of pigeon pea-cereals, agroforestry tree planting with moringa, neem tree, acacia and other valuable native/naturalized trees, FMNR, ecological pest management, and crop-livestock integration), adaptive management of natural forest resources (e.g. economic valuation, harvesting and processing techniques for bee products, baobab, mushrooms and other NTFPs; bioenergy alternatives and efficient use of fuelwood), and to develop business around the targeted green value chain commodities. Capacity development will be very practical, tailor made to the gender, cultural and social profile of the beneficiaries, focused on the interventions to be developed, and delivered to the communities in the pilot sites.

The project will engage key stakeholders ? public institutions, community organizations (especially small and medium size enterprises and producers' organizations), private sector, financial sector - in the development of a pathway and a capacity development process to achieve a more conductive environment for LDN finance (e.g. PES schemes, public incentives, PPP).

Under Component 3 national and sub-national stakeholders will learn about monitoring procedures and tools to mainstream LDN indicators into the existing FLRMF and the Landscape Monitoring Action Plans. LDN monitoring will follow an iterative process through which practitioners will analyse, learn and adapt the implementation procedures and the technologies used, to the environmental, cultural and socioeconomic context of the project. The dissemination of SFM-DSL IP-related lessons learned and best practices from the Child Project and the SFM-DSL IP network will contribute to developing national capacity. Workshops and meetings will be organized among concerned target actors to disseminate the lessons learned and best practices developed within the wider SFM-DSL IP program, and at least three study visit to other National Child Projects will be organized to enhance south-south cooperation and mutual learning.

Methodologically, all envisioned training activities will apply effective learning practices including pre-event learning needs assessments, post-event follow-up support to facilitate the transfer of knowledge into practice as well as institutionalization of curricula through partnering with and enhancing the capacities of local universities and research centres. This will contribute to achieving sustainable results. Efforts will also include organizational and institutional capacity strengthening efforts such as to strengthen multi-sectoral and multi-coordination and collaboration mechanisms such as the LDN platforms at national and landscape levels. Finally, all capacity enhancement activities will be aligned with a harmonized approach across the GEF IP Programme including the capacity enhancement strategy of the global coordination project and individual child project capacity enhancement strategies.

A dedicated expert will be hired by the Project to follow the systemic capacity development components together with knowledge management and stakeholder engagement (See TORS in

ANNEX O). FAO will provide overall quality assurance through a dedicated member on the internal Project Task Force (PTF) who will be task with the knowledge management, stakeholder engagement and system-wide capacity development components.

[2] See https://mcconnellfoundation.ca/wp-content/uploads/2017/08/ScalingOut_Nov27A_AV_BrandedBleed.pdf

[3] See ?System-wide capacity development for country-driven transformations?, page 38 in ?Feeding People Protecting the Planet ? FAO-GEF Partners in Action http://www.fao.org/3/CA0130EN/ca0130en.pdf

[4] Agriculture Extension Development Officers.

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[1] Bell AR, et al (2018). Transformative change through Payments for Ecosystem Services (PES): a conceptual framework and application to conservation agriculture in Malawi. Global Sustainability 1.

[2] Electricity Supply Corporation of Malawi Limited.

[3] The land degradation assessment undertaken by the Project formulation team in the target landscapes has identified stubble burning by numerous farmers in numerous areas. Likewise, pigeon pea and tobacco stalk can be regarded as a potential source of bioenergy because of their high biomass yield, provided it is compatible with the needs of soil mulching from conservation agriculture.

[4] See Annex N2.

[5] Concern Universal Microfinance Organization (CUMO), the largest rural microfinance provider in Malawi that brings extensive experience of designing and providing pro-poor finance products, including VSL for ultra-poor, loans and micro-insurance.

[6] http://www.fao.org/3/a-i6509e.pdf

[7] http://www.openforis.org/tools/sepal.html

[8] During project design CEPA was identified and contacted as a suitable and promising partner to support the policy and knowledge management components of the project. A final decision on this partnership will be taken at the very beginning of the project.

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[1] DEC: District Executive Committee; ADC: Area Development Committee; AEC: Area Executive Committee; VDC: Village Development Committee; VNRMC: Village Natural Resources

Management Committee; BMC: Block Management Committee; DADO: District Agriculture Development Offices; DFO: District Forestry Offices, DARS: Department of Agricultural Research Services.

[2] According to the National FLR Strategy, the cost of equipment, inputs and human resources for conservation agriculture is USD 70/ha, for FMNR is USD 20/ha; and for agroforestry tree planting is USD 250/ha.

[3] http://www.fao.org/docrep/019/i3512e/i3512e.pdf

[4] Agriculture Extension Development Officers.

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[1] DAES: Department of Agriculture Extension; DCP: Dpt. Of Crop Production; DLRC: Dpt. Of Land Resources and Conservation; DARTS: Dpt. Of Agriculture Research and Technical Services; DWD: Dpt. Of Water Development.

[2] During formulation phase, a number of NGOs ? African Institute of Corporate Citizenship (AICC), CEPA, Christian Aid, Concern Worldwide, Kusamala Research Institute, Malawi Environmental Endowment Trust (MEET), Welthungerhilfe (WHH) - have expressed interest as project partners to support the implementation of the project components in the 3 target districts.

[3] DEC: District Executive Committee; ADC: Area Development Committee; AEC: Area Executive Committee; VDC: Village Development Committee; VNRMC: Village Natural Resources Management Committee; BMC: Block Management Committee.

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[5] This will be the task of the NGO implementing partners supporting Component 2 in the three target districts.

[6] (i) generate and agreed vision and landscape goals among concerned stakeholders; (ii) adopt a variety of approaches for restoration, conservation and management that achieve multiple ecological, social and economic objectives and benefits; (iii) devise strategies to manage spatial and temporal interactions across sectors and users; (iv) engage and empower all concerned stakeholders and support participatory governance; (v) manage adaptively for long-term resilience.

[7] project ?Shire River Basin Management SRBM Program-SRBMP Phase I?

[8] Restoration Opportunities Assessment Methodology (ROAM), produced by IUCN and the World Resources Institute (WRI).

[1] *Assumptions* are external factors or conditions that need to be present for change to happen, but are beyond the power of the project to influence or address, e.g. turnover of government officials, global financial situation.

[2] *Impact drivers* are significant external factors that can positively influence the direction of change along the project?s causal pathways from outputs to outcomes to impacts, and over which the project, or its stakeholders/partners has some degree of control or influence, e.g. public pressure on decision-makers.

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[1] Kundhlande, Godfrey, Robert Winterbottom, Betserai I. Nyoka, Katie Reytar, Kim Ha, and Diji Chandrasekharan Behr. 2017. Taking to Scale Tree-Based Systems that Enhance Food Security, Improve Resilience to Climate Change, and Sequester Carbon in Malawi. PROFOR, Washington D.C.

[2] David Kamangira, Kondwani Makoko, Grace Timanyechi Munthali and Lawrent Pungulani (2016). Status of Agricultural Innovations, Innovation Platforms, and Innovations Investment. 2015 PARI project country report: Republic of Malawi. Forum for Agricultural Research in Africa (FARA), Accra Ghana.

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[1] Ibid.

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[1] Nkonya e. et al, 2016

[2] The analysis also includes the use of inorganic fertilizers that have been heavily subsidized by the government, with not always positive effects on SLM, therefore not considered in the paragraph.

[3] Ibid.

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[1] World Bank et al 2009.

[2] Nkonya et al. 2016. Economics of Land Degradation and Improvement?A Global Assessment for Sustainable Development.

[3] Jinga, P., & Ashley, V. M. (2019). Climate change threatens some miombo tree species of sub-Saharan Africa. Flora, 257

[4] Kabubo-Mariara 2007: In Nkonya et al, 2016

[5] Tiffen et al. 1994: In Nkonya et al, 2016.

[6] Nkonya et al. 2016. Economics of Land Degradation and Improvement: A Global Assessment for Sustainable Development.

[7] LTS International et al. 2014.

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[1] The household head was determined by identifying who owns assets and makes most decisions in the household, and whether these were done in participation of other person. Thus, the report refers to dual-headed households whenever there were adult women and men sharing property ownership and becoming decision-makers in the same household.

[2] Data was not recorded on the specific type of income source, though a variety of information is presented on agricultural and non-agricultural activities.

1b. Project Map and Coordinates

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

https://drive.google.com/file/d/1tfGASEldRxCT4DhJezDtxackg2pE7ShP/view?usp=sharing

1c. Child Project?

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

The Child Project in Malawi, together with the other Miombo & Mopane Child Project countries of the SFM-DSL IP, will respond to the Drylands IP novelty objective to maintain the ecological integrity of the entire unique and globally important ecoregion, through comprehensive and large-scale set of investments and efforts over large landscape units, in some cases cutting across important transboundary areas of regional watersheds.

The Child Project in Malawi respond to the LND goal of the GEF Dryland Sustainable Landscapes Impact Programme, to avoid, reduce and reverse land degradation and deforestation, through the sustainable management of production landscapes. The Child project is structured around three components that are aligned with the DSL IP objectives:

DSL IP Objectives	Malawi Child Project Components

1) Integrated landscape management with particular focus on sustainable forest management and restoration, rangelands, and livestock production.	? Component 2 will adopt an integrated landscape management approach addressing the complex nexus of local livelihoods, land degradation, climate change, and environmental protection. The project will support the development of integrated landscape management plans (ILMP) for large landscape units in three districts of the upper part of the Shire River Basin characterized by dry miombo & mopane ecosystems. The landscapes are shaped including several watersheds puring their waters into Lake Malawi and the Shire river, to well address the interlinks between forested catchment areas (Forest reserves) and downstram agroforestry systems. ILMP planning will address climate change impacts and multisectoral degradation drivers to help identify landscape restoration, SLM, and SFM priorities that generate multiple environmental benefits and secure local livelihoods.
2) The promotion of diversified agro-ecological food production systems in drylands.	? Component 2 will support climate-smart SLM, SFM and Green Value Chain investments for the diversification of agro-ecological food production systems in agriculture and forest land, mainly through the enhancement/restoration of agroforestry tree-crop systems (combining the planting of multipurpose trees and FMNR with conservation agriculture applied to pigeon pea intercropping with cereals, based on drought-resistant crop varieties) and the restoration, protection and sustainable community-based management of forest areas, as a key strategy to reduce climate change risks and enhance ecological, social and economic resilience in the target landscapes. ? The project will address the gender specificities of smallholder farmers and forest users in CC adaptation and SNRM, through participatory learning programmes (FFS and Forest Management/Business Learning Groups) aiming to enhance the integration of users into producers? organizations and enable them to effectively apply FLR/SLM/SFM/GVC systems and technologies.
3) The creation of an enabling environment to support the two objectives above.	? Component 1 will create an enabling environment for mainstreaming LDN into the policy framework at national, district and local levels, and enhancing the capacity of policy makers and local community members to become knowledgeable about the exiting LDN-related policies and regulations, formulate the necessary accompanying implementation frameworks to enforce the legal framework, formulate regulations and bylaws, and advocate for the necessary policy improvements to support integrated landscape restoration, SLM, SFM, and Green Value Chain development. ? Component 3 will create an enabling environment for LDN monitoring at the national level (embedded in the National FLR Monitoring Framework) and at the landscape level, and enhance the capacity of national, district and local actors to participate in gathering and analyzing monitoring data, developing lessons learned, and contributing to a knowledge management system to share knowhow among countries in the Miombo & Mopane Ecoregion.

Private Sector: promote innovative and sustainable financing mechanisms for conservation, development, peace-building, and benefits for local communities	? Component 2 will strengthen and I responsible and sustainable green value chains from the local communities to the markets in the target landscapes: (i) the NTFP of bee products, baobab, mushrooms and fuelwood/charcoal, and other to be selected during project implementation; (ii) the diverse set of climate-resilient agroforestry commodities including drought-resistant varieties of pigeon peas and cereals, moringa, and vegetable gardens. The project will enhance business capacity, certification and marketing skills of producers organizations and buyer companies, through training, technical assistance, investments, private-public partnerships and the participation to business incubation and acceleration programmes.

Malawi and the other Child Project countries of the SFM-DSL IP will build on the global initiatives that provide a basis for collaboration under the GEF Dryland Sustainable Landscapes Impact Programme, such WOCAT, the FAO Drylands & Forest and Landscape Restoration, and the Great Green Wall Initiative.

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:

Please provide the Stakeholder Engagement Plan or equivalent assessment.

Meaningful and continuous stakeholder engagement during the project design and implementation is key to maximize country ownership and contribute to more enduring results at scale. Moreover, the project intends to strengthen polycentric, multi-stakeholder governance mechanisms within the identified landscapes building on integrated spatial planning and management[1] to result in positive impacts within the productive landscapes and contribute to preserving the natural capital.

During project formulation, the project development team met a broad range of stakeholders at the national and district/community levels to assess land degradation and community resilience constraints, identify and prioritise project sites, brainstorm on the actions, seek consent to the build-up of partnerships, gather information and validate the project design. The workshops, focus groups discussions, meetings, and field visits during project preparation coupled with the feedback received in the inception and validation workshops at the national and districts levels helped identify the stakeholders and the different roles they are expected to play in the project. The main stakeholders can be grouped into six categories: governmental institutions, research institutions, local stakeholders, NGOs, private sector, and international development agencies.

Throughout the project formulation phase, FAO and the project development team did not identify any stakeholder that may be negatively affected by the project.

During the project formulation phase, it was observed that women engagement in FLR/SLM/SFM/GVC projects is limited, requiring major support to improve access to land, extension, knowledge, training, funding, equipment and inputs, and labour force. Youth appeared to be relatively active in preliminary consultation meetings through the establishment of youth clubs and their involvement in the implementation of the National FLR strategy. Women and youth engagement in decision-making, participatory planning, implementation and monitoring of integrated landscape plans, FFS and FMLG trainings, and access to financial and technical support for FLR/SLM/SFM/GVC implementation and income generating actions, will continue to be actively pursued during the project life, always addressing the gender specificities. In particular, activities aiming at improving income generation and the development of bankable projects under Component 2 will actively target women and youth.

Specific activities on stakeholder consultation and engagements included the following:

Training of national consultants on stakeholder assessment and consultation techniques. FAO organized a training workshop in South Africa (August 2019) involving all national consultants from the SFM-DSL IP countries to learn about common assessment techniques (CollectEarth, simplified WOCAT, SHARP, value chain (VC) analysis, Capacity Development Assessment methodologies) to be used in the formulation of the different child projects.

Testing assessment techniques in pre-selected sites: In September 2019, the national consultants ? two expert on SHARP and WOCAT questionnaires and surveys; one expert on VC; one expert on policy and capacity development ? undertook field visits to two preselected sites in Mangochi and Ntcheu districts to start gathering information and test the use of the assessment techniques.

Inception workshop (IW). The IW took place in Lilongwe (October 2019), with the participation of the GEF Project Design Expert, the National Experts, Representatives of FAO (Rome, Malawi), Representatives of the lead national partner (Department of Forestry) and a large number of representatives of national and district-level governmental institutions, Research, NGO, private sector, and international development agencies. The objective of the IW was to introduce the project and the project development team, review proposed project preparation activities, review and assess other current initiatives relevant to this project, identify potential co-financing, endorse the project preparation approach, and trigger a preliminary debate on the objectives, scope, and actions of the project.

Stakeholders? Consultations (SC). Several rounds of consultations were organized by the National Consultants, with the support of DF and FAO Malawi staff, between November 2019 and February 2020. Field assessments, interviews with local farmers, workshops, and focus groups discussions, took place at the national and district levels (proposed project landscapes), involving a wide range of stakeholders (governmental institutions representing different sectors, users and producers organizations, research centres, NGO and CBO, private companies) to obtain their perspectives on project activities and ensure that the project would meet their needs. The consultation can be divided into three categories: (i) workshops with governmental institutions and civil society in the target

districts; one-to-one meetings with specific stakeholders; (ii) meetings with focus groups (community operators in the fields on NTFP and agroforestry, value chain producer organizations, cooperatives and buyer groups, NGOs/CBOs, researchers, district, area and village committees, extension officers, financial operators); (iii) meetings with rural communities in the villages. Community leaders were approached in advance and asked to gather representative groups, making sure that women and young people would be equitably represented. The discussions were facilitated by the national consultants with an experience in community participation work, who encouraged the participants to identify opportunities and risks related to the future project, express their wishes and concerns, and prioritise actions and interventions. Consultations provided feedback about capacity development needs for the different stakeholders, and helped identify the value chain commodities (e.g. drought resistant crops such as pigeon pea and sorghum, NTFPs such as bee products, moringa, baobab, mushrooms and charcoal) for the project.

Peer Consultations (PC). Several consultations took place with national and international institutions responsible for related initiatives, to explore coordination arrangements. These included: USAID, EU, DFID, World Bank, ministries and government departments, private companies (Naturals Ltd, Honey Products Ltd, etc.), and NGOs.

Validation Workshop (VW). Due the Covid 19 crisis, the VW was organized through virtual meetings with a more limited number of representatives of the different stakeholder groups. VW virtual meetings were organized at the national level and at the district level in May 2020 to review and verify/endorse the project design, secure co-financing commitments, finalise implementation arrangements and project budget.

The outputs of these activities were consultation reports with list of participants, which were used to inform the project development exercise. Whenever possible, at least two meetings were organised for each priority stakeholder, the first one at the early stage, and the second towards the end of the project development process. The team felt a very positive attitude towards the project, with high participation and lively discussions. No major concerns were raised by the interviewees. Among the most frequent recommendations: (i) ensure coordination with on-going initiatives and avoid duplication; (ii) build on past achievements and learn from mistakes and experiences from past projects; (iii) ensure empowerment of local actors and grassroots beneficiaries; (iv) fill capacity gaps through specific gender-inclusive training; (v) maximise the use of national expertise and resources; (vi) ensure equal participation of men and women.

[1] See ?Strenghtening civic spaces in spatial planning processes- A technical guide on regulated spatial planning and tenure to balance societal priorities in the use of land, fisheries and forests?. http://www.fao.org/documents/card/en/c/cb0422en/

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

Different budget lines have been allocated to ensure the identified stakeholder are meaningfully involved throughout decision making process. This includes several capacity development workshops

at local, and regional levels, regular consultation meetings and surveys, knowledge and communications strategy, among others. The engagement of the stakeholders related to lessons learned of other participant countries in the program will be made through regional exchange mechanism (REM).

•The results framework has been structured to include indicators that ensure stakeholder participation in all components of the project. The engagement of national and local institutions is also reflected in the results of institutional capacity development, strengthening of policy, regulatory and planning frameworks. At local level, the communities, farmers, entrepreneurs will be engaged through FFS as main actors in sustainable land management of drylands. At landscape level, the development and implementation of integrated land use plans will involve extensive consultation of local stakeholders. At the regional level, the engagement of stakeholders will be through transboundary approaches as LDN dialogue platforms, intergovernmental agreements and sharing of lessons learned.

The PMU will be responsible for implementing the stakeholder engagement activities as outlined in the Stakeholder Engagement Plan and Stakeholder Engagement Matrix. It will also be responsible for monitoring and reporting on stakeholder engagement through the annual project implementation reports (PIRs). Relevant tasks have been incorporated into the Terms of Reference of the project staff and budgeted for accordingly (see Annex O).

In the annual PIRs, the PMU will report on the following indicators:

1) Number of government agencies, civil society organizations, private sector, vulnerable groups and other stakeholder groups that have been involved in the project implementation phase.

2) Number of engagements (such as meetings, workshops, official communications) with stakeholders during the project implementation phase.

3) Number of grievances received and responded to/resolved.

The table below outlines the stakeholder engagement matrix:

Stakeholder	Stakeholder Type	Stakeholder Profile	Consultation Methodology	Consultation Findings	Consult. Dates	Engagement in the project

Department of Forestry, Ministry of Natural Resources, Energy and Mining (MoNRM)	Partner	National Government Institution Body	Joint Planning Meetings and workshops	? Main project initiator. ? Key role in LDN-related policy frameworks (e.g. National FLR Strategy, FLRMF; National Charcoal Strategy) that will play a key role in the GEF project implementation.	October 2019 to June 2020	? Main project partner;: lead the planning and implementation of the project ? member of the NCCC&DRM; ? coordination and TA for FLR/SFM; ? implementation of FLRMF ? trainers of local partners ? beneficiaries of training ? production of education and technical materials

Departments at MoAIWD (DAES, DCP, DLRC, DWD, DARTS[1])	Partner	National Government Institution Body	Joint Planning Meetings and workshops	? Key role in LDN-related agriculture policy frameworks ? Leading role in integrated watershed planning in the Shire River Basin Management Program.	October 2019 to June 2020	? Support project implementation ? members of the NCCC &DRM ? DAES major role in the management and organization of FFS ? Coordinate TA for ILM and SLM; ? Trainers of local partners ? Beneficiaries of training ? Production of education and technical materials.
Other departments at MoNRM[2] (DNPW, DEA, EAD, DCCMS)	Partner	National Government Institution Body	Joint Planning Meetings and workshops	? Key role in LDN-related natural resources policy frameworks. ? Hosting National Committee on Climate Change and Disaster Risk Management (NCCC&DRM) . ? Bee Parks Trust (under DNPW) supports honey VC.	October 2019 to June 2020	? Support project implementation ? Members of the NCCC&DRM (DCCMS co-chairing the NCCC&DRM with its secretariat in DEA) ? Providers of training ? beneficiaries of training

Other relevant Ministries: MoLHUD; MoLGRD; MoFEP&D; MoITT[3]	Partner	National Government Institution Body	Joint Planning Meetings and workshops	? Key role in LDN-related land tenure, decentralization and economic policy frameworks. ? MoITT issuing export licences.	October 2019 to June 2020	? Members of the NCCC&DRM with major role in Component 1 policy interventions. ? TA and training support to project beneficiaries. ? Beneficiaries of training.
National Climate Change and Disaster Risk Management Committee (NCCC&DRM)	Partner	Other	Meetings and workshops with NCCC&DRM members and chairing organization.	? During design phase, the GEF formulation team and its national governmental counterparts agreed that the National Committee on Climate Change and Disaster Risk Management (NCCC&DRM) is, among existing governmental coordination bodies and platforms, the one which can best serve the project?s policy objectives.	October 2019 to June 2020	? Lead and steer policy component of the project. ? Beneficiaries of training. ? Major role in Component 3 (FLRMF monitoring and KM).
Malawi Bureau of Standards (MBS)	Partner	National Government Institution Body	Meetings and workshops	? Promoting standardization and certification of food commodities in Malawi; ? Training Baobab groups on certification requirements in target districts.	October 2019 to June 2020	? Provider of training and TA for GVC development. ? Main partner in GVC development.

District and Area institutions (e.g. District Councils of Mangochi, Ntcheu, Balaka; District Technical Officers; District and Area Development and Executing Committees; Traditional Leaders)	Indirect beneficiaries	Regional Government Institution Body	Joint Planning Meetings and workshops	? Represent national governmental sectors at district level. ? Support village committees on their effective functioning and planning, on project formulation, fundraising, TA, training, M&E. ? Provide extension on sectoral issues, with departments addressing gender issues too.	October 2019 to June 2020	? District Council is the main partner at Districts? level (Chair of Landscape Management Committee/LMC) to support project implementation. ? Members of the LMC, and key actors in the development, implementation and monitoring of ILMPs and VLAPs. ? Coordination of FFS and FMLG and provision of TA and training; ? Key stakeholder in raising awareness and mobilizing local community members around project interventions. ? Key role in the development and monitoring of procurement investments ? Support local bylaw formulation.

Village-level Committees	Indirect Beneficiaries	Local Government Institution Body	Meetings and workshops Field surveys	? Local institutions supporting local communities to address development and NRM challenges. ? Interact with Area and District committees to report about problems, needs and lessons from interventions in the communities. ? Week capacity and limited knowledge on policies and regulations, and FLR/SLM/SFM/ GVC related issues. ? Key role in the development of VLAPs.	October 2019 to June 2020	? Key stakeholder in raising awareness and mobilizing local community members around project interventions. ? Members of the LMC, and key role in ILM planning, implementation and monitoring. ? Key leading role in the development of VLAP. ? Support monitoring of procurement investments and project interventions in the landscapes. ? Support community bylaw formulation.

Land users	Direct Beneficiaries	Local Community	Meetings and workshops Focus groups discussions Field surveys	? Limited participation to Community-Based groups aiming to improve production and NRM. ? Need for diversification, including income (non-farm income) and agricultural production. ? Inadequate capacity and means to timely respond and adapt to climate shocks and change, including pest outbreaks. ? Low participation in local markets due to low production rates. ? Need for integration of water conservation techniques, particularly in response to water decline. ? Inadequate extension support and access to information on weather forecasts, adaptation practices, post-production techniques. ? Heavy reliance on unsustainably sourced fuelwood (charcoal), as a main energy source.	October 2019 to Februar y 2020	? Main beneficiaries of project investments in FLR/SLM/SFM/ GVC. ? Participants to FFS and FMLG and ToT programmes. ? Participants to VLAP planning with contribution on traditional knowledge. ? Beneficiaries of procurement investments with the conditionality to become part of producers organizations. ? Women Associations also targeted by procurement windows providing equipment and inputs for alternative and efficient bioenergy for cooking, and on vegetable home gardens to increase food security. ? Beneficiaries of training, TA, awareness raising.

Charcoal producers? organizations in the target landscapes	Direct beneficiaries	Local Community	Meetings and workshops Focus groups discussions Field surveys	? Involved in illegal charcoal production activities in the target landscapes. ? Lack of knowledge and capacity about policies, regulations and bioenergy alternatives.	October 2019 to February 2020	? Main beneficiaries of project investments in fuelwood and charcoal VC (e.g. planting woodlots of bamboo and mix of trees), with the objective to increase number of members, and capacities on SFM/GVC. ? Learning visits to the two legal charcoal production initiatives in Malawi around woodlots plantations (Kawandama Hills Plantation and Dzalanyama Legal and Sustainable Charcoal). ? Beneficiaries of procurement investments. ? Beneficiaries of FFS training and ToT programme. ? Participation in ILMP planning, implementation and monitoring

Agriculture and NTFP Producers? organizations in the target landscapes (Zankhalango Ass. and Zokoma Cooperative in Mangochi; Mpamadzi Coop. in Ntcheu; Nandolo Producers Association in Balaka; Producers clubs in all districts)	Direct Beneficiary	Local Community	Meetings and workshops Focus groups discussions Field surveys	? Support farmers? production and marketing activities of several selected value chains (honey, moringa, baobab). ? Limited membership. ? Have market links with major national companies (Honey Products Limited, Natural Limited, African General Trades) trading these VC products in the national and international markets. ? Have limited capacity for high quality production and produce limited quantities. ? Mainly trading raw material with very limited or no capacity for processing. ? Receive training from national buyers and MBS.	October 2019 to February 2020	? Main beneficiaries of project investments, with the objective to increase number of members, and capacities on SLM/SFM/GVC. ? Beneficiaries of procurement investments. ? Beneficiaries of FFS training and ToT programme. ? Participation in ILMP planning, implementation and monitoring

Kusamala Inst. Agriculture &Technology, LUANAR, Malawi College of Forestry and Wildlife, CIAT[4], and other research institutes	Partner	Research and extension	Meetings and workshops	? Research and training on agriculture and forestry issues. ? Kusamala Inst. Supports farmers in target districts on community tree nursery production including target VC such as moringa and baobab, planting techniques, and demonstration field.	October 2019 to June 2020	? Provide training and TA to producer groups on SLM/SFM/GVC. ? Participate in FFS and FMLG. ? Beneficiaries of training.
National Smallholder Farmers? Association (NASFAM)	Indirect beneficiary	Civil Society Organisation	Meetings and workshops Surveys	? Key national organization supporting smallholder farmers to improve production and access markets. ? Very active in the target crop VC of pigeon pea and sorghum ? Present and active in the target districts ? Member farmers in the target landscapes ? Member of the Innovation Platform of Balaka	October 2019 to June 2020	? Business partner of producers? organization supported by the project ? Provider of TA and training to producer organizations in the target landscapes ? Beneficiary of training ? Potential member of the Innovation Platform supported by the project in the target districts ? Potential beneficiary of project interventions on business incubation and acceleration

NTFP Buyer Companies (e.g. Honey Products Ltd; Naturals Ltd.; Moringa Miracles; Africa Gral. Trades; Invegrow Ltd)	Indirect Beneficiaries	Private Sector	Meetings and workshops Surveys	? Market linkage with honey, moringa, baobab producers and producer organizations in the target landscapes ? Providers of training to local producers on production and business development ? Involved in domestic and international trade ? Some companies are part of PhytoTrade Africa, the Southern African Natural Products Trade Association ? Some companies participated in business accelerator programmes (e.g. Moringa Miracles; Honey Products Ltd.) ? All companies still require support to improve manufacturing and marketing.	October 2019 to June 2020	? Business partners of producers? organization supported by the project ? Providers of TA and training to producer organizations in the target landscapes ? Beneficiaries of training ? Potential members of the Innovation Platform supported by the project in the target districts ? Beneficiaries of project interventions on business incubation and acceleration

NLGFC	Partner	Governmental Organisation	Meetings, email exchanges	? Active in the target districts. ? Extensive experience in designing and providing pro-poor finance products. ? CUMO is a partner of the baseline investment PROSPER	October 2019 to June 2020	? Project partner for the management of the procurement component. ? Providers of training on business and financial literacy.
Development and environmental NGOs (e.g. CEPA; Concern Worldwide; WHH; We Effect; Christian Aid; WESM, AICC[5])	Partner	Non-Governmental Organisation	Meetings and workshops	? Active in the target districts, supporting land users on rural livelihoods, agriculture improvement, forest restoration and production of NTFP commodities; ? Worldwide is executing entity of the baseline investment PROSPER in Balaka and Mangochi	October 2019 to June 2020	? EOI for selection of Implementation Partner NGOs in the three target districts; ? Coordination of ILM planning and implementation; ? Member of the LMCs; ? Support the establishment of the procurement windows; ? Support the organization of training, TA, KM and awareness raising; ? Monitoring of project implementation in each district.

PlanVivo (certification body that administers the Plan Vivo Standard for the voluntary carbon market)	Partner	Non-Governmental Organisation	Meetings and Skype conferences	? Carbon certification framework for community land use and forestry projects applied in two districts in Malawi (Neno and Dowa) under the Trees of Hope? Clinton Foundation Project. ? Discussions about a potential collaboration framework for a PES project on carbon credits in the target districts.	January 2020	? Meeting at FAO HQ to discuss about collaboration framework. ? Visits to ?Trees of Hope? project in Neno district (bordering the southern boundary of Ntcheu and Balaka districts) to meet project beneficiaries and Clinton Foundation staff, and learn about lessons learned. ? Assess opportunities to scale out ?Trees of Hope? experience in the target districts through a carbon PES bankable project.
WRI	*Partner*	*Non-Gonvernmental Organization*	Joint Planning Meetings and workshops	? DF key partner in the implementation of the National FLR strategy and FLRMF. ? Major role in Component 1 (Policy) and Component 3 (Monitoring)	October 2019 to June 2020	? Key implementing partner for Component 1 (policy accelerator) and Component 3 (FLR monitoring framework). ? member of the NCCC&DRM ? Provider of training

USAID	Partner	Resource Partner/Donor	Meetings and workshops	? Baseline MCHF investment partner for the forest fuelwood and charcoal VC component.	October 2019 to June 2020	? Establish a collaboration framework at the start of the Project implementation to harmonize approaches and agree on workplan, TA, training, exchanges, monitoring.
European Union	Partner	Resource Partner/Donor	Meetings and workshops	? Baseline KULIMA investment partner for the FFS component. ? FAO Office in Malawi is the main implementing partner.	October 2019 to June 2020	? Establish a collaboration framework at the start of the Project implementation to harmonize approaches and agree on workplan, TA, training, exchanges, monitoring.
DFID	Partner	Resource Partner/Donor	Meetings and workshops	? Baseline PROSPER investment partner for the climate-smart landscape planning and sustainable agriculture component. ? Active in two target districts: Balaka and Mangochi districts ? FAO in Malawi is a key implementing partner.	October 2019 to June 2020	? Establish a collaboration framework at the start of the Project implementation to harmonize approaches and agree on workplan, TA, training, exchanges, monitoring.

BMU	Partner	Resource Partner/Donor	Meetings and workshops	? IKI regional program including Malawi ? Implementation of FLR activities that diversify and intensify agricultural productivity and boost food security in Ntcheu district, sharing part of the target landscape with GEF Child Project ? FAO in Malawi is a key implementing partner of IKI programme.	October 2019 to June 2020	? Establish a collaboration framework at the start of the Project implementation to harmonize approaches and agree on workplan, TA, training, exchanges, monitoring
Other UN agencies and aid agencies active in Malawi	Partner	International Government Institution Body	Meetings and workshops	? Involved in projects directly or indirectly related to the GEF Child Project. ? Opportunities for collaboration and out- and upscaling project interventions	October 2019 to June 2020	? Exchange of information and best practices ? Collaboration on specific actions ? Beneficiaries and providers of training

SADC	*Partner*	*International Government Institution/body*	Meetings and workshops	? Key role in the regional sharing of experiences and knowhow among SFM-DSL IP Miombo & Mopane child projects.	December 2019 ? January 2020	? Hosting regional staff (co-funded by the child projects) to support the implementation of all the Miombo & Mopane child projects. ? Regional forum to catalize exchange of experiences and knowhow, and facilitate links between regional actors involved in FLR/SLM/SFM/ Green Value Chain.

[1] MoAIWD: Ministry of Agriculture, Irrigation and Water Development; DAES: Department of Agriculture Extension; DCP: Dpt. Of Crop Production; DLRC: Dpt. Of Land Resources and Conservation; DARTS: Dpt. Of Agriculture Research and Technical Services; DWD: Dpt. Of Water Development.

[2] DNPW: Department of National Parks and Wildlife; DEA: Department of Energy Affairs; EAD: Environmental Affairs Department; DCCMS: Department of Climate Change and Meteorological Services.

[3] MoLHUD: Ministry of Land, Housing and Urban Development; MoLGRD: Ministry of Local Government and Rural Development; MoFEP&D: Ministry of Finance, Economic Development and Planning; MoITT: Ministry of Industry, Trade and Tourism.

[4] LUANAR: Lilongwe University of Agriculture and Natural Resources; CIAT: International Centre for Tropical Agriculture.

[5] WHH: Welthungerhilfe; WESM: Wildlife Environmental Society of Malawi.

Select what role civil society will play in the project:

Consulted only;

Member of Advisory Body; Contractor; Yes

Co-financier;

Member of project steering committee or equivalent decision-making body; No

Executor or co-executor;

Other (Please explain)

3. Gender Equality and Women's Empowerment

Provide the gender analysis or equivalent socio-economic assesment.

In general, Malawi?s female farmers are less productive (by 28 percent on average) compared to their male counterparts. This is so because women are seldom involved in decision-making and have unequal access to key agricultural inputs such as land fertilizer, improved seeds, and mechanization. However, according to UN Women report ?The Cost of the Gender Gap in Agriculture: Five African Countries? , Malawi stands to gain if women are more involved in the entire agricultural value chain. The report estimates that closing the gender gap would result in a 7.3% increase in crop production, USD 100 million increase in GDP and lift 238,000 people out of poverty.

The Child Project in Malawi has embedded the consideration of key gender issues throughout its three components to contribute to closing the gender gap in the target districts and landscapes. During the design phase, a social analysis was carried out, in order to make the proposed project interventions more people-centred, socially inclusive, equitable and sustainable by ensuring a close fit with local contexts, culture and livelihoods, and to safeguard the interests of the weaker sections of the population, including women.

A key challenge to social sustainability in SLM-SFM projects is the development of the communities? capacities to access natural resources in an equitable and sustainable way and to take active action in the implementation of integrated landscape management plans. This challenge will be addressed by ensuring that all participation criteria operate an affirmative discrimination towards women, that all user groups especially women are represented in the process of design of the ILMPs and in the green value chains and other actions to promote economic diversification, that women entrepreneurs and institutions with a balanced gender component are involved in the procurement of equipment and inputs, and that the capacity development work promoted by the project targets a balanced and equitable share of social groups, with a special focus on women and youth.

The project will promote the participation of women and empowering them to strengthen their role in planning and decision-making, and to improve their productivity, incomes, and living conditions. The

Gender Action Plan attached explains in details how project activities will respond to identified gender gaps. This is summarized below:

Under Component 1, the policy assessment leading to the formulation of the Policy Influencing Plan project will look into gender gaps within the existing legislation/regulations and the barriers that prevent women from playing a pivotal role in land management and rural economy. Women will play a key role in the review and formulation of the policies. The CEPA consultants will make use of the awareness raising and training tools at their disposal to help women use and influence the policies and regulations that are supportive to their empowerment. The project will also guarantee equitable membership of NCCC&DRM and other committees within the project, with a minimum of 1/3 women members.

At the community level, as documented in the baseline assessments, women?s access to land and participation in natural resource management and decision-making processes is rather weak. Under Component 2, the project will sustain this and will work to improve it further, by ensuring: adequate and outspoken women?s participation in the design of the three ILMPs and the VLAPs; the consideration of gender specificities in SLM/SFM and climate change adaptation needs; the equitable access to information, training, extension, innovative technologies and high quality inputs, financial services, and participation in the governance of resources. Gender and social equitability criteria will also be paramount in the selection of beneficiaries ? cooperatives, producers? organisations, small local enterprises ? for the applications under the different procurement windows and the development of public-private partnerships and the investments to boost/create green value chains for target commodities. The project will apply the USAID guide for Integrating Gender into Agricultural Value Chains (INGIA-VC) process , to make sure that GVC development: provide opportunities for women to gain access to input and market information; improve women participation in association leading roles; assist women?s groups to purchase equipment to expand processing; favours women participation in enterprises; assist women to overcome mobility constraints and social barriers; encourage more women-led enterprises to join trade platforms.

All the capacity development programs delivered will strive to ensure that half of the participants are women ? also creating a conducive environment for their participation ? and that women are given priority for training in diversified livelihood options. Extension advise will ensure gender equity throughout its activities, also by training the maximum possible number of women extension agents.

The recruitment of a gender specialist will ensure knowledge of gender concepts and practice of gender sensitive participatory methods. The gender expert will be working with the M&E expert to ensure the set-up of an M&E system that facilitates gender mainstreaming. Data will be disaggregated by gender to monitor for the differential gender impacts of the project.

The project will apply the FAO?s Policy on Gender Equality to achieve equality between women and men in sustainable agricultural production, sustainable co-management of forest resources and green value chain development in the target landscapes. The project is aligned with the National Gender Policy (2015), which addresses the priority areas of rural women empowerment through education and training, health, agriculture, food security and nutrition, natural resources and climate change

management, economic development, governance, gender violence and human rights. Actions planned to achieve the LDN targets, the MGDS III, the National Resilience Strategy, the National FLR Strategy, the National Charcoal Strategy, the National Adaptation Programme of Action (NAPA), among other policy frameworks, will contribute to the SDGs Goal 5 (promote gender equality). The National Target 15 contributing to the Global CBD Aichi targets specifically mention 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.

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.

During design phase, the project development team visited and interviewed representatives of the private sector in Lilongwe, Blantyre, and the three target districts. These included processing and trading companies, export companies, cooperatives and cooperatives? unions, and community associations involved in the value chains identified by the project: NUS (pigeon pea, sorghum); NTFPS (moringa, baobab, honey and mushrooms), and charcoal. As it can be expected, the outcomes and conclusions of this assessment are very varied. For instance, opportunities for both domestic and international green value chain development seem good for pigeon pea, while the internal market for sorghum is weak and opportunities are mainly linked to the international market. As for honey, in 2019, the domestic demand was estimated at 200 MT while the volume of domestic honey that was formally traded was around 80 MT. This substantial gap between demand and supply constitutes an important market opportunity, although quality constraints do exist on the supply side. Finally, the only two national companies producing sustainable, certified charcoal from the blue-gum tree (Kawandama Hills Plantation and Dzalanyama Legal and Sustainable Charcoal) are not competitive with traditional charcoal, most of which is currently illegal.

Challenges identified at project design for the private sector include: (i) certification and quality control; (ii) investments in equipment and production; (iii) poor or insufficient link with suppliers of raw produce; and (iv)links with national and international markets. At the same time, a number of opportunities were identified, which offer a promising baseline for the green investments if pursued by

the project. For instance, a potential solution to more sustainable and cheaper charcoal production could be the giant bamboo, a fast-growing species which has been adapted to the Malawi ecological system and provides a rapidly renewable source of fuelwood and timber. As far as honey is concerned, improved quality and certification by the Malawi Bureau of Standards would enable access to higher value markets such as supermarkets, hotels etc. and would facilitate business partnership between the local producers and national companies like Honey Products Ltd, which has ambitious expansion plans and is also intending to target the export market.

While working with producers? organisations and groups in the target district to develop and upscale their capacity and business, the project will contact the most promising market operators for the target commodities to inform them about the project, check interest about potential commercial links with the project beneficiaries, and understand the conditions that must be met to establish commercial agreements with the producer organizations supported by the procurement windows. The tools made available to foster the producers-buyers partnerships will include: (i) procurement investments to support producers organisations and small local enterprises; (ii) setup of an innovation platform to facilitate dialogue and joint learning among different actors of the value chain; (iii) facilitate access of buyer companies to business incubator and business accelerator schemes such as the WRI Land Accelerator Program; (iv) facilitate access to international markets by identifying new market segments and players, including international fair-trade operators, international organic food and pharmaceutic/cosmetic companies and retailers. The interventions supported by the project will be inspired by effective examples of private-public-partnerships in Malawi and Miombo & Mopane Ecoregion ? including GIZ-promoted partnership in the Shire River Basin involving a PhytoTrade and Weleda for the cultivation of the medicinal plant Komb? Arrow Poison or the UK company Aduna and Minvita involved in baobab and moringa manufacturing.

Another opportunity for the involvement of the private sector is in the working line to secure the long-term sustainability of the SLM-SFM program through the creation of private-public partnerships revolving around the financing of PES. A specialist hired by the project will identify potential sources of funds within the private sector for the long-term implementation of the ILMPs and the VLAPs.

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):

Project risks have been identified and analysed during the preparation phase and mitigation measures have been incorporated into the design of the project. The Project Steering Committee (PSC) will be responsible for the management of such risks as well as the effective implementation of mitigation measures. The PSC will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies as needed, and to identify and manage any new risks that were not identified during project development, in collaboration with project partners. The main risks, their ranking and mitigation measures are presented in the following table as well as in Annex 4 in more details.

Risks rating and mitigation actions

Description of risk	Impact [1]	Probability of occurance 3	Mitigation actions	Responsible party
Lack of political will to improve/reform/ harmonize a cross-compliant LDN-related legislative and policy framework and establish a cross-sectoral coordination mechanism. Turnover and changes in decision makers and institutional arrangements beyond the control of the project may lead to a volatile environment that hampers the long-term success of the work.	M	L	- Project priorities are aligned with the international commitment of the GoM and with the most recent national strategies, policies and legislation. Support for LDN will be further strengthened through implementation of components 1 and 3 focusing on policy development, monitoring and information and awareness-raising interventions. - The leading role of the MoNREM and MoAIWD will build robust support to LDN among technical staff from key ministerial departments that enjoy a more stable position within the administration and reducing turnover volatility. - The empowerment of the NCCC&DRM committee including representatives from relevant governmental sectors and public and private stakeholders, and the improved governance and legislation framework conveyed under Component 1 will increase the chances of long term buy-in and conduciveness.	DF
Insufficient capacity within the concerned ministerial departments of the GoM to successfully engage in a complex, comprehensive LDN multi-sectoral and multi-level program	L	L	- Component 1 will strengthen capacity at the national level to enable NCCC&DRM members to effectively engage and coordinate multi-sectoral and multi-stakeholder ILM planning and implementation processes. Capacity development efforts will also be supported by Component 3, particularly through opportunities for learning and knowledge sharing among Miombo countries.	PMU
The project is unable to secure the external expertise and technical assistance required for a proper and timely implementation of the work plan.	L	L	- The fact that the project is nested within the wider SFM-DSL IP, the pool of expertise made available by the Global Program and the implementing partners (FAO, UNEP, IUCN), the involvement of the FAO Headquarters and Sub-Regional Office for Southern Africa will highly minimize this risk.	PMU GCP

Local communities are reluctant to engage in or abandon the adoption of SLM/SFM in their respective landscapes.	M	M	- The project design recognizes at the outset that capacity development is a long-term endeavour requiring long-term support throughout the right implementation process. The FFS continuous coaching of farmers through highly qualified peers, with the support of experts from public and private organizations, will help consolidate the long-term adoption of SLM/SFM by land users. - The participatory nature of the development of ILM plans and selection of LDN priority interventions, together with the accompanying capacity development actions and financial mechanism (Landscape Conservation and Development Fund) will maximize community buy in. - The fact that the project interventions are clearly aimed at improving the rural economy and creating business opportunities for the communities will encourage involvement of the grassroots beneficiaries.	PMU DAES DADO DFO FFS & Forest Learning Groups? master trainers/ facilitators and TA
Project interventions fail to be gender inclusive	L	L	- The project recognizes the gender constraints of women-headed households in terms land tenure rights, access to capacity enhancement programs, access to finance, technologies, inputs, labor, etc. Capacity enhancement interventions will address the specific role, constraints and needs of women in rural development, with concrete awareness raising and training activities to strengthen women leadership and secure their land rights and effective involvement in SLM/SFM/Green value chains. - Gender balanced targets will be applied in capacity enhancement participation and access to finance for investments in SLM/SFM/Green VC.	Implementing NGO/CBO

Lack of effective and sustainable capacity enhancement interventions (organizational/institutional, enabling environment)	M	L	- The project build on the assumption that collectively, forest and farm producers have the potential to achieve the Sustainable Development Goals and to respond to climate change at the landscape scale. - All capacity enhancement interventions at local level will provide support direct financial support and technical assistance to strengthen forest and farm producer organizations representing smallholders and women?s groups. Access to finance through the Landscape Conservation and Development Fund will target trained women and men formally or informally participate or are members of forest and farm producers clubs, producers organizations, forest block management committees, etc.	DC LMC Implementing NGO
Current and future climate change impacts threaten the sustainability of SLM/SFM investments	M	M	- The project seeks to restore and enhance the ecosystem services provided by resilient landscapes that support sustainable livelihoods. In doing so, the objective of strengthening resiliency to anticipated climate impacts will be embedded into ILM planning and all SLM/SFM investments. - The project SLM will support investments in drought-resistant crop species and varieties (pigeon pea and sorghum) that CC scenarios for Malawi consider the best climate-adapted to the target district. Additional tree enhancement in farmland and production diversification will strengthen producers? resilience. An analysis on the climate risks affecting the Miombo-Mopane region is available here: https://drive.google.com/file/d/1Ng-VWBnviBbLVHTxccbN4msvHWUSnrOy/view	PMU GCP Implementing partner NGO

The private sector is reluctant to invest in LDN due to lack of information, experience, and un-conductive framework for LDN finance.	L	L	-A key emphasis of Outcome 2.3 will be to strengthen links between national buyer companies and value chain actors in the target landscapes, so that investments in training and equipping local producer organizations with their members producing high quality commodities through SLM and SFM result in favourable conditions for solid contract agreements with national companies. On the other hand, the project will support the participation of selected buyer companies already trading with commodities from the target value chains in business incubator/accelerator initiatives to improve their ability to access green markets and enhance their social and environmental corporate responsibility.	PMU Land Accelerator and Incubator Progr.
The COVID-19 crisis extends over time and has operational impacts on the implementation and institutional/governance arrangements of the project.	M	M	-Mitigate social distancing requirements by enhancing IT support and funding. -Review and adjust implementation and stakeholder engagement arrangements to compensate staff shortages, reorientation of institutional priorities and social distancing. -Adjust stakeholders? engagement plans, adopt higher flexibility and adaptive management and use remote communication whenever possible.	PMU GCP DF Implementing partner NGO

The Miombo/Mopane child projects will follow a similar process that takes identified climate risks, vulnerabilities and corresponding management actions into account.

Component 1:

Climate risks will be systematically incorporated in the integrated land use planning process to anticipate future extreme weather events and plan positive actions of sustainable land management. This joint planning process will benefit from climate change related assessments conducted during the PPG (SHARP) as well as available climate change analysis (e.g. IFAD/ACDI climate analysis) and other available data sets.

The National Meteorological Authorities (NMA) and other institutions leading the collection, analysis and use of climate data should be engaged in the development and implementation of LDN strategies. Trainings and capacity building of relevant stakeholders should include activities on the use of climate information for informing strategies and planning, certain activities can be led by the NMAs.

Component 2:

The selection of evidence-based climate smart SLM/SFM practices will follow the results of the joint planning process (component 1) to ensure they are adapted to local contexts and supported by scientific evidence of project climate conditions. The identified practices should be integrated in the forest and farm producers? training manuals and be part of the Famers Field Schools curricula. The newly developed global note for FFS facilitators on integrating climate change adaptation into farmer field schools can inform this process as well as lessons learned from participatory engagement approaches such a PICSA. Climate field schools can link to demonstration plots of sustainable intensification practices and resilience measures post-harvest.

The selection of dryland value chains should also consider climate related risks. Their selection should be based on (i) their viability under climate change in the mid to long term; (ii) their contribution to drivers of climate-related impacts; and (iii) their ability to increase the resilience of the most vulnerable populations. Development of green value chains, including appropriate infrastructure or technologies to climate proof food value chains, should be based on results of climate impact assessments. Planning around drying, storage and transport can be informed by climate impacts at each stage.

Additional information: https://drive.google.com/file/d/1Ng-VWBnviBbLVHTxccbN4msvHWUSnrOy/view?usp=sharing

Project strategy towards Covid19 risk:

Covid19 pandemic had a significant impact in project design and will represent a major challenge in project implementation. There is a negative feedback between tropical deforestation, climate change and biodiversity loss, that has serious repercussions, including many that are unpredictable as pandemic crisis. Experts have warned that human encroachment of natural habitats for wildlife will drive the emergence of further zoonotic diseases, as pathogens that historically did not interact with people can now jump from animals to humans, as seems to be the case of covid19. According to the UN Framework for the Immediate Socio-economic Response to Covid19, published in April 2020, the success of pandemic recovery is intimately linked to supporting efforts to arrest ecosystem encroachments and harmful practices, restore degraded ecosystems, and close down illegal trade and illegal wet markets, while protecting communities that depend on natural habitats for their food supply and livelihoods.

The project will adopt the *principle of diversification* at all levels (e.g. species diversification in forest restoration and agroforestry interventions; tree-crop-livestock landscape integration; diversification of climate-adaptive crop species/varieties and NTFPs in agriculture/forest production systems and green value chain development, as a way to diversify livelihood opportunities and enhance food security under lock down situation) as the best strategy to stop and reverse habitat encroachment and biodiversity loss in the Miombo and Mopane woodlands, increase landscape resilience against climate risks, reduce sources of social vulnerability associated with lack of knowledge, food and economic insecurity, and reinforce the participatory governance of landscape stakeholders, and the capacity of public services and social safety nets to react in times of pandemic crisis. In this sense, the project will address the Covid19 crisis in a multiple way, responding to the recommendations of the UN Framework for the Immediate Socio-economic Response to Covid19:

Mainstreaming Covid19 issues into project interventions

Data gathering and stakeholder analysis for ILMP planning in the three districts: The ILMP planning team will gather data and make a rapid assessment of the socio-economic impact of Covid19 impact on the stakeholder groups in each landscape. This will help prioritize the target population for each type of investment in the three landscapes, with special focus on the groups that are most eligible for procurement of equipment and inputs linked to emergency or distress situations under Procurement Window 5 (Output 2.1.1). Likewise, the analysis of the impact of Covid19 on the different stakeholders will help identify the most sensitive groups to food insecurity and prioritize them in the ILMP interventions supporting the diversification of agroforestry and NTFP production so that they can better cope with lock down situations with job loss or little or no access to food products from outside.

Awareness: the ILMP participatory planning process will help increase understanding of the negative feedback between tropical deforestation, climate change and biodiversity loss that is behind the Covid19 or other zoonotic disease risks. It will also help understand the positive effects of the proposed integrated landscape management interventions that enhance sustainable coexistence of agriculture and natural habitats, including through investments in SLM, SFM and GVC methods for land restoration, sustainable natural resources management and diversified green food production.

Governance: the ILMP planning process will follow an interdisciplinary approach, making sure that stakeholders integrate the health perspective and its environmental and socio-economic considerations in the planning process.

Capacity building: the capacity development interventions ? training, FFS/FMLG, technical support ? will help the target groups understand multiple causation ? deforestation, loss of biodiversity, climate change ? that is behind zoonotic diseases risks, and how integrated landscape management investments help prevent these risks.

•Project investments: integrated SLM, SFM and GVC interventions at the landscape level will help restore healthy and well connected ecosystems in the target landscapes with a positive global impact in the prevention of a possible outbreak of zoonotic disease risk, while promoting economically viable and socially beneficial land-use options and diversified production systems that help safeguard livelihoods and food and economic security.

Mainstreaming Covid19 issues into working procedures

The project design has been affected in terms of working procedures, preventing the organization of some field missions and forcing the project partners to organize web meetings with a lower representation of people than expected, although ensuring the representation of all the stakeholders concerned.

The fact that the Covid19 crisis will continue, at least until a safe and accessible vaccine is available to everyone, will force the project team and partners to define alternative measures regarding: (i) the collection of information and consultations with the stakeholders involved, (ii) the organization of teamwork, working meetings, workshops, training, and visits to / from other countries involved in the program, (iii) the provision of technical assistance from national and international experts, and (iv) the community-based participation and relationships among members of local communities, and among members of producer organizations, market-based platforms, etc. In this sense, the project team and its

partners should define the rules of the game that best adapt to the conditions of Covid19 during the inception workshop. Specifically, the project could define the following types of alternatives to work procedures:

The meetings and workshops will be carried out electronically through Zoom or similar system, ensuring a minimum representation of all interested stakeholder groups. To the extent possible, and depending on changes in the Malawian government regulations on limitations on the number of people who can meet and on the movement of people within / outside the country and within / outside the target districts, the project will try to group the maximum number of people legally possible in a common space, to minimize the problems derived from Zoom meetings with multiple people. The project team will request the respect of all legal measures established by the government when people gather, such as a mask, hand washing, safety distance, ventilation of the meeting space, maximum meeting time, etc.

Technical assistance and training may make use of alternative communication tools adapted to the different target audiences. In the case of literate people, the Global Programme may organize web training programmes on the different LDN topics (e.g. FLR, SLM, SFM, GVC) identified as priority ones for the different Child Projects. The experts hired by the Malawi Child Project may be involved in the national and global web training activities, being requested and guided to register web lectures, and participate in life sessions to answer questions to the course students and provide additional information.

In the case of illiterate people, the project team, assisted by the hired experts, will develop other tools such as the production of short very practical videos with images that describe how to implement different active restoration, SLM, SFM and GVC interventions. The videos can be sent through mobile phones to practitioners to use in their daily work. Likewise, the project team may hire a communication expert to periodically visit the field and make short videos on the different stages of implementation of Active Restoration / SLM / SFM / GVC actions, so that they can be sent to the experts to remotely analyse the effectiveness of the actions undertaken by the project beneficiaries, and prepare new additional short videos that help to correct errors or improve execution in the field. This will require a continuous technical support throughout the different steps of the different LDN interventions.

The project team and partners will raise awareness among local community members, producers? organizations participating in FFS/FMLG, and value chain members, about Covid19 risks and the official measures established to prevent transmission of the virus. Project facilitators supporting FFS/FMLG and GVC development will agree with practitioners about meeting and coworking opportunities that meet the governmental Covid19 protocols. Practitioners will benefit from the alternative learning and technical support defined in the previous point.

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[1] H: High; M: Moderate; L: Low.

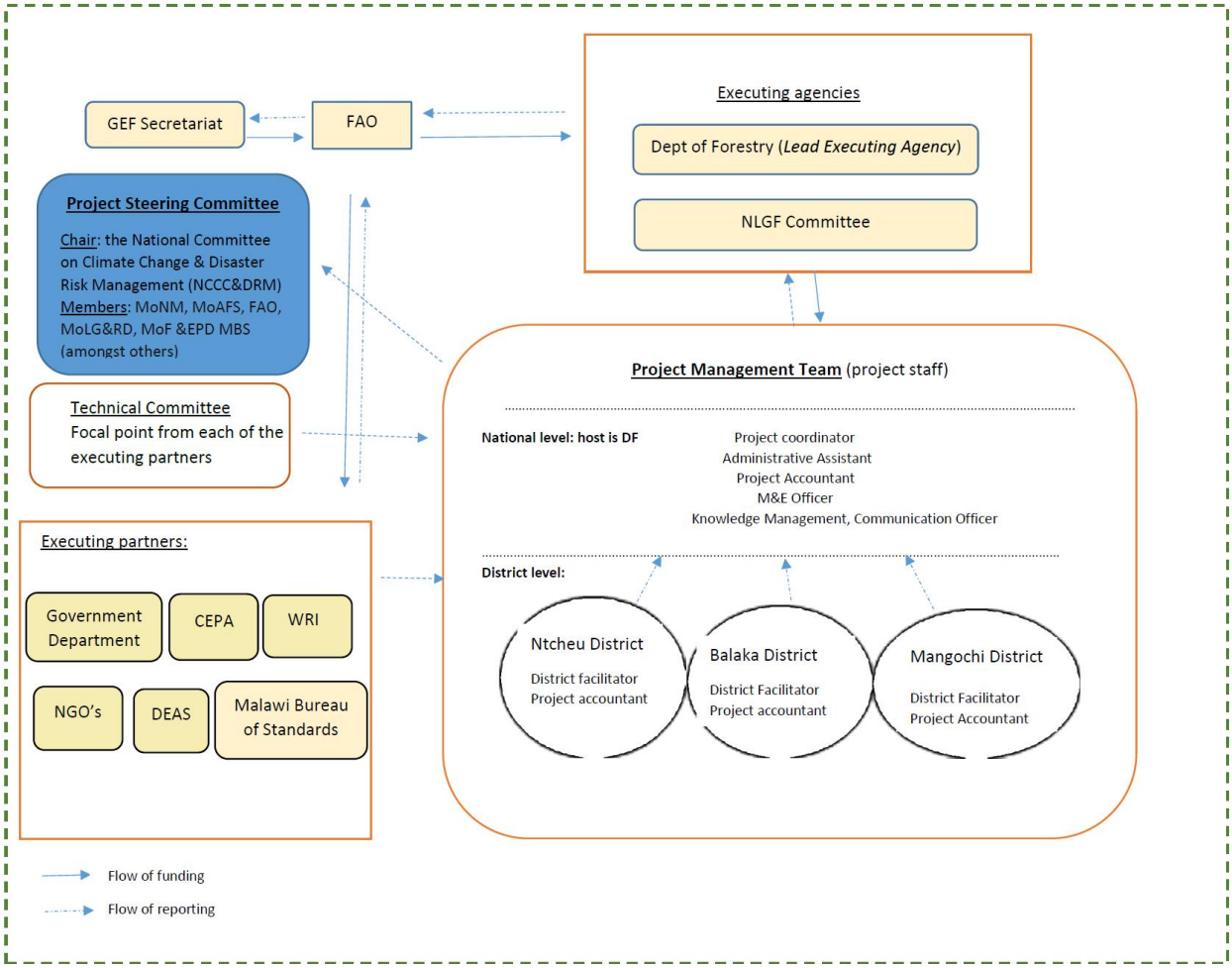
6. Institutional Arrangement and Coordination

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

The Department of Forestry will have the overall executing and technical responsibility for the project, with FAO providing oversight as GEF Agency as described below. The Department of Forestry will act as the lead executing agency and will be responsible for the day-to-day management of project results entrusted to it in full compliance with all terms and conditions of the Operational Partnership Agreement (OPA) signed with FAO. As OP of the project the Department of Forestry is responsible and accountable to FAO for the timely implementation of the agreed project results, operational oversight of implementation activities, timely reporting, and for effective use of GEF resources for the intended purposes and in line with FAO and GEF policy requirements. The same will apply for the National Local Government Finance Committee with whom FAO will be signing an OPA with.[1]

The project organization structure is as illustrated in the diagram below:

Implementation arrangements diagram:



? The government will designate a National Project Director (NPD) and not covered by project resources. Located in the Department of Forestry the NPD will be responsible for coordinating the activities with all the national bodies related to the different project components, as well as with the project

partners. He/she will also be responsible for supervising and guiding the Project Coordinator (see below) on the government policies and priorities

? The NPD (or designated person from lead national institution) will chair the technical committee meeting and the PS for the line ministry will chair the Project Steering Committee which will be the main governing body of the project. The PSC will approve Annual Work Plans and Budgets on a yearly basis and will provide strategic guidance to the Project Management Team and to all executing partners. The PSC will be comprised of representatives from NCC &DRM. The members of the technical committee will each assure the role of a Focal Point for the project in their respective agencies. Hence, the project will have a Focal Point in each concerned institution. The technical committee will be comprised of representatives from all executing partners at the level of Director with a designated focal point. . As members of the executing team, the concerned technical committee members will: (i) technically oversee activities in their sector; (ii) ensure a fluid two-way exchange of information and knowledge between their agency and the project; (iii) facilitate coordination and links between the project activities and the work plan of their agency; and (iv) facilitate the provision of co-financing to the project.

? The National Project Coordinator (see below) will be the Secretary to the technical committee and PSC in meeting organised where the project is on the agenda. The technical committee will meet quarterly to ensure: i) Oversight and assurance of technical quality of outputs; ii) Close linkages between the project and other ongoing projects and programmes relevant to the project; iii) Timely availability and effectiveness of co-financing support; iv) Sustainability of key project outcomes, including up-scaling and replication; v) Effective coordination of government partner work under this project; vi) Approval of the six-monthly Project Progress and Financial Reports, the Annual Work Plan and Budget; vii) Making by consensus, management decisions when guidance is required by the National Project Coordinator of the PMU.

? A Project Management Unit (PMU) will be co-funded by the GEF and established within the Department of Forestry Head Quarters in Lilongwe and supporting teams will be established in each District (see draft TORs in Annex O). The main functions of the PMU, following the guidance of the Project Steering Committee, are to ensure overall efficient management, coordination, implementation and monitoring of the project through the effective implementation of the annual work plans and budgets (AWP/Bs). The PMU will be composed of a National Project Coordinator (NPC) recruited by DF, and will work full-time for the project lifetime. In addition, the PMU will include:

At national level hosted either by DF or NLGFC:

? Administrative and Operations Officer: national, full time, recruited by DF, he/she will provide daily admin and operations support including procurement and asset management to project. NLGFC will assign a desk officer from the existing establishment to coordinate with the PMU administration and operations officer who will sit at the Dept of Forestry Project accountant: National, full time, recruited by DF. She/he will coordinate the disbursement, monitoring and reporting of financial resource utilization. NLGFC will assign a finance manager for the project account from the existing establishment.

? M&E expert: national, full time recruited by DF and will coordinate monitoring and reporting across the implementing councils, DF and NLGFC.

? Knowledge management and Communication officer: National, full time, recruited by NLGFC and will develop, implement, manage and review the overall Information Education and Communications (IEC) strategy for the project.

At District level: hosted by District Councils. Each District (Ntcheu, Balaka and Mangochi) will be equipped with:

? District coordinator: full time and will be an existing employee of the district council seconded to the project. He/she will be responsible for the daily management of project activities in the district and for developing Annual Work Plans and Annual Work Budget (in consultation with the project coordinator, and to be presented and validated by the Technical Committee and Project Steering Committee).

? Accounts officer: full time and will be an existing employee of the district council seconded to the project and shall facilitate the disbursement, monitoring and reporting of financial resource utilization.

The National Project Coordinator (NPC) will be in charge of daily implementation, management, administration and technical supervision of the project, on behalf of the Operational partner and within the framework delineated by the PSC. S/he will be responsible, among others, for:

i) coordination with relevant initiatives;

ii) ensuring a high level of collaboration among participating institutions and organizations at the national and local levels;

iii) ensuring compliance with all OPA provisions during the implementation, including on timely reporting and financial management;

iv) coordination and close monitoring of the implementation of project activities;

v) tracking the project?s progress and ensuring timely delivery of inputs and outputs;

vi) providing technical support and assessing the outputs of the project national consultants hired with GEF funds, as well as the products generated in the implementation of the project,;

vii) approve and manage requests for provision of financial resources using provided format in OPA annexes;

viii) monitoring financial resources and accounting to ensure accuracy and reliability of financial reports;

ix) ensuring timely preparation and submission of requests for funds, financial and progress reports to FAO as per OPA reporting requirements;

x) maintaining documentation and evidence that describes the proper and prudent use of project resources as per OPA provisions, including making available this supporting documentation to FAO and designated auditors when requested;

xi) implementing and managing the project?s monitoring and communications plans;

xii) organizing project workshops and meetings to monitor progress and preparing the Annual Budget and Work Plan;

xiii) submitting the six-monthly Project Progress Reports (PPRs) with the AWP/B to the PSC and FAO in collaboration with CTA;

xiv) Reviewing and co-preparing the first draft of the Project Implementation Review (PIR) together with CTA;

xv) supporting the organization of the mid-term and final evaluations in close coordination with the FAO Budget Holder and the FAO Independent Office of Evaluation (OED);

xvi) submitting the OP six-monthly technical and financial reports to FAO and facilitate the information exchange between the OP and FAO, if needed;

xvii) inform the PSC and FAO of any delays and difficulties as they arise during the implementation to ensure timely corrective measure and support.

? The Food and Agriculture Organization (FAO) will be the GEF Implementing Agency (IA) for the Project, providing project cycle management and support services as established in the GEF Policy. As the GEF IA, FAO holds overall accountability and responsibility to the GEF for delivery of the results. In the IA role, FAO will utilize the GEF fees to deploy three different actors within the organization to support the project (see Annex J for details):

? the Budget Holder, which is usually the most decentralized FAO office, will provide oversight of day to day project execution;

? the Lead Technical Officer(s), drawn from across FAO will provide oversight/support to the projects technical work in coordination with government representatives participating in the Project Steering Committee;

? the Funding Liasion Officer(s) within FAO will monitor and support the project cycle to ensure that the project is being carried out and reporting done in accordance with agreed standards and requirements.

? FAO responsibilities, as GEF agency, will include:

? Administrate funds from GEF in accordance with the rules and procedures of FAO;

? Oversee project implementation in accordance with the project document, work plans, budgets, agreements with co-financiers, Operational Partners Agreement(s)and other rules and procedures of FAO;

? Provide technical guidance to ensure that appropriate technical quality is applied to all activities concerned;

? Conduct at least one supervision mission per year; and

? Reporting to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review, the Mid Term Review, the Terminal Evaluation and the Project Closure Report on project progress;

? Financial reporting to the GEF Trustee.

Coordination with other relevant GEF-financed projects and other initiatives.

One important recommendation from the stakeholders involved in the project design phase was to develop synergies and avoid duplication with other, on-going initiatives related to FLR and agro-forestry. The project will coordinate with ongoing GEF and non- GEF initiatives in Malawi to ensure synergies are generated, particularly with the projects mentioned below. Coordination with these initiatives will focus on exchanging lessons learned and sharing technical expertise and will be established through partnership agreements and joint work-plans. The fact that most of these projects are connected to the National Committee on Climate Change & Disaster Risk Management (NCCC&DRM), a major institutional partner of the SFM-DSL-IP project, will facilitate coordination and interaction. During the PPG phase, some of the following project were consulted and invited to participate to project design workshops in order to identify synergies:

Project Title	Implementing Agency	Description
Shire Valley Transformation Program	World Bank	Provide access to reliable gravity fed irrigation and drainage services, secure land tenure for smallholder farmers, and strengthen management of wetlands and protected areas in the Shire Valley.
Enhancing Sustainability of Protected Area Systems and Stabilizing Agro-production in Adjoining Areas through Improved IAS Management	UNEP	Prevent new invasions and reduce the current impacts of invasive alien species (IAS) in protected areas and adjoining agro-ecosystems in Malawi
Food-IAP: Enhancing the Resilience of Agro-Ecological Systems	IFAD	Enhance the Provision of Ecosystem services and improve the Productivity and Resilience of Agricultural Systems of Vulnerable Rural Poor.

SIP: Private Public Sector Partnership on Capacity Building for SLM in the Shire River Basin	UNDP	Reduce land degradation in the Shire River Basin through improved institutional, policy and Payment for Ecosystem Services Schemes
Enhancing food security and rural development outcomes through the AFR100 program	BMU	Scale up FLR on the ground to boost food security and household income in Malawi and other four countries of the region.
NJIRA Sustainable Land Management Program	USAID	Spur economic growth and food security through SLM in several districts of southern Malawi including Balaka.

[1] It should be noted that the identified Operational Partner(s) or OP, the results to be implemented by the OP and budgets to be transferred to the OP are non-binding and may change due to FAO internal partnership and agreement procedures which have not yet been concluded at the time of submission .

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.

Consistency with national development goals and policies

The Government of Malawi has demonstrated strong political will for restoration as a way to promote integrated landscape management and achieve LDN. Malawi?s restoration efforts are integrated into numerous sectors? strategies and policies. The project is strongly aligned to, and consistent with the following national legislation and frameworks:

? Vision 2020 ? Malawi?s national development perspective (2000).The project is consistent with the Vision 2020 goals to catalyse sustainable development growth based on Malawi?s natural and human capital, increasing the supply of goods and services obtained through sustainable agriculture.

? Malawi Growth and Development Strategy III (MGDS III 2017-2022). The project will ensure investments in the five Key Priority Areas identified by MGDS III: (i) contribute to improved nutrition and food security, (ii) increased agriculture productivity, (iii) diversification and agribusiness/market development, (iv) enhanced environmental and climate-risk management, and (v) increased technology adaption and reduced unemployment and gender inequality

? National Agricultural Investment Plan (NAIP) (2017-2023). This is the main implementation vehicle of the National Agriculture Policy (NAP). The project contributes to the objectives of the four programmes identified by NAIP: (i) Improve policy and regulatory environment, stakeholder coordination and accountability; (ii) strengthen resilience of livelihoods and natural resource- based agriculture; (iii) increase production and productivity of a more diversified agriculture sector; (iv) enhance market access, value addition, trade, and access to finance

? The National Land Policy (2016) has a strong focus on formalizing customary systems for land tenure security. The project will develop the capacity of smallholder farmers in the target landscapes to gain legal titles to their land and thus be protected from encroachment and other interests, thus enabling long term engagement with the land

? National FLR Strategy (2017). The project is geographically and thematically aligned with the Strategy, which identified spatial priority areas for restoration in each District and defined the priority types of FLR interventions. Additional LDN-related targets have been set in the National FLR Strategy with its commitment under the AFR100/Bonn Challenge to restore 4.5 million hectares of degraded land by 2030. The project will bring an important contribution to the implementation goals of the Strategy

? The National Forestry Policy (2016) is designed to align the country agreements on climate change, biodiversity and combat desertification, including FLR, SFM and community involvement in the governance of forest resources. The project will promote effective solutions and good practices for the co-management and governance of forest resources. The project will also contribute to the NFP objectives of improved provision of forest goods and services, decreased deforestation and forest degradation, and contribution to increase forest cover by 2% by 2021.

? National Resilience Strategy (2018-2030). The project is inspired by, and consistent with the following Combined Pillar Impacts identified by the NRS 3: (i) Sustained reduction in the number of chronically food insecure households by scaling up access to predictable social support services, complementary livelihood packages, nutrition services, and expanded access to national programmes; (ii) Expanded public, private and community partnerships to safeguard Malawi?s natural resource endowments and ecosystems that contribute to social and economic prosperity; (iii) Strengthened national and devolved government institutions, civil society, and private sector actors to adopt effective and accountable practices that prevent, mitigate, and respond to disasters, and promote long-term development; and (iv) Strengthened women?s empowerment through cross-cutting strategies and measurable outcomes

? Water Resources Act (2013). This Act was conceived to provide for the management, conservation, use, and control of water resources and for the acquisition and regulation of rights to use water. The project will build on the governance framework established by the NWRA, particularly the National Water Resources Authority Catchment, the Management Committees, and the Associations of Water Users at the watershed level

? The National Charcoal Strategy (2017?2027) is harmonized with the National FLR Strategy and represents an ambitious and progress reform which sets out a 10-year plan for a climate-resilient and sustainable energy sector. The project will support actions that help implement the Strategy, namely through the promotion of alternative cooking fuel, the adoption of fuel-efficient firewood cookstoves, the support to increased sustainable wood production and the enforcement of sectoral laws and regulations to stop illegal charcoal production

Consistency with national communications and reports to the United Nations Conventions

Malawi?s landscape restoration efforts are a direct contribution to numerous regional and global processes, including: AFR100 and Bonn Challenge, LDN under UNCCD, CBD Aichi targets 2-3-4-5-7, SDGs, UNFCCC, UN Sustainable Energy for All (SE4ALL), and the Great Green Wall Initiative (GGWI) that will help SADC countries mobilize resources to combat desertification namely in Miombo drylands. More specifically, the project is consistent with:

? National LDN Strategy (2017). Malawi?s national targets are to achieve LDN with no net loss by 2030 and an additional 2% gain *?* that is *188,000* hectares nation-wide? - as compared to 2015. One of the Strategy?s sub indicators is to attain land degradation neutrality in the Shire River basin catchment by 2030 compared to 2015 and an additional 2% of the basin with improved, net gain. The Strategy mentions FLR as one of the main vehicles for the achievement of its objectives. The project has been designed to contribute directly to the national LDN targets ? more concretely in the focal landscapes within the Shire River Basin? - and to implement the associated measures to achieve LDN

? Malawi?s National Biodiversity Strategy II (NBSAP II ? 2015-2025) defines actions and indicators for each of the Aichi targets. The project is consistent with, and delivers on Target 2 (traditional

knowledge, innovations and community practices), Target 4 (biodiversity value integrated into national/local policies and plans), Target 6 (restoration and protection of terrestrial habitats); Target 8 (forest coverer increased and sustainably managed) , Target 11 (minimized human pressure and increased climate resilience of vulnerable ecosystems), Target 13 (maintained genetic diversity of wild and domestic plants and animals), and Target 15 (preserved and restored ecosystem services taking into account gender, youth, and the vulnerable segments of society).

? Malawi?s Intended National Determined Contribution (2015). Ecosystem restoration and SLM/SFM are pivotal elements in the priority adaptation actions identified by the INDC: (i) build adaptation capacity for smallholder farmers in climate-resilient agronomic practices; (ii) promote on-farm water conservation technology; (iii) promote draught-tolerant crop varieties; (iv) implement conservation agriculture and agro-forestry practices; (v) implement integrated catchment conservation and management programmes; (vi) promote use of substitutes for firewood and charcoal and an energy mix that moves people away from the use of biomass; (vii) expand afforestation and forest regeneration programmes

? National Action Plan for Adaptation under LDCF/UNFCCC (2006). The project tackles the following high-ranked adaptation needs identified by the NAPA: (i) including targeting afforestation and reforestation programmes to control erosion, provide fuelwood and ensure alternative sources of income; (ii) improving energy access and security in rural areas; (iii) increasing the resilience of food production systems

? The project will also directly contribute to other regional and global processes that Malawi has joined such Malawi?s AFR100/Bonn Challenge commitment is to restore 4.5 million hectares of degraded land by 2030, and the Pan-African Action Agenda on Ecosystem Restoration for Increased Resilience

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.

In line with GEF Knowledge Management Guidelines[1], knowledge generation and management will be an essential component of the project . The project will develop a systematic knowledge management process to capture and exchange lessons learned and best practices on FLR/SLM/SFM and will support knowledge development and communication activities to systematize and disseminate them in Malawi and the other countries of the SFM-DSL IP. It will be structured under a knowledge management and communication strategy (KMCS) for the project that will address the needs of practitioners, decision-makers and local stakeholders, making use of both traditional and new communication media and networks. Materials and tools will be produced and disseminated to relevant stakeholders using the most appropriate means to the target audience while learning will be maximized.

At project design, contacts were made with the Centre for Environmental Policy and Advocacy (CEPA), a no-profit public interest organization established in Malawi since 2002 with the objective to contribute to the systematic capturing and development of best practices in the field of environment and natural resources management in the country and the wider Southern Africa Region. CEPA operates as a think tank and advocacy institution, and runs a resource centre open to the public and including a wide range of

publications and information from governmental and non-governmental sources. The project will establish a partnership with CEPA to support its knowledge management structure and develop an Information clearinghouse for the SFM-DSL IP, as from the Year 2. CEPA will be asked to design a participatory communication strategy that can effectively address different audience needs. It is anticipated that the clearinghouse will create a database of LDN-related practices and lessons learned, with a focus on the results of the project, and the information supplied by the GCP and other SFM-DSL IP countries, but open to other experiences from SADC, the AFR100 countries, TRI, and elsewhere. The database will build on the experience of WRI, FAO and other SFM-DSL IP partners on knowledge management systems and will be designed in close coordination with the PMU and Implementing Partner NGOs in charge of Component 2. The FLRMF task force, and the PMU M&E expert will agree on appropriate mechanisms for the sharing of monitoring and evaluation data at various levels (national, sub-national, regional and international) as a vehicle for adaptive management, learning, knowledge dissemination, and policy and advocacy actions.

CEPA will organize a knowledge management and communication training exercise for the PMU and Implementing Partner NGOs, to develop their capacity on effective information and knowledge management. The aim of this exercise will be to underline that KM and effective communication should be viewed as a fundamental part of each team members? job, and not as an ?extra effort?. This will allow the project staff at national, district, and landscape level to disseminate the project to targeted stakeholders through communication events with beneficiaries (e.g. information days, on-farm demonstrations, local fairs, brief radio programs, information vans and community announcers) and national audiences (e.g. organization of workshops and conferences, web dissemination).

At the district and landscape level, the Implementing Partner NGOs will receive support from CEPA to develop knowledge management plans for the Landscape Management Committees and the District Agriculture Extension Service Systems (DAESS), and the District Forest Offices (DFO). The Landscape Management Committees will spread information on the initiative among the concerned stakeholders in the landscape, and they will promote their participation to the different planning, implementation, and monitoring actions. They will also inform potential beneficiaries on the Landscape Plans and on the tools and financial resources available for their implementation. The DAESS and DFO, in their function as bodies entrusted of the coordination of the field training work? - Field Farm Schools and Forest Learning Group? - will vehicle technical know-how on FLR/SLM/SFM to the field practitioners and will collect results and good practices that will feed the awareness raising and dissemination work of the Implementing Partner NGOs and the Landscape Management Committees, and eventually the knowledge management structure and Information clearinghouse built by CEPA at the national level.

The PMU will liaise with the Global Child Project to ensure the bi-directional flow of information and knowledge between the child project in Malawi and the GCP and another SFM-DSL IP countries. The GCP will help CEPA identify appropriate and standardized means of documenting lessons learned and best practices from the Impact Programme and other partners? interventions relevant to LDN, to reach the different audience? - rural communities, NGOs, civil servants, researchers, policy-makers, donors ? in the most appropriate fashion. Chosen tools may include electronic and printed reports, journal articles, booklets, leaflets, presentations and audio-visual materials, culturally adapted musical and pictorial tools, as well as info kits. The information and knowledge gathered/generated by CEPA will be disseminated as from the second half of the project.

The knowledge exchange at the global level facilitated by the GCP through the working groups on drylands will take place in two ways: The Malawi Child Project will actively ?feed? and share knowledge to the global platform while benefiting from recent scientific knowledge and evidence based good practices provided by the GCP in return. Moreover, the child project will use part of the DSL IP incentive to ?access? additional services provided by the global project on demand and adaptive basis. The Miombo/Mopane countries will further benefit from a regional knowledge exchange ?hub? by leveraging on SADC?s GGWI. The hub will provide opportunities for knowledge sharing between the countries and the identification of evidence based good practices on regional specific issues (Miombo and Mopane landscape). In order to highlight the importance of documenting change management approaches and innovative solutions, and to help show results and impact, FAO?s South-South and Triangular Cooperation Division and its partners are documenting the baseline status of the targeted landscapes in every country, using a participatory video approach. This interactive, dynamic and powerful monitoring tool includes the participation of local communities and different stakeholders. Moreover, it provides a wholesome view of the project?s progress at every stage, including changes within the individuals, groups of farmers (producer groups, cooperatives etc.), local community, the district councils and other stakeholders such as NGOs, private sector entities and civil society organizations that may occur in the landscapes throughout the lifetime of the project. Through this in-depth observation, the initiative aims to point out what impact these changes may have on dryland management and degradation. Once the baseline is established, each country will continue this monitoring process until best practices are identified and each project reaches its completion. The final product will then be translated and disseminated among the 11 countries involved, cross pollinating and sharing the identified best practices, the supporting knowledge and the lessons learned. The dissemination will occur through various international and regional mechanisms by leveraging on the convening power of the Working Group on Dryland Forests and Agrosilvopastoral Systems. In the long term, this participatory approach will feed into a digital library containing an array of different contexts and paths, serving as a pragmatic learning platform for contributing partners and members achieving the objective of making every voice count for adaptive management, at every level.

The PMU will include a dedicated person to follow the knowledge management components together with stakeholder engagement and capacity development to assure that the KMCS is implemented (See ANNEX O for TORs). FAO will provide overall quality assurance through a dedicated member on the internal Project Task Force (PTF) who will be task with the knowledge management, stakeholder engagement and system-wide capacity development components.

Moreover, during the inception phase the DF will second a part-time staff as a Knowledge and Communication Focal Point (KCFP) as an in-kind contribution to the project. With the assistance of CEPA, the CFP will develop a knowledge and communication work plan structured according to three levels:

? At the district/landscape level: supported by the Implementing Partner NGOs and the members of the Landscape Management Committees, the project raise the awareness of local communities on the objectives and importance of the ILM/FLR/SLM/SFM.

? At the national level: the CFP will work closely with its co-financing and co-executing partners in order to spread awareness on the work and achievements of the project. TV and radio stations will be key partners in the dissemination of news about the project.

? Internationally: the CFP will establish a link with the GCP and will act as a focal point for the establishment of a bi-direction flow of information between the child project in Malawi, the GCP, and the other Miombo & Mopane countries of the Impact Programme, documenting and sharing achievements, lessons, best practices.

Under Component 1, the NCCC&DRM will spread awareness on the project among the constituency of committee members, and it will disseminate the documents, materials and tools. Various communication, awareness raising, dissemination and visibility tool? - e.g. press releases, seminars and workshops, newsletters, videos presenting success stories, publications, and production of visibility item? - will be used. The communication/visibility plan and activities will be aligned with the GEF communication and visibility policy and FAO?s corporate communication strategy. All publications will bear the logos of the Government of the GoM, FAO and GEF. At the end of the project, in conjunction with the terminal workshop a daylong meeting will be held to disseminate the project results, key lessons learnt and best practices captured through the project.

Key deliverables	Timeline	Budget
? Database of LDN-related practices and lessons learned, with a focus on the SFM-DSL IP but open to other experiences (e.g. SADC, the AFR100 countries, TRI).	Year 2	TBD
? Training module to develop the capacity of PMU and Implementing Partner NGOs on effective information and knowledge management.	Year 2	TBD
? Knowledge management plans for the Landscape Management Committees and the District Agriculture Extension Service Systems (DAESS), and the District Forest Offices (DFO).	Year 2	TBD
? Knowledge management and awareness raising tools to reach the different audiences of the project (e.g. reports, articles, audio-visual materials, and cultural adaptive music and pictorial tools).	Years 2-3	TBD
? Regional knowledge hub for the Miombo & Mopane countries.	Year 3	TBD

[1] See GEF Approach on Knowledge Management https://www.thegef.org/sites/default/files/council-meeting-documents/EN_GEF.C.48.07.Rev_.01_KM_Approach_Paper.pdf

9. Monitoring and Evaluation

Describe the budgeted M and E plan

Oversight

Project oversight will be carried out by the Project Steering Committee (PSC), the FAO GEF Coordination Unit and relevant Technical Units in HQ. Oversight will ensure that: (i) project outputs are produced in accordance with the project results framework and leading to the achievement of project outcomes; (ii) project outcomes are leading to the achievement of the project objective; (iii) risks are continuously identified and monitored and appropriate mitigation strategies are applied; and (iv) agreed project global environmental benefits/ adaptation benefits are being delivered. The FAO GEF Unit and HQ Technical Units will provide oversight of GEF financed activities, outputs and outcomes largely through the annual Project Implementation Reports (PIRs), periodic backstopping and supervision missions.

Monitoring

Project monitoring will be carried out by the Project Implementation Unit (PMU) and the FAO budget holder. Project performance will be monitored using the project results matrix, including indicators (baseline and targets) and annual work plans and budgets. At inception, the results matrix will be reviewed to finalize identification of: i) outputs ii) indicators; and iii) missing baseline information and targets. A detailed M&E plan, which builds on the results matrix and defines specific requirements for each indicator (data collection methods, frequency, responsibilities for data collection and analysis, etc.) will also be developed during project inception by the M&E specialist hired by the PMU. The project will ensure transparency in the preparation, conduct, reporting and evaluation of its activities. This includes full disclosure of all non-confidential information, and consultation with major groups and representatives of local communities. The disclosure of information shall be ensured through posting on websites and dissemination of findings through knowledge products and events. Project reports will be broadly and freely shared, and findings and lessons learned made available.

Reporting

Specific reports that will be prepared under the M&E program are: (i) Project inception report; (ii) Annual Work Plan and Budget (AWPB); (iii) Project Progress Reports (PPRs); (iv) annual Project Implementation Review (PIR); (v) Technical Reports; (vi) co-financing reports; and (vii) Terminal Report.

Project Inception Report. The PMU will prepare a draft project inception report in consultation with the Lead Technical Officer (LTO), Budget Holder (BH) and other project partners. Elements of this report should be discussed during the Project Inception Workshop and the report subsequently finalized. The report will include: (i) a narrative on the institutional roles and responsibilities and coordinating action of project partners; (ii) progress to date on project establishment and start-up activities, and (iii) an update of any changed external conditions that may affect project implementation. It will also include a detailed first year AWPB and a detailed project monitoring plan. The draft inception report will be circulated to the PSC for review and comments before its finalization, no later than one month after project start-up. The report should be cleared by the FAO BH, LTO and the FAO GEF Coordination Unit and uploaded in Field Programme Management Information System (FPMIS) by the BH.

Results-based Annual Work Plan and Budget (AWPB). The draft of the first AWPB will be prepared by the PMU in consultation with the FAO Project Task Force and reviewed at the project Inception Workshop. The Inception Workshop (IW) inputs will be incorporated and the PMU will submit a final draft AWPB within two weeks of the IW to the BH. For subsequent AWPB, the PMU will organize a

project progress review and planning meeting for its review. Once comments have been incorporated, the BH will circulate the AWPB to the LTO and the GEF Coordination Unit for comments/clearance prior to uploading in FPMIS by the BH. The AWPB will be linked to the project?s Results Framework indicators so that the project?s work is contributing to the achievement of the indicators. The AWPB will also include detailed activities to be implemented to achieve the project outputs and output targets and divided into quarterly timeframes and targets and milestone dates for output indicators to be achieved during the year. A detailed project budget for the activities to be implemented during the year will also be included together with all monitoring and supervision activities required during the year. The AWPB will be approved by the Project Steering Committee and uploaded on the FPMIS by the BH.

Project Progress Reports (PPR): PPRs will be prepared by the PMU based on the systematic monitoring of output and outcome indicators identified in the project?s Results Framework. The purpose of the PPR is to identify constraints, problems or bottlenecks that impede timely implementation and to take appropriate remedial action in a timely manner. They will also report on projects risks and implementation of the risk mitigation plan. The PPR will be submitted to the BH and LTO for comments and clearance. The BH will upload the PPR on the FPMIS.

Annual Project Implementation Review (PIR): The LTO (in collaboration with the PMU) will prepare an annual PIR covering the period July (the previous year) through June (current year) to be submitted to the BH and the TCI GEF Funding Liaison Officer (FLO) for review and approval no later than (check each year with GEF Unit but roughly end June/early July each year). The FAO GEF Coordination Unit will submit the PIR to the GEF Secretariat and GEF Evaluation Office as part of the Annual Monitoring Review report of the FAO-GEF portfolio. PIRs will be uploaded on the FPMIS by the TCI GEF Coordination Unit.

Key milestones for the PIR process:

? Early July: the LTOs submit the draft PIRs (after consultations with BHs, project teams) to the GEF Coordination Unit (faogef@fao.org , copying respective GEF Unit officer) for initial review;

? Mid July: GEF Unit responsible officers review main elements of PIR and discuss with LTO as required;

? Early/mid-August: GEF Coordination Unit prepares and finalizes the FAO Summary Tables and sends to the GEF Secretariat by (date is communicated each year by the GEF Secretariat through the FAO GEF Unit;

? September/October: PIRs are finalized. PIRs carefully and thoroughly reviewed by the GEF Coordination Unit and discussed with the LTOs for final review and clearance;

? Mid November: (date to be confirmed by the GEF): the GEF Coordination Unit submits the final PIR reports -cleared by the LTU and approved by the GEF Unit- to the GEF Secretariat and the GEF Independent Evaluation Office.

Technical Reports: Technical reports will be prepared by national, international consultants (partner organizations under LOAs) as part of project outputs and to document and share project outcomes and lessons learned. The drafts of any technical reports will be submitted by the PMU to the BH who will share it with the LTO. The LTO will be responsible for ensuring appropriate technical review and clearance of the report. The BH will upload the final cleared reports onto the FPMIS. Copies of the technical reports will be distributed to project partners and the Project Steering Committee as appropriate.

Co-financing Reports: The BH, with support from the PMU, will be responsible for collecting the required information and reporting on co-financing as indicated in the Project Document/CEO Request. The PMU will compile the information received from the Implementing Partner NGOs and transmit it in a timely manner to the LTO and BH. The report, which covers the period 1 July through 30 June, is to be submitted on or before 31 July and will be incorporated into the annual PIR. The format and tables to report on co-financing can be found in the PIR.

Terminal Report: Within two months before the end date of the project, and one month before the Final Evaluation, the PMU will submit to the BH and LTO a draft Terminal Report. The main purpose of the Terminal Report is to give guidance at ministerial or senior government level on the policy decisions required for the follow-up of the project, and to provide the donor with information on how the funds were utilized. The Terminal Report is accordingly a concise account of the main products, results, conclusions and recommendations of the project, without unnecessary background, narrative or technical details. The target readership consists of persons who are not necessarily technical specialists but who need to understand the policy implications of technical findings and needs for insuring sustainability of project results.

Evaluation

For full-sized projects, a Mid-Term Review will be undertaken at project mid-term to review progress and effectiveness of implementation in terms of achieving the project objectives, outcomes and outputs. Mid-term Reviews are encouraged for medium sized projects. Findings and recommendations of this review/evaluation will be instrumental for bringing improvement in the overall project design and execution strategy for the remaining period of the project?s term. FAO will arrange for the mid-term review in consultation with the project partners. The evaluation will, inter alia:

? review the effectiveness, efficiency and timeliness of project implementation;

? analyse effectiveness of partnership arrangements;

? identify issues requiring decisions and remedial actions;

? propose any mid-course corrections and/or adjustments to the implementation strategy as necessary; and

? Highlight technical achievements and lessons learned derived from project design, implementation and management.

It is recommended that an independent Final Evaluation (FE) be carried out three months prior to the terminal review meeting of the project partners. The FE will aim to identify the project impacts and sustainability of project results and the degree of achievement of long-term results. This evaluation will also have the purpose of indicating future actions needed to sustain project results and disseminate products and best-practices within the country and to neighboring countries.

M&E Plan

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Type of M&E Activity	Responsible Parties	Time-frame	Budget
Inception Workshop	PMU	Within one month after start-up	Project staff time
Project Inception Report	PMU	One month after start-up	Project staff time
Project Progress Reports (PPR)	PMU	No later than one month after the end of each six-monthly reporting period (30 June and 31 December)	Project staff time
Project Implementation Review report (PIR)	PMU	August 1, of each reporting year	Project staff time
Co-financing Reports	PMU	On a semi-annual basis, and will be considered as part of the semi-annual PPRs	Project staff time
Technical reports	Project staff and consultants, with peer review as appropriate.	As appropriate	Project staff time + consultant costs
Mid-term Review	External consultant, FAO BH in consultation with PMU, GEF Coordination Unit and other partners.	During PY3, at mid-term	*30,000
Final evaluation	External consultant, FAO Office of Evaluation in consultation with PMU, GEF Coordination Unit and other partners	6 months prior to terminal review meeting	*40,000

Type of M&E Activity	Responsible Parties	Time-frame	Budget
Terminal Report	PMU	2 months before project end	7,000
M&E officer	Full-time expert as part of the PMU	1 month after project start up	108,000
Execution Capacity Development and ESS monitoring specialist	Full-time expert , cost shared between M&E and Component 3	1 month after Start-up	133,245
Total Budget			**318,245**

The estimated costs of the MTE and TE have been proposed based on the intention to group the FAO SFM-DSL IP child projects together and carry out a cluster evaluation where possible. Technically and from a project management point of view, the child project teams will be benefit from the knowledge sharing and exchange of lessons.

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 help deliver the following global socio-economic benefits:

Global Socio-economic Benefits

Objectives and Priorities to be addressed through the IP	GEF 7 Core Indicator Target	Expected contribution of the Malawi Child Project of the SFM-DSL IP
Sustainable management of forest landscape and dryland production systems ? integrating the LDN targets into planning processes, focusing mainly on improved land use and management for crop and livestock production.	109,009,473 direct beneficiaries (disaggregated by gender) benefit of GEF investments.	150,000 members of rural communities (disaggregated by gender) directly benefitting of SLM/SFM interventions.

The Global socio-economic benefits are based following on the following considerations:

•Sustainable Forest Management: It is estimated that during the project lifetime approx. 10,000 members of forest users, women associations and producer organizations will benefit of the FMLG and procurement investments in the target landscapes of the three districts, resulting in 8,454 hectares of restored forest blocks and village forest areas with improved co-managed systems. The forest users that throughout the process have acquired a greater organizational capacity and an improvement in the high-quality production of the project's target commodities (e.g. bee products, mushrooms, baobab, fuelwood & charcoal, and other identified priority NTFP during project implementation), will be supported to improve their business capacity and market access for diversified green value chain (GVC) commodities. The project will target women and men in equal proportion of 50%.

? Sustainable intensification of agroforestry production systems: It is estimated that during the project lifetime approx? 34,000 women and men smallholder farmers, will benefit of the FFS and procurement investments in the target landscapes of the three districts, and project investments will allow 7,845 hectares of sustainably managed agroforestry production systems. The smallholder farmers that throughout the process have acquired a greater organizational capacity under producer organizations and an improvement in the high-quality production of the project's target commodities (e.g. pigeon pea, sorghum, moringa), will be supported to improve their business capacity and market access for diversified green value chain (GVC) commodities. The project will target women and men in equal proportion of 50%.

? Increased skills and knowhow on FLR/SLM/SFM/GVC: Approximately 150,000 community members (33,350 households) will have acquired good knowledge and skills on FLR/SLM/SFM/GVC. 520 practitioners from different stakeholder groups (e.g. AEDOs, Forest Extension Officers, FFS trainers, NASFAM members, researchers, lead farmers, private companies, CBOs and NGOs) will be qualified as master trainers on FFS therefore increasing their employment opportunities during project implementation and beyond.

? Micro, small and medium enterprise development around green value chain (GVC) commodities: The project will support approximately 10,000 local producers to become members of economically viable micro-small-medium enterprises (producer organizations and cooperatives) with social and environmental corporate responsibility, through training, technical and financial support for the adoption of improved technologies that allow production to comply with market requirements and national standards for product diversification. Local businesses around green value chain commodities will include: (i) community nurseries for the production and marketing of high quality plant material (seeds, seedlings and cuttings) and the provision of services to customers on the use of plant material in FLR/SLM/SFM implementation; (ii) production and marketing of a diverse set of high quality products of moringa, beekeeping, baobab, pigeon pea, sorghum, and bioenergy, among others. The project will target a minimum of 1/3 of women among beneficiaries.

? Adaptive capacity of smallholder farmers and forest users: The project will enhance the adaptive capacity of women and men smallholder farmers and forest users, addressing the gender-specific adaptation needs. The project will enhance farmer?s resilience and adaptation capacity in the following way: (i) reduce the impact of climate shocks on smallholder farmers through the promotion of management practices that help compensate the effect of drought events through higher soil water availability (conservation agriculture and agroforestry; less water demanding crop varieties); (ii) diversify livelihoods

(food security and income diversification) through sustainable intensification of agroforestry production through which farmers diversify their production from a set of crops (e.g. mix production of pigeon pea + sorghum + moringa, with additional vegetable production on home gardens) and reduce the risk of total loss of production due to a climatic event; (iii) increase the capacity of producer organizations to preserve and process their products reducing their perishability increasing their capacity to negotiate in the market over a longer period of time without depending on the seasonality of the raw product; (iv) increase the capacity to produce high quality products with greater potential to be marketed and increase revenue that allow smallholder farmers to cover needs in times of shocks.

Target 1.B in MDG 1 (?Eradicate extreme poverty and hunger?) highlights the central role of employment and decent work in achieving food security and poverty reduction, therefore allowing women and men in rural communities to have access to the knowledge and resources necessary to produce sustainably and thereby contributing to the (SDG) target 15.3 on LDN. The project formulation has followed the *Guidance on How to Address Decent Rural Employment Concerns in FAO Country Activities* to make sure that decent rural employment is promoted in the project outcomes and outputs:

Table. The Four Pillars of Decent Rural Employment (DRE) in the GEF Child Project in Malawi

Pillar 1: Employment creation and enterprise development	? Component 1will address explicitly policies, regulations and bylaws supporting DRE in the implementation of FLR/SLM/ SFM and to meet the certification standards of the Malawi Bureau of Standards in the GVC development. ? Outcome 2.3 will build the capacity of women and men small-holder producers in accessing markets and modern green value chains. ? The FFS and FMLG under Outcome 2.2 will provide vocation and education training programs for rural women and men on technical and business skills. ? The training-of-trainers (ToT) under FFS and FMLG will increase the professionalization of members of youth clubs and other groups of practitioners on FLR/SLM/SFM related-jobs. ? Component 3 will develop national and sub-national capacities to collect and analyze age and sex disaggregated data on rural labour under LDN interventions.
Pillar 2: Social protection	? FFS and FMLG under Outcome 2.2 will train practitioners on occupational safety and health measures for the rural workforce applying SLM/SFM/GVC technologies. ? Producer organizations, enterprises and buyer companies supported by business development, incubation and accelerator programs under Component 2 will enhance their social corporate responsibility. ? Procurement investments in each district will have a funding window of social support for emergency or distress situations, targeting community needs beyond the SLM/SFM priorities. The provision of this support indirectly delivers SLM/SFM because it helps remove social barriers that may prevent community members to invest in SLM/SFM. The social support procurement window will have a total of USD 50,000 per ILMP (USD 150,000 for the whole project).

Pillar 3: Standards and rights at work	? Community bylaw formulation, fair access to training, extension and investments on SLM/SFM technologies and inputs will help reduce gender and age-based discrimination in the target landscapes. ? The project will ensure compliance with the National Labour Legislation for the rural areas. the Project will use the SNAP[1] community-based approach to monitor child labour, through the District Child Labour & Community Child Labour Committees and active involvement of local leaders, and representatives from church, government, NGOs, employers? and workers? organizations.
Pillar 4: Governance and social dialogue	? Component 1 will ensure representation of the rural poor in policy dialogue through awareness raising, training and bylaw formulation on gender-inclusive land tenure and natural resource governance issues. ? The project will ensure in Component 2 fair, and effective participation of the rural poor in the planning, implementation and monitoring of the Integrated landscape Management Plans, and Village-level Action Plans. ? Component 2 will put especial focus on capacity enhancement activities for women and youth groups to empower them in SLM/SFM/GVC. ? The Child Project in Malawi, with the support of the GCP SFM-DSL IP will create synergies and south-south collaboration among practitioners from the six Miombo & Mopane countries.

[1] National Action Plan to combat child labor in Malawi.

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
	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.

Malawi?s Miombo and Mopane forests and woodlands play a key role in supporting livelihoods and protecting ecosystem services. Non-timber forest products such as fruits, medicinal plants, mushrooms, honey, caterpillars, flying termites and bush meat from the Miombo woodlands are central to the livelihoods of both rural and urban dwellers. Wood fuel dominates Malawi?s energy sector, used by 98% of the population. Forests and woodlands also play a key role in protecting watersheds from erosion, sustain the biodiversity that underpins a large proportion of Malawi?s tourism sector, and makes an important contribution to mitigating carbon emissions by sequestering carbon (forest loss and degradation are by far the largest contributors to Malawi?s national GHG emissions). However, anthropogenic and natural threats are causing significant biodiversity loss in Miombo woodlands, primarily associated with deforestation and land degradation as the most significant causes of biodiversity loss. This is causing the loss of drylands productivity, ecosystems goods and services, and global environmental values, which undermines livelihoods, food security and the potential for sustainable economic development for smallholder farmers, forest users, and leads to biodiversity loss, and further increases vulnerability to climate change The main causes and drivers of degradation include unsustainable use of drylands resources, with the expansion of agriculture and widespread use of maladaptive practices, as well as clearing of land for urban and commercial developments, driven by population growth, poverty and inequality, and exacerbated by climate change.

The project seeks to halt and reverse negative trends of land degradation and biodiversity loss in degraded areas of the Miombo woodlands in the southern part of Malawi by applying an integrated landscape management approach.

Identified Environmental and Social risks from the project

The project is reclassified from low to moderate risk mostly due to the fact that although the foreseen environmental and social impacts of the project are likely to be positive considering the nature of the interventions, the project includes the following risks factors under the Environmental and Social Risk Identification Screening Checklist:

(i) **ESS 3 - Plant and Genetic Resources for Food and Agriculture**: The project interventions on crop diversification and community seed banks (CSB) will involve the provision and transfer of seeds and planting materials for cultivation which triggers ESS 3.

The identified risks are mostly temporal, localized and reversible. Considering the impact, appropriate mitigation measures have been developed to address and mitigate the identified risks above. The developed risk management plan in the table below will allow managing risks by monitoring mitigation actions throughout implementation.

The risks to the project have been identified and analysed during the project preparation phase and mitigation measures have been incorporated into the project design (see Table on section 5.b in Project Document - also copied below). With the support and oversight of FAO, the Project Steering Committee (PSC) will be responsible for managing these risks as well as the effective implementation of mitigation measures. The Monitoring and Evaluation (M&E) system will serve to monitor outcome and output indicators, risks to the project and mitigation measures. The PSC will also be responsible for monitoring the effectiveness of mitigation measures and adjusting mitigation strategies accordingly, as well as identifying and managing any new risks that have not been identified during Project preparation, in collaboration with Project partners.

The six-monthly Project Progress Reports (PPR) are the main tool for risk monitoring and management. These PPRs include a section covering the systematic monitoring of risks and mitigation actions that were identified in the previous PPRs. Further, the PPRs include a section for the identification of possible new risks or risks that still need to be addressed, risk rating and mitigation actions as well as those responsible for monitoring such actions and estimated timeframes. FAO will closely monitor project risk management and will support the adjustment and implementation of mitigation strategies. The preparation of risk monitoring reports and their rating will also be part of the Annual Project Implementation Review Report (PIR) prepared by FAO and submitted to the GEF Secretariat.

Table Section 5.b: Environment and Social Risks Mitigation Plan

Risk identified	**Risk Classification**	**Mitigation Action (s)**	**Indicators**

SAFEGUARD 3 PLANT GENETIC RESOURCES FOR FOOD AND AGRICULTURE	Moderate	As part of the implementation of the integrated landscape management approach the project will promote sustainable agricultural intensification through the diversification of agricultural production. The focus will be on drought tolerant, nitrogen fixing and soil stabilizing pulses (and other neglected and underutilized species (NUS)) to increase resilience and productivity, strengthening sustainable local food systems and mitigating the negative effects of land degradation and climate change. ` The project will support livelihoods diversification and income generation strategy based on the sustainable intensification of productive agricultural and forestry systems and the diversification of the economy with the support to green value chains. The specific interventions shall respond to the site-specific priorities defined in the FLR National Strategy for the target districts regarding agriculture technologies such as tree-crop agroforestry tree/shrub planting, and conservation agriculture; the planting of trees in community forests and tree planting for river- and stream-bank restoration. These interventions will entail introduction of crops varieties/tree species that are drought tolerant, research proven and locally adaptable to Malawi	Area of landscapes under improved management to benefit biodiversity and control the expansion of invasive species. # of smallholder farming households who are applying sustainable agricultural intensification and diversifying their production. # of farmers involved in CSB activities and benefiting in resources. # of crops and varieties per crops conserved and exchanged through the CSB. # of training beneficiaries (management of CSB and seed conservation, small-scale seed production and climate change adaptation strategies. Recommendations produced on policy and legal environment in relation to access and benefit-sharing,

Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
ESS Checklist_DSL IP Malawi child.	**CEO Endorsement 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).

Result Chain	Indicators	Baseline	Mid-Term Milestone	Targets	Means of Verification	Assumptions
Development objective: Improve livelihoods and economic diversification of rural communities in two productive landscapes of the Upper Shire Basin of southern Malawi by promoting best land management practices and green value chains for key agriculture and woodland commodities.						
Project objective: Sustainable management of the Miombo and Mopane productive landscapes of the Districts of Balaka, Ntcheu and Mangochi, contributing to national land degradation neutrality targets.	(i) # of direct beneficiaries of SLM/SFM interventions disaggregated by gender (GEF Core Indicator 11) (ii) # of tCO2eq sequestered due to direct project interventions (GEF Core Indicator 6). (iii) Area of land restored (GEF Core Indicator 3)	(i) Estimated (SHARP) 3754 farm and forest users (769 HH) applying SLM/SFM practices. (ii) TBD based on Ex-ACT results (iii) No restoration so far	(i) 60,000 direct beneficiaries (: 50% women) benefitting from SLM/SFM interventions. (ii) 300,000 tCO2e. (iii) 8,000 ha of land restored (3,500 ha of agriculture land ? GEF sub-indicator 3.1 and 4,500 ha of forest land ? GEF sub-indicator 3.2)	(i) 150,000 direct beneficiaries (50% women) (ii) 712,288 tCO2e. (iii) 16,299 ha (7,845 ha of agriculture land - GEF sub indicator 3.1 - and 8,454 ha of forest land - GEF sub indicator 3.2.	SHARP surveys USGS-Remote Sensing data collection Field verifications Field data collected by the M&E appointed members of the Landscape Management Committees	Continued commitment of institutions and actors from national to community level. Continued political stability to ensure institutional framework able to carry out the work and achieve results.
Component 1: Effective governance support on LDN at the national level and in the targeted Mopane/Miombo landscapes						
Result Chain	Indicators	Baseline	Mid-term Milestone	Targets	Means of Verification	Assumptions

Outcome 1.1: Enhanced multisectoral and multilevel LDN governance.	(i) Level of increase in active participation of the NCCC&DRM inter-ministerial committee and sub-national government counterparts in cross-sectoral policy revision and coordination.[1] (ii) Gender-inclusive by-laws and regulations for land use and land tenure improvements introduced in at least 75% of the target communities.	(i)**Level 1** of active participation (ii) TBD at project inception.	(i)**Level 3** of active participation (ii) Gender-inclusive by-laws and regulations introduced in at least 35% of the target communities. (50% of trained leaders on policy formulation in the villages of the target landscape are women).	(i)**Level 4** of active participation (ii) Gender-inclusive by-laws and regulations introduced in at least 75% of the target communities. (50% of trained leaders on policy formulation in the villages of the target landscape are women).	List with NCCC&DRM members. Reports from CD actions; PIP document; Cross-sectoral/ multi-level MoU and agreements. Policy briefs New/ modified laws/regulations.	Buy-in and engagement of national institutions is secured. Continued political stability in Malawi to ensure institutional framework able to carry out the work and achieve results.
Output 1.1.1: The Malawi National Committee on Climate Change (NCCC&DRM) empowered to mainstream and harmonize LDN into sectoral policies, and to ensure their implementation through the introduction of cross-compliant regulations and incentives. **Output 1.1.2**: The capacity of concerned agencies/managing bodies in the three target districts is developed to become leading actors in the planning, implementation, and monitoring of LDN at the district level. **Output 1.1.3:** Multi-sectoral and multi-level policies and regulations are improved and disseminated, using the knowledge generated and lessons learned through LDN practice.						
Component 2: Scaling-out SLM and SFM best practices at the landscape level, to support the development of environmentally sound, socially-beneficial and economically-viable green value chains						
Result Chain	Indicators	Baseline	Mid-term Milestones	Targets	Means of Verification	Assumptions

Outcome 2.1: Integrated Landscape Management Plans (ILMP) incorporating LDN objectives developed and under implementation in the Balaka, Ntcheu and Mangochi Districts.	(i) Area of landscapes under ILMP.(Contributing to GEF Core Indicator 4). - (ii) Area of landscapes under improved management to benefit biodiversity and prevent the introduction of invasive species (GEF Sub Indicator 4.1): - (iii) Inclusion of Tsanya (Mopane) on the CITES list to improve the conservation status of threatened species. .	(i) No landscapes with ILPMs supporting improved practices. (ii) No landscape area under improved management to benefit biodiversity. (iii) Tsanya not included in CITIES list	(i) ILMPs developed in the three districts? landscapes covering 420,539 hectares. (ii) 15% of landscape area (63,000 ha).	(i) ILMPs under implementation in the three districts? landscapes covering 420,539 hectares. (ii) 30% of landscape area under improved management to benefit biodiversity (126,000 ha,, covering forest areas, buffer zones among them, and riparian corridors). (iii) CITIES list updated to include Tsanya	List of members and ToR of Landscape Management Committees (LMCs). Minutes of meetings and workshops organized by LMCs. ILMP and VAPs plans/maps, and baseline data. CITIES list	DF has the capacity to lead the ILMP development process. District, and village-level institutions, users? organizations, researchers, private sector (etc) willing to join the works. Political stability

Output 2.1.1: Integrated Landscape Management Plans (ILMPs) developed in the target landscapes of Mangochi, Ntcheu and Balaka districts.

Result Chain	Indicators	Baseline	Mid-term Milestones	Targets	Means of Verification	Assumptions

Outcome 2.2: Climate-adaptive natural resources management systems and technologies for resilient landscapes applied and sustainably financed.	(i) # of ha of agriculture land restored and sustainably managed with diversification of agroforestry species (Contributing to GEF sub indicator 3.1) (ii) # of ha of forest areas restored and sustainably managed with diversification of key Miombo & mopane woody species (Contributing to GEF sub indicator 3.2) (iii) # of regionally/nationally endangered/extinct Miombo & Mopane diverse woody species conserved/reintroduced and integrated in FLR interventions (iv) New financial initiatives to sustainably support the long-term implementation of ILMPs.	(i) No restoration so far. (ii) No restoration so far. (iii) No endangered species integrated in SLM/SFM interventions. (iv) No new financial initiative	(i) 3,000 ha of agriculture land restored and sustainably managed (ii) 4,000 ha of forest land restored and sustainably managed (iii) 15 Miombo & Mopane endangered/extinct/diverse woody species integrated in SLM/SFM interventions. (iv) At least 1 bankable project for a financial initiative to support the ILMPs long-term implementation submitted to donor.	(i) 7,845 ha of agriculture land restored and under SFM sustainably managed (ii) 8,454 ha of forest land restored and sustainably managed (iii) 30 Miombo & Mopane endangered/extinct and diverse woody species integrated in SLM/SFM interventions. (iv) At least 1 financial initiative approved to support the ILMPs long-term implementation.	SHARP surveys. Charter of extension providers and partnerships established. Reports from FFS and FMLG sessions and awareness campaigns. USGS-Remote Sensing data collection. Field data collected by the M&E appointed members of the LMC Video footage/pictures. Applications under Procurement Windows.	Project is successful in building capacity of a critical mass of extension providers. Local farmers and forest users enabled to switch from less sustainable to SLM/SFM activities Continued political stability

Output 2.2.1: Three pools of extension agents created in each target District and empowered to deliver training and extension support on climate-resilient restoration, adaptive management and conservation priorities to sustain ecosystem services at the landscape level.

Output 2.2.2: Community SLM actions for the sustainable intensification of diversified agro-ecological food production systems.

Output 2.2.3: Forest landscape restoration, co-management and protection interventions implemented by the landscape forest practitioners in co-managed forest blocks and community forest areas.

Output 2.2.4: Long-term financial sustainability to implement ILMPs secured by harnessing existing domestic public finance and at least one new financial initiative to regain landscape resilience through payment for ecosystem services (PES).

Result Chain	Indicators	Baseline	Mid-term Milestone	Targets	Means of Verification	Assumptions

Outcome 2.3 Increased presence of community-suited green value chains (GVC) in the targeted landscapes, whose commodities come from the supported SLM/SFM production systems.	(i) # of members of producer organizations (POs) engaged in green agri-food value chains (gender disaggregated). (ii) % Increase in volume of production from target producer organizations that meet GVC requirements (e.g. derived from SLM/SFM, social-responsible, quality standards, certification, food safety, value-added accruing to producers). (iii) # of producer organizations and/or buyer companies engaged in existing business incubator and/or accelerator programmes.	(i) Estimated 197 HH members of POs commercialize SLM/SFM produced commodities from the target value chains. (ii) TBD during project inception. (iii) Two buyer companies marketing commodities from the targeted GVC have attended business incubator and accelerator programmes. (iv) none (v) No agreements so far.	(i) Additional 2,000 members of POs (at least 1/3 women) have adopted improved technologies & post-harvest practices that allow production to comply with GVC requirements. (ii) 30% increase in volume of production (iii) 2 additional producer organizations and/or buyer companies (iv) TBD (v) One community protocol on access and benefit-sharing developed on a selected NTFP resource.	(i) A total of additional 10,000 members of POs (at least 1/3 women) commercialize the target commodities complying with GVC requirements. (ii) 80% increase in volume of production. (iii) At least a total of 5 producer organizations and/or buyer companies (iv) TBD (v) One agreement on access and benefit-sharing negotiated with a company interested in the selected NTFP resource, based on the community protocol.	List of members of innovation platforms. Minutes from innovation platforms. Farmer organizations? business plans. Contracts and MoU between value chain actors. Reports from capacity development programs. Video footage and pictures. Equipment and inputs for GVC applications under the procurement programme. Proof of purchase and effective use of processing and marketing.	Cooperatives and producers? association and buyer companies continue to commit to SLM/SFM practices in the face of social, economic and political change Demand for the target products exists on the national and international markets. Continued political stability

Output 2.3.1: High value GVC commodities of producers? organizations in the target districts comply with market requirements, opening a wider range of market segments and players.

Output 2.3.2: Capacity development program implemented for producers? organizations in the target landscapes on product diversification, processing, value chain management, business planning, quality standards and marketing.

Output 2.3.3: Three innovation platforms established to connect and promote dialogue between value chain actors, leading to the formulation of integrated green value chain (GVC) strategies and action plans at the District level.

Output 2.3.4: Support program for buyer companies implemented, making use of existing business incubator/accelerator initiatives.

Component 3: Effective knowledge management, monitoring, and linkages with the SFM-DSL-IP.

Result Chain	Indicators	Baseline	Mid-term Milestone	Targets	Means of Verification	Assumptions

Outcome 3.1: Framework in place for monitoring and the transfer of lessons learned on LDN to multi-level policies at the national and international levels.	(i) Revised National FLR Monitoring Framework incorporating LDN indicators. (ii) Participatory monitoring systems measuring LDN in place in each of the 3 target landscapes. (iii) # of people reached by the project?s communication and dissemination work.	(i) Incomplete National FLRMF produced in 2017. (ii) No monitoring plans exist (iii) No project communication and dissemination activities at start of project	(i) Set of LDN indicators defined and validated, and process started for their incorporation into the FLR strategy. (ii) Participatory monitoring systems under development in the 3 target landscapes (iii) 100,000 people reached	(i) At least 80% of LDN indicators incorporated in the National FLRMF and monitored in the target landscapes (ii) Participatory monitoring systems under implementation in the 3 target landscapes (iii) At least 500,000 people reached	Reports on capacity development actions. Revised National FLRMF document. Reports, publications, on-line information of monitored LDN indicators under the National FLRMF.	Buy-in and engagement of national and district institutions is secured. Political stability

Output 3.1.1: National stakeholders are trained on LDN M&E to incorporate LDN-related indicators in multi-level policies at national and international levels**.**

Output 3.1.2: LDN monitoring integrated into development planning and monitoring processes at the national and district, traditional authorities and village committees? level.

Output 3.1.3: Information clearing house and focal node for knowledge management on LDN created and operational.

Result Chain	Indicators	Baseline	Mid-term Milestone	Targets	Means of Verification	Assumptions

Outcome 3.2: National and sub-national measures to deliver LDN enhanced through shared collaborative opportunities at regional and global levels.	(i) # of proposals for transboundary and regional initiatives addressing common management challenges in the Miombo-Mopane region. (ii) # of transboundary/regional business initiatives focusing on NTFP value chains. (iii) % of meetings, training and exchange visits organized by the REM attended by Malawi NCP staff, partners and beneficiaries (gender disaggregated).	(i) No actions organized by REM so far. (ii) No actions organized by REM so far. (iii) No actions organized by REM so far.	(i) Regional review and identification of priorities for transboundary and regional collaboration (ii) REM assessment of market analysis and business opportunities for SLM/SFM products (iii) Malawi NCP has attended at least 40% of REM organized activities (at least 1/3 women).	(i) At least 1 proposal designed and submitted to donors by the end of the project. (ii) At least 1 transboundary/regional business initiative. (iii) Malawi NCP has attended at least 85% of REM organized activities (at least 1/3 women).	Minutes of meetings and workshops Strategic papers; Project proposals Market assessments Minutes of meetings/workshops Articles, videos and media footage. Reports from REM events and training. Evaluation reports	GCP/REM partners willing and able to collaborate Good collaboration framework between project/ national authorities/ private businesses and producers GCP/REM developed a rapid response strategy to face possible lock down situations
Output 3.2.1: Actions and investments identified to address transboundary land and environmental degradation priorities in Miombo-Mopane ecoregion and bi-/multi-lateral initiatives strengthened/established to progress towards LDN. **Output 3.2.2**: Collaborative actions to support business and market development for SLM/SFM products across the Miombo-Mopane region undertaken. **Output 3.2.3**: Opportunities for national and landscape-level stakeholders to exchange knowledge, experiences, and lessons learnt at regional and global levels identified, developed and supported.						

[1] NOTE: rating scale 1-4: **Level 1**: (i) National LDN Voluntary targets and LDN-related new policies and strategies (e.g. National FLR Strategy; National Charcoal Strategy; etc) available; (ii) NCCC&DRM established; **Level 2**: (i) NCCC&DRM membership adapted to the LDN policy improvement task; (ii) NCCC&DRM members and sub-national government counterparts aware and knowledgeable on LDN-related policies and legislation; **Level 3**: (i) Capacity of the NCCC&DRM and sub-national government counterparts on LDN mainstreaming into policies developed; (ii) Policy Influencing Plan (PIP) produced and adopted by NCCC&DRM; (iii) at least 4 capacity building workshops (e.g. Policy Accelerators) held; **Level 4**: PIP implemented through (i) at least 4 policy briefs approved by NCCC&DRM and used to advocate for law improvement and/or formulation; (ii) lessons learned from LDN practices in the target landscapes integrated in at least ten sectoral policies and regulations.

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).

STAP comment	Initial agency response	Response at submission
STAP?s overall assessment: Minor issues to be considered during the project design		
STAP would be willing to contribute to the technical steering committee advising on the design and implementation of the global coordination project.	This suggestion is much appreciated. FAO will invite STAP to participate in the technical steering committee.	The Program Task Force (PTF) will be established and chaired by the designated Budget Holder in FAO for the Global Coordination Project. It will be comprised of one representative each from the FAO-COFO Working Group on Dryland Forests and Agrosilvopastoral Systems, IUCN, The World Bank, WWF, and WOCAT. The UNCCD Global Mechanism and **GEF-STAP** will be invited to participate as ex-officio members.

STAP comment	Initial agency response	Response at submission
STAP recommends for the program to build questions into the theory of change by interrogating the rationale and assumptions that underlie the hypothesized sequence of outcomes. For instance, it would be useful for the program to turn these assumptions (defined in the program document) into questions, and contribute to the evidence on drylands: 1) ?They (drylands) must be resilient, adaptive and biologically functional; and; 2) their management must be responsive to landscape configurations and trends over time and capable of generating food, income and services in a sustainable manner.?	The description of the issues listed under paragraph 66 as ?assumptions? was perhaps not completely accurate. As explained in more detail in paragraph 22 and Box 3, these issues (expanded in Boxes 3 to 6) are in fact dimensions of the definition of what constitutes a sustainable landscape. We understand that it is not within the scope of project preparation to test definitions of sustainability, but rather to interrogate whether the barriers listed (under paragraph 67 and in the ToC diagram itself) are in fact the factors that impede achieving sustainability as defined, and whether the attainment of the corresponding proposed outcomes would result in these conditions of sustainability. FAO looks forward to working with STAP during the PPG phase, to improve the ToC as suggested.	The assumptions have been formulated as proposed in the GCP Theory of Change

STAP comment	Initial agency response	Response at submission
STAP recommends that the global coordination project should develop its own theory of change focusing on the scaling and transformative aspects of the program, through multi?stakeholder engagement, with appropriate governance arrangements; this will help to reinforce connections between the program?s stakeholders, and build the trust necessary to embrace the program?s vision ? going beyond the exchange of information.	It is indeed proposed that the GCP will have its own theory of change, given its specific overarching role. During the detailed formulation process of the GCP, emphasis will be placed on ensuring its role in promoting multi-stakeholder engagement, as suggested, proposing in detail the mechanisms through which this will be achieved (including, but not necessarily limited to, relations with the platforms presented in Box 14 of the PFD). This will also be developed in a bottom-up fashion, drawing from the country child project design processes.	The GCP ProDoc now includes a specific theory of change (Figure 6). The relations between the GCP and child projects are summarized in Figure 4, and by the inclusion of a generic child project ToC in Figure 5.

STAP comment	Initial agency response	Response at submission
Additionally, applying resilience thinking will benefit the analysis of trade?offs, and help identify options for adapting, and/or transforming, the program?s impact pathways. STAP recommends two approaches for resilience thinking: 1) Resilience, Adaptation Pathway Transformation Assessment; and, 2) the Scientific Conceptual Framework on Land Degradation Neutrality (LDN?CF). Both approaches will also be useful in assessing potential inter?country or cross?border leakages that may arise from tailored interventions (pg 36). Like the Drylands IP, the LDN?CF is managed at the landscape scale: it relies on multi?stakeholder engagement and planning across scales and sectors, supported by national?scale coordination that should work with and incorporate existing local and regional governance structures. The LDN?CF considers all land types in a geographic intervention area, and their interactions and ecological trajectories. This will allow interventions that avoid land degradation and/or restore/reverse land degradation to be optimized, and unintended outcomes minimized.	Both RAPTA and LDN-CF approaches, which are quite complementary, will contribute to the formulation of the GCP and country-specific child projects. Guidance on these approaches will be provided to country project formulation teams during regional orientation workshops (one in Africa and one in Central Asia) which are proposed at the outset of the PPG phases of the child projects, together with ongoing oversight and support throughout project formulation. Participation of STAP members in these workshops would be very welcome.	In recognition of the importance of applying resilience thinking, FAO has developed an Integrated Landscape Assessment Methodology (ILAM) toolbox for application during the formulation of the child projects, which built on FAO?s Self-evaluation and Holistic Assessment of climate Resilience of farmers and Pastoralists (SHARP) tool, is linked to the LDN Conceptual Framework (LDN CF), as was inspired by RAPTA. The ILAM tool (which is detailed in the GCP ProDoc) was specifically developed to ensure that the six Southern African IP countries followed a harmonized, systematic approach to baseline assessments and project development: methodological guidance on its application was provided to PPG teams from all the IP countries during the orientation workshop in Rome in January 2020, in which STAP representatives participated.

STAP comment	Initial agency response	Response at submission
Finally, STAP recommends that the project team apply the Checklist for Land Degradation Neutrality Transformative Projects and Programmes; this was developed to help country?level project developers and their technical and financial partners, to design effective and innovative interventions, while ensuring consistency and completeness in the implementation of LDN, and the application of the fundamental features of the LDN framework.	As with the RAPTA and LDN-CF approaches, guidance on the LDN Checklist will be provided to country child project developers during the proposed regional PPG orientation workshops. We will be working closely with the UNCCD focal points in DSL countries, as well as with the UNCCD Secretariat.	The checklist has been applied in the formulation of all of the child projects.
Project components: A brief description of the planned activities. Do these support the project?s objectives?		
The project components support the project objective. However, STAP would have supported greater detail in the theory of change to substantiate the rationale underlying the proposed component ? such as detailing the preconditions necessary to reach each outcome.	This additional detail will be provided in the text of each child project document, tailored as necessary to country-specific conditions. The timing and nature of the expression of interest process and development of the PFD precluded greater detail at this stage.	Each child project now includes its own theory of change with accompanying narratives explaining the causal linkages and assumptions/preconditions necessary to reach the proposed outcomes.

STAP comment	Initial agency response	Response at submission
While STAP acknowledges the excellent description of global drivers of land degradation, it is also true that pressures and mechanisms of land degradation are context/geography based (e.g. differing political factors, differing forms of land governance, differing national land use planning systems, and environmental factors). For example, Box 2 of the project exemplifies climate?related pressures that vary according to country. Therefore, STAP strongly encourages the development of a theory of change for each of the child projects. Such TOC should follow the underlying assumptions of the global Dryland IP (e.g. a common vision of what the future would look like, para 66), but be tailored to the political, social, economic, legal and environmental circumstances (e.g. pressures on State Change of Land) of each child project. A TOC for each child project will support delivery of a Component #2, for instance, that focuses on ?creating country specific conditions and capacities for scaling up?. A Theory of Change for each country would also enable effective identification of the tailored, relevant and innovative solutions that the project aims to implement (pg 36 of the project)	As noted above, we agree that each child project will develop its own theory of change to reflect country-specific conditions. An important aspect of overall program coherence and a component of expected long term impact, however, is the expectation that each country ToC will follow the overall logic and approach of the programmatic ToC. Guidance on country-specific ToC development will be provided in the proposed regional PPG orientation workshops.	Each child project now includes its own theory of change that is tailored to the individual conditions, pressures and corresponding responses in each target locality, while following the overall generic logic presented in Figure 5 of the GCP ProDoc.
1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description). Is the problem statement well?defined?		
Note that Kenya is omitted from the description in Box 1, p.6.	Thank you for identifying this error.	

STAP comment	Initial agency response	Response at submission
The rationale for ?presumed drylands? in Fig.2 might benefit from more explanation ? why does seasonal severe aridity warrant treating under drylands given that only one country is included on this basis?	Seasonal aridity, as a dimension of dryness, is a significant constraint on livelihood and productive options in the countries indicated, and the use of total annual rainfall as the sole criterion for dryness misses this. As shown in Figure 2, presumed drylands in fact cover significant areas of three countries: Angola, Zimbabwe and Kenya, which account for a large proportion of the area of miombo and mopane woodlands in the region; the inclusion of these presumed drylands is also of importance for scaling out, given that this category is represented over significant areas of neighbouring countries, especially Zambia and the Democratic Republic of Congo. The precise dimensions of ?dryness? that are of significance in each of the target countries, and their implications and corresponding responses, will be investigated	Country- and site-specific detail on climatic conditions (including the different dimensions of ?dryness?) and their implications has been included in the ProDocs of each of the child projects, including the areas classified as ?presumed drylands?.

STAP comment	Initial agency response	Response at submission
3) the proposed alternative scenario with a brief description of expected outcomes and components of the project. What is the theory of change?		
The theory of change is that by developing capacities on landscape management, and strengthening knowledge exchange across scales, it will be possible to avoid, reduce, and reverse further degradation, desertification, and deforestation of land and ecosystems in drylands. Suggest that each country develops their theory of change with context?specific stakeholders (see justification above). See the table on the STAP criteria for IPs for further comments on the theory of change.	As confirmed above, country-specific ToCs will be developed, with methodological and strategic guidance provided through the proposed regional PPG orientation workshops.	Theories of change are included in the ProDocs of each of the child projects, following the generic ToC model shown in the GCP ProDoc and supported by PPG technical orientation workshops at regional and HQ levels.
In component 1, STAP recommends that countries apply LDN methods for landscape planning. LDN is a participatory land use planning process to avoid land degradation, reduce land degradation, and reverse the productive potential of land.	Noted. This will be included in the guidance provided to the country project development teams.	LDN methodology was applied in the formulation of all of the child projects.

STAP comment	Initial agency response	Response at submission
In component 2, there is an assumption that enhancing farmer?s capacities through farmer field schools will result in transformative change. STAP recommends testing this assumption in the theory of change.	The validity of the assumption will be tested through the country-specific and programmatic M&E systems to be applied during project implementation, which will include appropriate indicators to measure the direct and indirect effects of farmer capacity development. We will also explore the possibility of building in a long-term research exercise in parallel to the Program in order to more thoroughly test this and other assumptions.	As indicated in the initial response, we consider that the most appropriate time for testing this assumption will be during implementation, and specifically at the moment of mid-term evaluation. The M&E systems of the child projects all include indicators both of farmer capacity development and of behavioural change, which will enable the correlations between these to be examined; this will be complemented by qualitative, participatory analyses of the factors determining behaviour and transformative change, for example through focus groups. These analyses will be specifically provided for in the ToRs of the MTEs, with guidance from the GCP. The GCP will include support to PhD research which will provide an opportunity to test this and other assumptions in a detailed and scientifically rigorous way, as indicated in the initial response.
STAP also suggests testing the impact of behavioral change on pro?environment behavior by embedding contextual interventions (e.g. norms, sensory cues) in the project. Influencing behavior may result in more durable effects than training farmers (Byerly, 2018).	Noted. The potential impact of behavioural change will be analysed on a country-by-country basis during PPG.	This will potentially be looked at through future research work, for example through the support by the GCP to PhD research.

STAP comment	Initial agency response	Response at submission
When the country projects are designed and implemented, it is important to remain cognizant that transformational change can be delivered through a series of adaptation interventions that are responsive to change ? and not necessarily only through large?scale interventions.	Noted. The proposed interventions of the child projects will be considered in the light of their potential to generate incremental changes, and the potential scenarios of alternative chains of causality linking such successive incremental changes will be identified and mapped.	Noted: child project M&E systems will be fine-tuned, with advisory support from the GCP, in order to allow them to pick up smaller-scale changes that may cumulatively and progressively lead to larger impacts; again, these causal pathways will be further examined through complementary qualitative and participatory research, for example through the support by the GCP to PhD studies.
For component 3 and in the global coordination project, STAP recommends applying a planning process to specify further the platform?s objectives, define how to monitor the platform?s progress including building?in adaptive management, and describe methods for assessing the quality of multi?stakeholder dialogue-engagement within the platform. These processes will enable the program to identify the platform?s priorities and outcomes, assess to what extent the priorities were met, and determine the quality of the multi-stakeholder process within the platform. If the quality of the multi?stakeholder engagement is robust, the platform is likely to meet its objectives on scaling and transformational change. FAO and the program agencies may wish to consider the following paper: https://link.springer.com/content/pdf/10.1007%2Fs00267?017?0847?y.pdf	Noted. Close attention will be paid during PPG to the definition of optimal structures and strategies for ensuring multi-stakeholder engagement, and the M&E systems of the GCP and country-specific child projects will include indicators designed specifically to measure the effectiveness of engagement in relation to scaling and transformational change.	The PMU of the GCP will include specialists on capacity development, stakeholder engagement and monitoring and evaluation, who together will provide oversight and methodological support to the child projects on how to optimize and monitor the effectiveness of their multi-stakeholder engagement processes. In addition to ensuring that the child project indicators on stakeholder engagement are measured and the results analysed and interpreted effectively, this support may also include the realization of qualitative analyses of the functioning and effects of the engagement processes.

STAP comment	Initial agency response	Response at submission
In addition, the GCP should plan for how the set of stakeholders may need to change during the course of the program.	Agreed, the stakeholder engagement processes of each of the projects will be subject to adaptive management in order to ensure their continued relevance and effectiveness. To this end the stakeholder mapping that will be undertaken during the formulation processes of each child project will be subject to regular review, mostly notably at project inception and mid-term, but also at intermediate (e.g. annual) intervals and at other periods when project strategies may be subject to review and modification. Project participation and oversight mechanisms, including project steering committees, will also play key roles in advising on possible needs for updating stakeholder mapping and engagement strategies.	The approach will remain as proposed in the initial response.

STAP comment	Initial agency response	Response at submission
5) incremental/additional cost reasoning and expected contributions from the baseline, the GEF trust fund, LDCF, SCCF, and co?financing GEF trust fund: will the proposed incremental activities lead to the delivery of global environmental benefits?		
The program identifies key contributions it will make to add value to large?scale programming: innovation and integration; moving to scale; and working effectively. STAP suggests that the country projects should keep these contributions in mind when developing the theory of change, and to assign indicators to monitor whether progress is being made on these conditions.	Noted. This will be discussed in the proposed regional PPG orientation workshops.	On the basis of guidance provided during PPG, all of the child projects include specific provisions in relation to these issues. The GCP and the REMs will provide programme-wide oversight of how these issues are addressed by the child projects, as well as programmatic monitoring (the GCP for example includes indicators of scaling out to non-IP countries).
6) global environmental benefits (GEF trust fund) and/or adaptation benefits (LDCF/SCCF). Are the benefits truly global environmental benefits, andare they measurable?		
STAP welcomes the GEB table, explaining the baseline scenario, the GEF scenario, and the value of projects being part of the IP. It will be important to identify the assumptions and barriers to scaling and transformation in the child projects to reach the stated incremental value.	Although implicit in the explanation in the PFD of the strategies proposed to achieve transformation and scaling out, FAO agrees that it will be necessary to unpack and more explicitly define the assumptions and barriers to scaling and transformation within individual country projects and the GCP.	The assumptions and barriers to scaling and transformation are especially made explicit in the theory of change of the GCP, given the crucial role that the GCP will play in overseeing and facilitating scaling and transformation. What can we say about how child projects are providing for scaling and transformation?
A planning and monitoring process for the stakeholder platform is recommended to continuously track its progress in delivering on knowledge management, capacity, and scaling.	Agreed. This will be defined during the formulation process of the GCP.	The GCP includes indicators permitting M&E and adaptive management of a range of indicators related to KM, capacity and scaling.

STAP comment	Initial agency response	Response at submission
Although the GEBs are stated, the program document does not state the methods that will be used to monitor the GEBs, or to implement adaptive management. Suggest that the country projects should detail the methods that will be used to monitor GEBs, and implement adaptive management as necessary.	GEB indicators and monitoring protocols will be defined on a project-by-project basis during PPG, and taking into account the country-specific nature of the global environmental values and benefits to be pursued.	Metrics and methodologies for monitoring GEBs are specified in each child project ProDoc: as stated in the initial response, some of these are country-specific, but where appropriate and possible they have been harmonized across child projects.
7) innovative, sustainability and potential for scaling?up: Is the project innovative, for example, in its design, method of financing, technology, business model, policy, monitoring and evaluation, or learning?		
Barriers to scaling?up need to be built into the theory of change. It is hard to gauge whether the program will be sustainable, or if there is potential for scaling?up. STAP recommends that the IP develop a separate ToC that focuses on how the impacts will be scaled; although this overlaps with the existing ToC, it will help clarify what is to be achieved in the child projects as opposed to how the value add of the GCP project needs to be activated.	Potential for scaling (?up?, ?deep? and ?out?) is presented in general terms in paragraphs 85-92 of the PFD; FAO agrees however that this analysis, and corresponding strategies (especially under Component 3) will need to be deepened and made country-specific during formulation of the child projects.	Figures 3 and 4 in the GCP ProDoc complement the barriers and assumptions regarding scaling that are set out in the GCP ToC diagram and narrative (paragraphs 51-55). Figures 5 and 6 show how the child projects and GCP will complement each other in delivering transformation and scaling.

STAP comment	Initial agency response	Response at submission
The program is not innovative in its current iteration. It is unclear whether the assumptions that were identified at the beginning of the document will be tested in the theory of change.	Additional clarification on this comment would be much appreciated, regarding the nature and magnitude of the innovation that is required (Section 7 of the PFD ? paragraph 156 and Box 16 ? provides specific examples of innovative aspects of the programme).	Significant areas of innovativeness are explained in GCP ProDoc Section 7 (paras 130-132): specifically, its programmatic, supra-national perspective; its focus on facilitating the delivery of cumulative and synergistic impacts across child projects; and its focus on linking science and practice.
The list also is missing critical assumptions about how scaling and transformation are achieved.	As explained above, the theory of change for scaling and transformation will be re-examined and further developed during the formulation of the child projects.	Please see response to the penultimate point above.
2. Stakeholders. Select the stakeholders that have participated in consultations during the project identification phase: Indigenous people and local communities; Civil society organizations; Private sector entities. If none of the above, please explain why. In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement. Have all the key relevant stakeholders been identified to cover the complexity of the problem, and project implementation barriers?		

STAP comment	Initial agency response	Response at submission
The relevant stakeholders should be involved in the design of the theory of change, at least as the ToCs are elaborated further during the next design phase (see RAPTA Guidelines).	Agreed. Orientation on the development of ToCs and corresponding needs for participation in the process (as proposed in the RAPTA framework) will be provided to child project formulators in the proposed regional orientation workshops; the formulation process of each child project will then include participatory project design workshops in which multi-stakeholder inputs into the definition of key elements of the ToCs will be obtained.	Key stakeholders have been involved in designing the ToCs in each of the child projects, and also in the development of work plans for the operationalization of the ToCs, a process which will continue into their implementation phases.
3. Gender Equality and Women?s Empowerment. Please briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis). Does the project expect to include any gender?responsive measures to address gender gaps or promote gender equality and women empowerment? Yes/no/ tbd. If possible, indicate in which results area(s) the project is expected to contribute to gender equality: access to and control over resources; participation and decision making; and/or economic benefits or services. Will the project?s results framework or logical framework include gender?sensitive indicators? yes/no /tbd Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences?		
Suggest for the country projects to consult a gender specialist when developing the project document, and to mainstream gender into the theory of change.	Agreed.	The child project PPG teams all included gender specialists. All of the child project results frameworks are gender sensitive: the ToCs will also be reviewed at project start, and STAP guidance on mainstreaming gender into them at that stage would be very welcome.

STAP comment	Initial agency response	Response at submission
Where culturally appropriate, the program may wish to look at the Family Farm Teams approach from Papua New Guinea as a possible elaboration to the FFS approach, that specifically addresses bringing women and youth into the decision?making processes of farming families (e.g. see https://colab.aciar.gov.au/genderequity/sites/colab.aciar.gov.au.genderequity/files/2019?02/mn_194_family_teamsweb? updated_4?10?2016.pdf).	Agreed. This will be discussed in the regional PPG orientation workshops. Please note that the link to the reference identified is not working. We would be grateful if STAP could forward a copy of the file.	This suggestion is welcome: the specifics of how FFS will work will be defined in consultation with local level stakeholders during the implementation phases of the child projects, and this model (or elements of it) will be proposed as an option for consideration in these processes.
5. Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design. Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project?s control?		

STAP comment	Initial agency response	Response at submission
Suggest that countries should embed these questions to address risks to climate, when developing the project: For climate risk, and climate resilience measures: ? How will the project?s objectives or outputs be affected by climate risks over the period 2020 to 2050, and have the impact of these risks been addressed adequately? ? Has the sensitivity to climate change, and its impacts, been assessed? ? Have resilience practices and measures to address projected climate risks and impacts been considered? How will these be dealt with? ? What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures? Note: it is logically problematic to assess the risks arising from climate change (or other long?term changes such as population and demography, market demand, technologies, etc) in a conventional risk management sense after establishing the project, since these ?risks? are certain to happen in some fashion and should be part of the initial design rather than post hoc risk treatment. Otherwise the solution space is not open to creating a project that is likely to be robust in the first place. For example, if climate change may undermine local farming practices, then it may be better to promote different practices from the start. Consequently climate risk in particular should be considered in establishing the ToC, not in this risk management section, especially in child projects.	Agreed. The RAPTA framework is an excellent guide for this assessment. Orientation on the consideration of these ?certain risks? in child project design will be provided during the proposed regional PPG orientation workshops, and project formulation teams (together with participating stakeholders) will be requested to address during project formulation the tolerance limits of the proposed dryland management strategies in relation to these risks, and be open to proposing alternative scenarios and strategies accordingly, if necessary.	All of these points have been considered and included in the design of the child projects, as elements of the evolving context within which each project will need to work and to which it will need to respond; and corresponding response/adaptation measures have been defined, the adequacy of which will be subject to continuing review and adaptive management throughout project implementation.
6. Coordination. Outline the coordination with other relevant GEF?financed and other related initiatives. Are the project proponents tapping into relevant knowledge and learning generated by other projects, including GEF projects?		

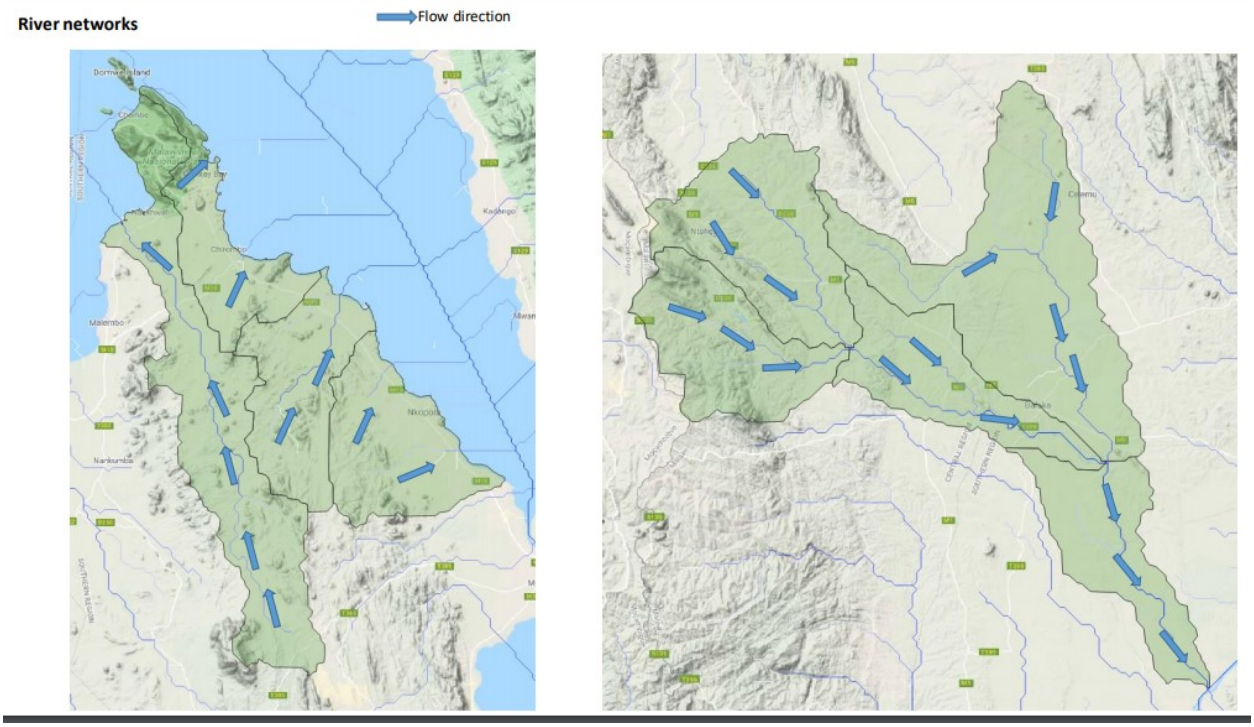
STAP comment	Initial agency response	Response at submission
The program does a good job of identifying initiatives that it can leverage upon. Suggest doing the same in the country projects.	Agreed. The identification of opportunities for partnership and leverage, and the definition of mechanisms for implementing them, will be important tasks during the formulation of each of the child projects, in order to maximise the potential for scale and sustainability of impact.	Partnership opportunities have been explored and identified in all of the child projects, as proposed in the initial response.
8. Knowledge management. Outline the ?Knowledge Management Approach? for the project, and how it will contribute to the project?s overall impact, including plans to learn from relevant projects, initiatives and evaluations. What overall approach will be taken, and what knowledge management indicators and metrics will be used?		
Suggest identifying indicators for monitoring and assessing the effectiveness of the knowledge platform itself in component 3.	Agreed. This will in particular be an important element to consider during the formulation of the GCP.	The indicators under GCP Outcome 2.2 refer to the effectiveness of knowledge management: child projects also include indicators related to KM, as well as country-specific indicators of behavioural change (e.g. adoption of SLM practices). As proposed above in response to the comment on the relations between the development of farmer capacities and the achievement of transformative change, the correlation between KM and behavioural change will be further examined through qualitative analyses of cause-effect relations and research studies (ideally at the time of MTE), both of which will be supported as needed by the GCP.

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

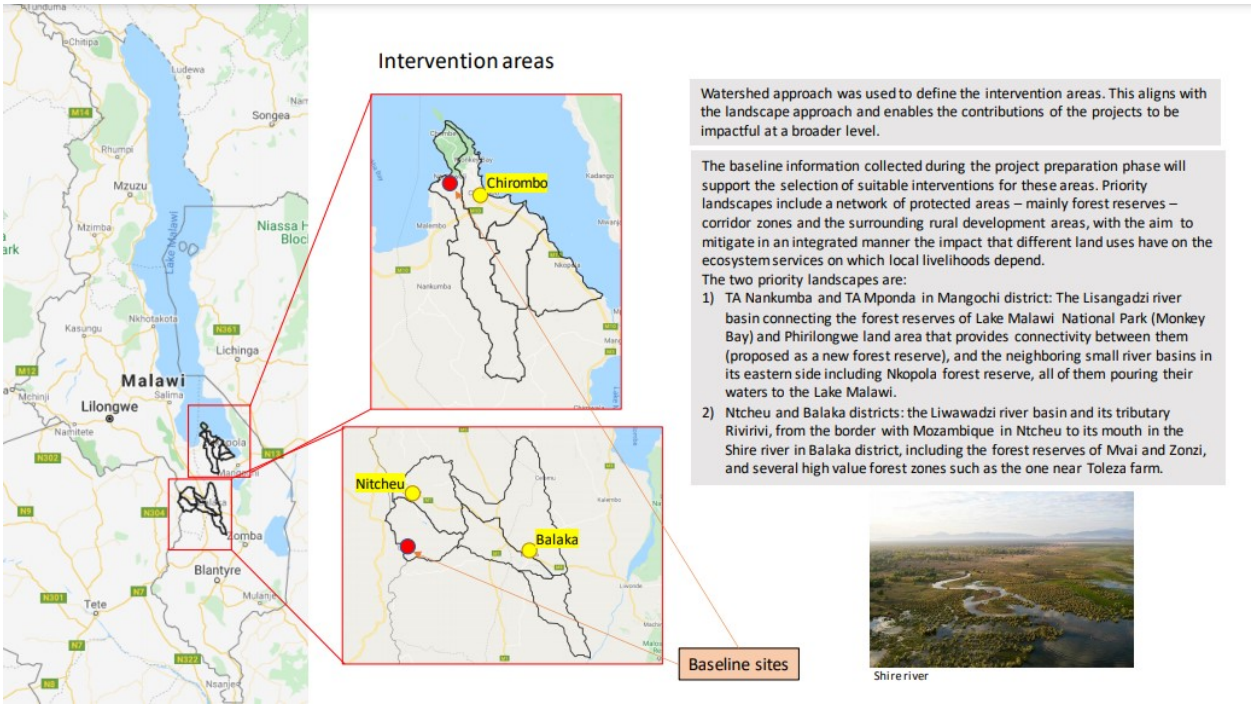
PPG Grant Approved at PIF: USD 200,000			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
(5011) Salaries Professional	9,524	-	9,524
(5013) Consultants	81,680	48,931	32,749
(5014) Contracts	4,000	11,250	(7,250)
(5020) Locally Contracted Labour	3,720	-	3,720
(5021) Travel	60,400	46,323	17,077
(5023) Training	33,502	23,461	10,041
(5054) Expendable Procurement	2,500	2,647	(147)
(5028) General Operating Expenses	4,674	6,727	(2,053)
Total	**200,000**	**139,339**	**60,661**
	1	1	1

ANNEX D: Project Map(s) and Coordinates

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



Intervention areas:



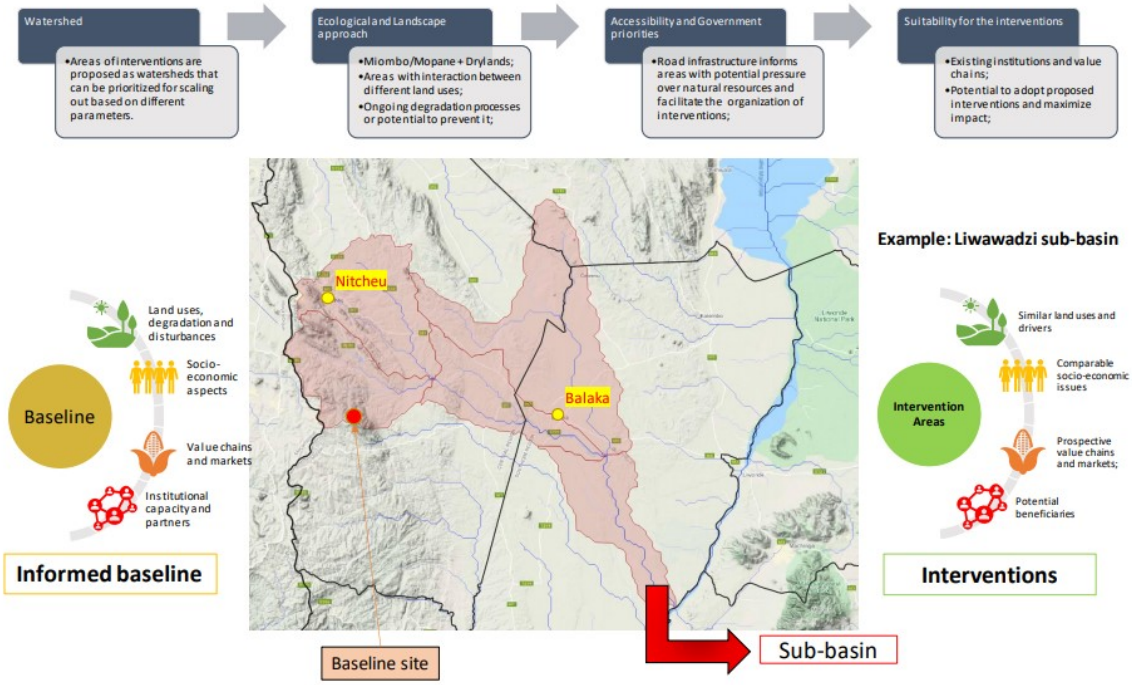
Watershed approach was used to define the intervention areas. This aligns with the landscape approach and enables the contributions of the projects to be impactful at a broader level.

The baseline information collected during the project preparation phase will support the selection of suitable interventions for these areas. Priority landscapes include a network of protected areas – mainly forest reserves – corridor zones and the surrounding rural development areas, with the aim to mitigate in an integrated manner the impact that different land uses have on the ecosystem services on which local livelihoods depend.

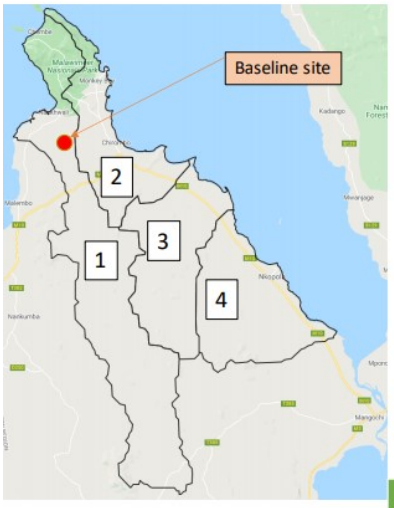
The two priority landscapes are:

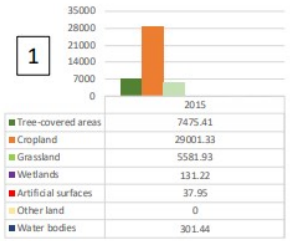
1) TA Nankumba and TA Mponda in Mangochi district: The Lisangadzi river basin connecting the forest reserves of Lake Malawi National Park (Monkey Bay) and Phirilongwe land area that provides connectivity between them (proposed as a new forest reserve), and the neighboring small river basins in its eastern side including Nkopola forest reserve, all of them pouring their waters to the Lake Malawi.
2) Ntcheu and Balaka districts: the Liwawadzi river basin and its tributary Rivirivi, from the border with Mozambique in Ntcheu to its mouth in the Shire river in Balaka district, including the forest reserves of Mvai and Zonzi, and several high value forest zones such as the one near Toleza farm.

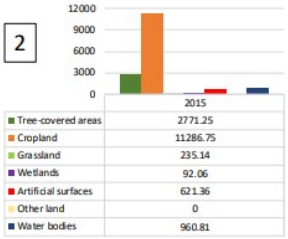
Shire river

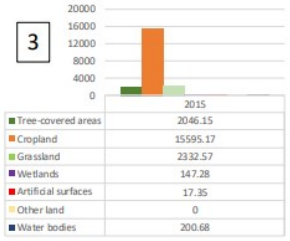


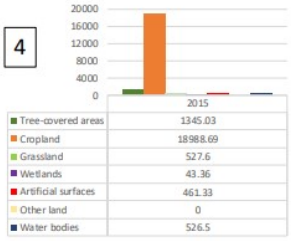
Mangochi area





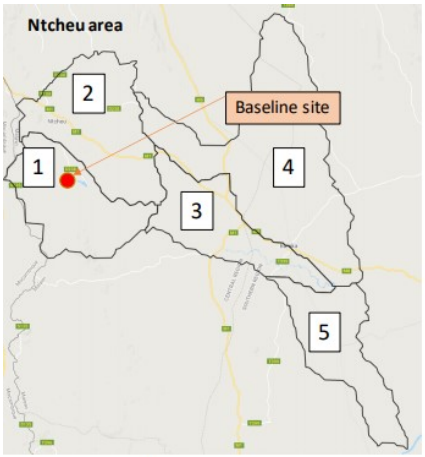


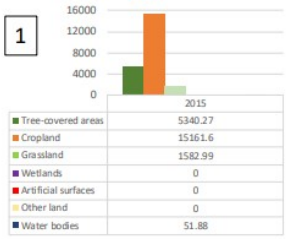


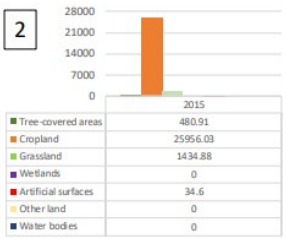


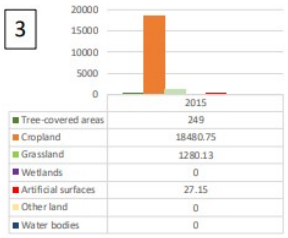
Land cover data source: ESA Land Cover CCI
Tree cover loss data source: Hansen Global Forest Change

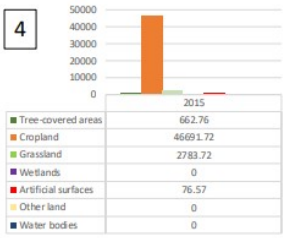
Watershed/ sub-basin	Total Area (ha)	Tree Covered Area (ha)	Tree Covered Area Lost (ha)	Tree Covered Area Gain (ha)	Average Canopy Cover (%)	Tree Covered Area (%)	Tree Cover Loss (%)	Tree Cover Gain (%)
Catchment 1	42,691.11	36,903.77	566.95	1.65	17.41	86.44	1.54	0
Catchment 2	16,026.88	11,545.53	326.18	0.94	13.88	72.04	2.83	0.01
Catchment 3	20,984.72	17,711.16	712.55	0.67	15.26	84.4	4.02	0
Catchment 4	21,972.38	15,138.82	1,248.32	0.45	14.03	68.9	8.25	0

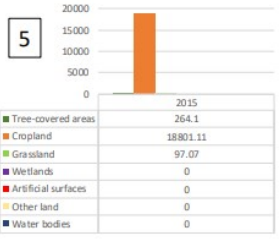










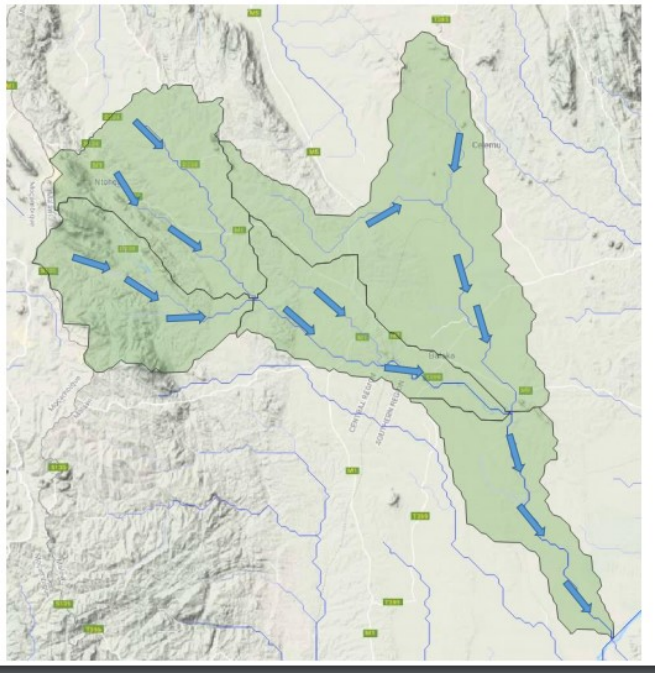


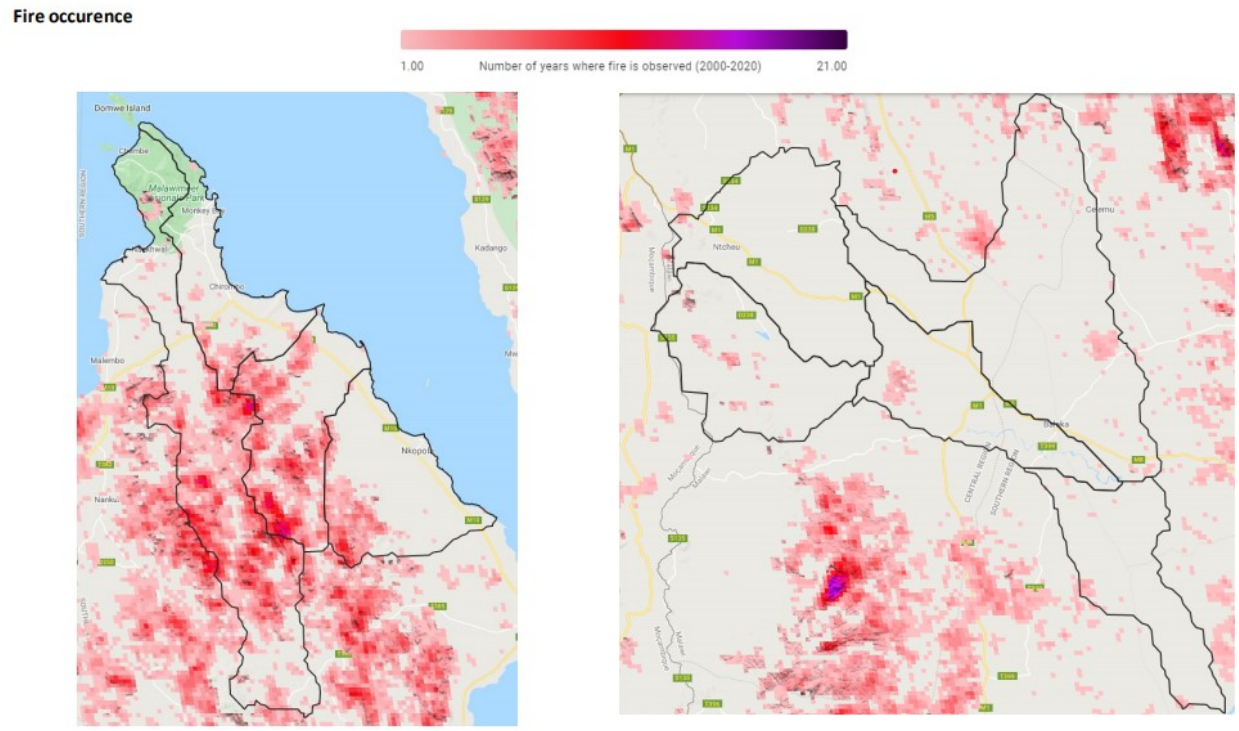
Land cover data source: ESA Land Cover CCI
Tree cover loss data source: Hansen Global Forest Change

Watershed/ sub-basin	Total Area (ha)	Tree Covered Area (ha)	Tree Covered Area Lost (ha)	Tree Covered Area Gain (ha)	Average Canopy Cover (%)	Tree Covered Area (%)	Tree Cover Loss (%)	Tree Cover Gain (%)
Catchment 1	22,217.94	18,616.58	1,090.23	31.96	19.82	83.79	5.86	0.17
Catchment 2	28,007.04	21,247.4	80.93	2.01	12.9	75.86	0.38	0.01
Catchment 3	20,106.79	15,122.99	63.09	0.3	12.74	75.21	0.42	0
Catchment 4	50,405.5	33,474.32	146.44	0	11.35	66.41	0.44	0
Catchment 4	19,234.35	14,407.07	71.67	0.37	12.3	74.9	0.5	0

River networks

Flow direction





Remote sensing analysis:

https://drive.google.com/file/d/1tfGASEldRxCT4DhJezDtxackg2pE7ShP/view?usp=sharing

ANNEX E: Project Budget Table

Please attach a project budget table.

Here is a summary of the budget available in Prodoc Annex A. The full excel sheet is available also a separate document in RoadMap.

Description, Units and Unit Costs	Total Cost per Component and Project Management					Total
Oracle code and description	Component 1	Component 2	Component 3	M&E	PM	GEF
5570 Consultants	64,100	583,000	180,000	241,245	302,000	**1,370,345**
5650 Contracts (MoUs)	232,610	614,440	249,950	77,000	114,610	**1,288,610**
5900 Travel	174,000	609,562	246,438	0	0	**1,030,000**
5023 Training	0	130,000	80,760	0	0	**210,760**
6000 Expendable procurement	0	1,953,951	150,000	0	0	**2,103,951**
6100 Non-expendable procurement	0	316,793	0	0	0	**316,793**
6300 General Operating Expenses	0	0	0	0	30,000	**30,000**
TOTAL	**470,710**	**4,207,746**	**907,148**	**318,245**	**446,610**	**6,350,459**

Itiemized budget:

FAO Cost Categories	Component 1 Total	Component 2 Total	Component 3 Total	PMC	M&E Budget
National Consultants					
Project Coordinator	20,000	80,000	30,000	20,000	
Project Accountant	-	-	-	108,000	
Administrative Procurement and Operations Officer	-	-	-	84,000	
M&E Officer	-		-		108,000
Knowledge mgt and communication officer	18,000	-	90,000		
Ntcheu District coordinator	-	72,000	-		
Balaka District coordinator	-	72,000	-		
Mangochi District coordinator	-	72,000	-		
Ntcheu District project accountant	-	18,000	-	30,000	
Balaka District project accountant	-	18,000	-	30,000	
Mangochi District project accountant	-	18,000	-	30,000	
3 National Consultants for the planning process of ILM Plans	-	128,000	-		
3 National Consultants for the training of master trainers and facilitators for FFS/Forest Learning Groups	-	75,000	-		
National Consultant for PES Project proposal writting	-	30,000	-		
National Consultant to develop community protocols on access and benefit sharing	26,100		-		
Behavioral Change Consultant			30,000		
National Consultant on Green Value Chains			30,000		
Execution Capacity Development Support and ESS monitoring specialist	-	-	-		133,245
Total National Consultants	**64,100**	**583,000**	**180,000**	**302,000**	**241,245**
5650 Contracts					
FFS outscaling support	-	102,000	-		
FFP outscaling support	15,000	87,240	17,760		
CBS outscaling support	-	120,000	-		
Contract with CEPA for Component 1	79,660	-	30,340		
Contract with NGO (Lead Executing Entity in Mangochi District) for Component 2	-	120,000	-		
Contract with NGO (Lead Executing Entity, possibly one for the two Ntcheu and Balaka Districts) for Component 2	-	110,000	-		
Mid-term Evaluation	-	-	-		30,000
Final Evaluation	-	-	-		40,000
Terminal Report	-	-	-		7,000
Annual Audits and spot checks by an international firm	-	-	-	114,610	
Contract with Malawi Bureau of Standards for training of GVC beneficiaries (Component 2, Outcome 2.3)	-	20,000	-		
Contract with WRI for Policy accelerators , ILM Planning and M&E and KM support	137,950	55,200	201,850		
5650 Sub-total Contracts	**232,610**	**614,440**	**249,950**	**114,610**	**77,000**
5021 Travel					
(Lump sum) International travel					
Travel expenses for the NCCC members to attend periodical meetings (Component 1)	40,000	-	-		
Travel Expenses for International study tours for project beneficiaries to visit other countries with best practices	-	3,562	116,438		
Travel Expenses for the Attendance to GCP, REM and SADC meetings	-	-	130,000		
Travel expenses for the Innovation Platform members to attend periodical meetings (Component 2, Output 2.3.3)	-	40,000	-		
National travel					
National Travel for NCCC members (30)	50,000	100,000	-		
National experts to develop Integrated Landscape Management Plans under Component 2	-	30,000	-		
National experts to train master trainers and facilitators for FFS/Forest Learning Groups (Component 2, Output 2.2.1)	-	50,000	-		
National Experts to support the implementation of SLM, SFM and GVC by producers organizations under Component 2	-	80,000	-		
Venue costs inception and PSC workshops (Lilongwe + 3 districts)	45,000	75,000	-		
Events and workshops with village-level actors		60,000	-		
National travel of M&E staff to monitor the implementation of ILMP interventions	39,000	21,000	-		
Workshops with Village-level actors (Component 2, Outcome 2.1) to raise awareness, develop and validate plans.	-	100,000	-		
Workshops with Village-level actors quality control and marketing of green value products	-	50,000	-		
5021 Sub-total travel	**174,000**	**609,562**	**246,438**	-	-
5023 Training					
Training for partner producer organizations (NASFAM, local producer organizations) and buyer companies to business incubator/accelerator programmes	-	30,000	-		
Forest Learning Groups training and implementation of restoration and SFM/SLM activities, FFS training and implementation activities by DAES	-	100,000	-		
Study tours for project beneficiaries to visit other sites in Malawi	-	-	50,000		
Training budget for learning workshops on mainstreaming LDN monitoring needs into FLRMF (Component 3)	-	-	30,760		
5023 Sub-total training	-	**130,000**	**80,760**	-	-
5024 Expendable procurement					
Procurement for Window 1: Inputs for Hybrid FFS/FBS for SLM/SFM and business trainings (Component 2)	-	473,951	-		
Procurement for Window 2 (SLM): Inputs supporting the implementation of the SLM/SFM for LDN and Landscape Restoration.	-	980,000	-		
Procurement for Window 3: Inputs to support producer organizations and cooperatives participating in the targeted GVC commodities (Component 2)	-	500,000	-		
(Lump sum items) Production of Knowledge Management materials (Publications, videos, media news, Jingles, etc)	-	-	150,000		
5024 Sub-total expendable procurement	-	**1,953,951**	**150,000**	-	-
6100 Non-expendable procurement					
Computer, equipment and consumables (including Germplasm packadging and processing material, moisture meter) and GPS for Gene Bank work on assessments	-	201,793	-		
5 vehicles		100,000	-	-	
6 motorcycles including helmets		15,000	-	-	
6100 Sub-total non-expendable procurement	-	316,793	-	-	-
5028 GOE budget					
Office expenses (electricity, water, phone, fuel, etc)				30,000	
(Lump sum) misc. Expenses	-	-	-	-	
6300 Sub-total GOE budget	-	-	-	30,000	-
TOTAL	**470,710**	**4,207,746**	**907,148**	**446,610**	**318,245**

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.

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.

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).