



# GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project  
 TYPE OF TRUST FUND: GEF Trust Fund

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## PART I: PROJECT INFORMATION

Project Title: Reversing Land Degradation trends and increasing Food Security in degraded ecosystems of semi-arid areas of Tanzania			
Country(ies):	The United Republic of Tanzania	GEF Project ID: <sup>1</sup>	9132
GEF Agency(ies):	IFAD (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):	Vice President Office (VPO)	Submission Date:	15 May 2017
GEF Focal Area (s):	Multi-focal Areas	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input checked="" type="checkbox"/>	Corporate Program: SGP	<input type="checkbox"/>
Name of Parent Program	[if applicable]	Agency Fee (\$)	644,037

### A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES<sup>2</sup>

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
LD-1 Program 1 (select) (select)	Outcome 1.1: Improved agricultural, rangeland and pastoral management.	GEFTF	521,790	10,592,360
LD-3 Program 4 (select) (select)	Outcome 3.2: Integrated landscape management practices adopted by local communities based on gender sensitive needs <sup>[SEP]</sup>	GEFTF	521,790	10,592,360
LD-4 Program 5 (select) (select)	Outcome 4.2: Innovative mechanisms for multi-stakeholder planning and investments in SLM at scale <sup>[SEP]</sup>	GEFTF	521,790	10,592,360
BD-4 Program 9 (select) (select)	Outcome 9.1 Increased area of production landscapes and seascapes that integrate conservation and sustainable use of biodiversity into management.	GEFTF	3,727,062	10,592,360
(select) CCM-2 Program 4 (select)	Outcome A. Accelerated adoption of innovative technologies and management practices for GHG emission reduction and carbon sequestration	GEFTF	1,863,531	10,592,360
<b>Total project costs</b>			<b>7,155,963</b>	<b>52,961,800</b>

### B. PROJECT DESCRIPTION SUMMARY

<b>Project Objective: To reverse land degradation trends in central Tanzania and Pemba (Zanzibar) through sustainable land and water management and ecosystem-based adaptation</b>						
Project Components/Programs	Financing Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Institutional capacity building for sustainable land management and	TA	Outcome 1: Institutional capacity in place at district and local village levels to support SLM practices	Output 1.1: Local and district level institutional capacity strengthened in participatory joint land-	GEFTF	1,001,000	10,512,400

<sup>1</sup> Project ID number remains the same as the assigned PIF number.

<sup>2</sup> When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

<sup>3</sup> Financing type can be either investment or technical assistance.

biodiversity conservation at landscape level		and conservation of ecosystem services at the landscape level	use mapping, planning and access; and use regulation in support of SLM, forest conservation and sustainable agro-pastoralism  Output 1.2: Governance instruments in place to support integrated landscape management and SLM practices			
Component 2: Up-scaling of sustainable and climate-smart agriculture, land, water and pastoral management systems	TA	Outcome 2: Reduced land degradation, improved soil health and increased productivity of and income generation from agro-pastoral ecosystems  Outcome 3: Diversified and climate resilient production systems that increase all-season income generation through producer groups and better market linkages	Output 2.1: Farmer's capacities strengthened in experimental learning and adoption of conservation and climate smart farming and SLM practices  Output 2.2: Improved management of dryland agro-pastoral and woodlands landscapes  Output 3.1: Households adding value and accessing markets with a diversified basket of produce	GEFTF	4,994,463	29,552,600
Component 3: Monitoring and assessment	TA	Outcome 4: Improved evidence-base for joint village land-use planning and improvement of ecosystem services and up-scaling at district, region and national level	Output 4.1 Strengthening District and National M&A capacities to document progress in ecosystem services and household resilience and report on GEBs are strengthened  Output 4.2 M&A results and knowledge products available for policy development and decision support for landscape level resources management  Output 4.3 Project is linked to regional program	GEFTF	842,500	10,883,000
Subtotal					6,837,963	50,948,000

Project Management Cost (PMC) <sup>4</sup>	GEFTF	318,000	2,013,800
<b>Total project costs</b>		7,155,963	52,961,800

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

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

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Recipient Government	Vice President Office (VPO)	In-kind	12,403,000
Recipient Government	Mkalama District Government	In-kind	6,442,000
Recipient Government	Nzega District Government	In-kind	8,087,000
Recipient Government	Micheweni District Government	In-kind	6,016,500
Recipient Government	Kondoa District Government	In-kind	6,003,000
Recipient Government	Magu District Government	In-kind	6,010,300
GEF Agency	IFAD	Loans/Grants	8,000,000
<b>Total Co-financing</b>			<b>52,961,800</b>

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

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee <sup>a)</sup> (b) <sup>2</sup>	Total (c)=a+b
IFAD	GEF TF	The United Republic of Tanzania	Land Degradation	IAP-Food Security	894,495	80,504	975,000
IFAD	GEF TF	The United Republic of Tanzania	Biodiversity	IAP-Food Security	1,788,991	161,009	1,950,000
IFAD	GEF TF	The United Republic of Tanzania	Climate Change	IAP-Food Security	894,495	80,504	975,000
IFAD	GEF TF	The United Republic of Tanzania	IAP Set Aside	IAP-Food Security	3,577,982	322,018	3,900,000
<b>Total Grant Resources</b>					<b>7,155,963</b>	<b>644,037</b>	<b>7,800,000</b>

a ) Refer to the Fee Policy for GEF Partner Agencies

<sup>4</sup> For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

## E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>5</sup>

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>9500 hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO <sub>2e</sub> mitigated (include both direct and indirect)	<i>915,247 metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

## F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

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

## PART II: PROJECT JUSTIFICATION

### A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF<sup>6</sup>

<sup>5</sup> Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

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

1) Global environmental problems, root causes and barriers

Tanzania encompasses a variety of ecosystems, which can be categorized as (i) coastal areas, (ii) western plateau, (iii) highlands and (iv) semi-arid areas. The project districts are located in the semi-arid areas (Kondoa, Mkalama, Nzega, Magu) and the coastal areas (Micheweni located on the island of Pemba). Climatic conditions are tropical and the annual rainfall is between 450 – 700 mm of rain per year in a single wet season.

The main obstacles hindering agricultural development include:

- (a) Unreliable rainfall in some regions;
- (b) Limited use of available water resources for irrigated agriculture or complementary irrigation;
- (c) Land degradation, erosion and agro-biodiversity loss;
- (d) Poor access to and low use of resilient plant genetic resources, improved seeds and soil fertility improving measures, leading to large crop and livestock yield gaps;
- (e) Land tenure insecurity and inequitable access to resources due to lack of governance system to manage competition between farmers and pastoralists over resources;
- (f) Weak institutional capacities and institutional fragmentation;
- (g) Under-investment in productivity enhancing practices, such as conservation agriculture and climate-smart practices, limited access to financing for uptake of technologies coupled with weak extension services;
- (h) Emerging challenges for coastal and in particular island areas are salt water intrusion destroying agricultural land.

Land in the targeted districts located in semi-arid areas are highly degraded (65-71% of total land according to visual estimations) and the productive land is becoming increasingly scarce. Invasive species such as sleeper weed (*Lantana camara*) and morning glory (*ipomoea* spp.) are out-competing other more palatable vegetation. Prolonged dry spells are a recurrent phenomenon. Farmers perceive increasing temperatures, which is confirmed by data from the meteorological services stating a country-wide average temperature increase of 0.23°C per decade since 1960. Total annual rainfall over the same period has decreased by 3.3% per decade. Farmers are also reporting a delayed onset and increased intensity of the wet season. These changes and the generally perceived unpredictability of rainfall events cause increased risk of crop failure, amongst others due to poor seed germination and washing away of seeds or crops. Similarly, livestock pastures are decreasing in size and the risk of diseases and parasites is increasing.

Climate change forecasts states that temperatures will increase by 1.0 – 2.7°C by the 2060s. Total annual rainfall on the other hand is expected to increase again in the future, however this will be for a large part attributable to increases in intensity of rainfall in the wet season. Together, the increasing temperatures and higher-intensity rain events would lead to increased drought and flood risks for the target areas.

The coastal district of Micheweni, located on the island of Pemba, has its particular issues regarding natural resources availability and management, and the impacts of climate change. Coastal erosion, salt water intrusion destroying agricultural land, deforestation caused by the need for poles for seaweed farming (an important income source for the local communities), land degradation from sand and brick mining, depletion of near coast fisheries resources are

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<sup>6</sup> For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

<sup>7</sup> For biodiversity projects, in addition to explaining the project’s consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving..

amongst the key concerns of the rural population. While annual rainfall on the island is relatively high at 900 mm/year, the rainfall in the selected wards for project interventions, Kiuyu Maziwang'ombe and Micheweni, is only around 400 mm/year. Improved water use efficiency and eventual shift to less-water consuming crops will be essential to sustain agriculture on the island without depleting freshwater aquifers. Satellite observations show an annual sea-level rise of 3-5 mm/year, which could increase up to 10 mm / year according to climate models.

Because of the fragile ecosystems and the limited productive land available for the various resources users (agro-pastoralists, pastoralists and hunter gathers), the semi-arid areas have particular challenges regarding governance of access and user rights to crop-, pasture- and wood lands and management of the resources on the land. These challenges are often cross village boarders in nature because of rangeland and woodland resources are used by many villages living in the same landscape. At the same time they have to be tackled in an evolving socioeconomic and livelihood context where grazing land is increasingly being occupied with crop production causing conflicts and longer migrations in search for grazing. Customary institutions which used to govern land and water access and use rights are struggling to adjust to these evolving socioeconomic dynamics and are also weakened by the village administrative structure dividing landscapes and focused at settled farmers. The degraded status of land, forest and ecosystem services reflects that these challenges are not being addressed despite Tanzania's Land Policy of 1995 and the Village Land Act No 5 of 1999, which give power to Village Councils to develop participatory village land use plans (VLUP) and, supported by Regulation No. 26-35 of 2002, also grant Village Councils power to enter into joint planning processes and land-use agreements on shared resources with other villages. The Land Use Planning Act No. 6 of 2007 provide for the formation of planning authorities, functions and procedures for the development of VLUPs and the formation of joint village land-use planning authorities. When a participatory joint land-use planning process has been implemented, resources user groups/ associations can be formed and be granted a certificate of customary rights of occupancy and use of the shared land and resources.

Despite this, decentralized and participatory framework has been in place for decades and most districts have a responsible staff for facilitating VLUP processes, few VLUPs have actually been developed and implemented and much less so in the case of joint VLUPs. This is due to various constraints identified by the National Land-Use Planning Commission including: i) lack of financial, human and transport resources to support the formulation process; ii) lack of required investment for their implementation (i.e. water access for livestock and crop land and improved grass on communal grazing land); (iii) weak monitoring and enforcement capacity of village and district authorities; iv) limited capacity to accommodate evolving changes in land uses; and (v) lack of public awareness on the importance of VLUP for conflict prevention and sustainable natural resource management.

## 2) Baseline scenario

The LDFS will build on each district's ongoing rural development programming as operationalized through their local investment and operational budgets . Local governments receive funding from the national government and ministries through core programmes as well as through more targeted projects (including donor-supported projects). The LDFS will build on core operational funding delivered to Local Government Authorities (LGAs) through the departments of land, urban and rural planning, environment, the forestry and renewable energies. The LDFS will also build on more targeted projects, such as:

(a) The Sustainable Rangeland Management Programme phase 3 (SRMP-3), which will build on phases 1 and 2 (2010-2012 and 2012-2014), is funded through IFAD and implemented by MALF and ILRI in the period (2016 to 2020), and will provide co-financing for the LDFS project. The phases 1 and 2 supported one of the first experiences in Tanzania in preparing joint VLUPs in rangelands and the SRMP-3 will aim to develop and demonstrate improved approaches based on the lessons learned (see section D). The LDFS will create synergies with the SRMP-3 and create joint efforts to improve the various lessons learned and practical guidance notes developed under the SRMP I and II. The contribution of the LDFS will in particular be on taking the process all the way to the actual creation or strengthening of resources user groups (rangeland and woodland management groups and water user groups) granted occupancy and user rights and support them in the actual management and rehabilitation of the resources. The SRMP 1 and 2 never really got beyond the land-use planning to the actual joint management of the resources. At the same time

the SRMP 3 will support with best practices in how to form inter-village NRM committees and manage landscape level land use planning processes.

(b) The Dryland Development Project (DDP) for mainland Tanzania is under design under the lead of the MALF and in collaboration with IFAD and is the main IFAD co-financing source of the LDFS project. The DDP will work with livestock keepers, agro-pastoralists and other land users in districts and villages where Phases 1 and 2 of the SRMP secured 'rangeland reserves' as part of joint VLUPs as well as in new districts which have not yet undergone a joint village LUP process. The aim will be to support integrated dryland-based livelihoods including linkages to markets and income generation while providing ecologically sound strategies for resolving conflicts between farmers and pastoralists. The DDP will be designed to build direct geographical synergies with the LDFS project in Kondo, Mkalama, and possibly Nzega. In these areas LDFS beneficiaries will be provided with support from the DDP for market linkages and income generation from dryland products. Methodological synergies will also be created between the two projects on joint VLUP and integrated management of dryland ecosystems increasing ecosystem services and dryland productivity. One of the important synergies between the two projects is the scaling up opportunity the DDP provides for the LDFS. The LDFS project is foreseen to start implementation slightly ahead of the DDP and will as such be able to provide methodologies, approaches and lessons learned that can be picked up and scaled up by the PPD project in a much bigger area of the Tanzanian drylands.

(c) The Marketing Infrastructure Value Addition and Rural Finance Support Programme (MIVARF; IFAD, 2011-2017), which aims to reduce rural poverty and accelerate economic growth on a sustainable basis and is being implemented in all 29 regions of Tanzania (24 regions in mainland and 5 regions in Zanzibar), in a total of 72 districts. The LDFS will build on MIVARF results when selecting climate-resilient commodities for farmers to increase their all-season incomes.

(d) The National Tree Planting and Management Strategy (VPO, 2017-2030) aims to plant and conserve trees all over the country by engaging communities and other stakeholders to improve forest cover. Its specific objectives are to: plant appropriate trees over 185,000 hectares per year over five years (56,000,000 trees per year, or 302 trees per hectare per year); mobilize participation of all stakeholders in tree planting and conservation; mobilize financial resources for planting and management of trees; and strengthen information management system and reporting. The total budget for the Strategy is about US\$ 131.5 million per year and US\$ 2.4 billion up to year 2030, with each district receiving a portion. The LDFS project will complement the national tree planting strategy by promoting a more integrated approach to biomass management, including conservation of indigenous tree species, sustainable land management and a landscape approach that considers trade-offs and co-benefits from forests, crop land and rangeland.

(e) The third Tanzania Social Action Fund (TASAF III, World Bank) aims at enabling poor and vulnerable households, as well as those temporarily affected by short-term shocks to increase incomes and opportunities while improving consumption, thanks to safety net support and the creation of opportunities to take part in livelihood enhancing activities.

In addition, the project will also coordinate with the national investments made under the second phases of the Agricultural Sector Development Program (ASDP-II) and Water Sector Development Program (WSDP-II), both of which are funded through various national and international sources. The project will especially build on the lessons learned from their first phases (see Appendix 3), and will also strive to create synergies within each district with projects on agriculture and land regeneration. Using a participatory land use planning process in which district administrations will play a key role will ensure that LDFS investments are truly complementary to planned and ongoing investments in each site.

Other on-going and future baseline projects:

National initiatives:

(a) The Tanzania's Livestock Modernisation Initiative (TLMI) is a government-led initiative aimed at increasing food and nutrition security and food safety, creating employment and contributing to the national economy, social stability and sustainable environment. The focus of the TLMI is on transforming traditional livestock farmers' livelihoods into a modern, responsive, sustainable and environmentally friendly engine for rural development. LDFS will seek to create synergies between activities planned under Component 2 on supporting pasture management for assisted and natural rangeland rehabilitation to promote resilient indigenous species of grass and shrubs and TLMI's

first key strategic area on rangelands conservation and management (1), which include the following priority actions: village rangeland reserves initiative, rangeland rehabilitation and improvement program, feed improvements, strengthen capacity

(b) The National Engagement Strategy supported by the International Land Coalition, IFAD and a number of NGOs is a strategy used to strengthen existing multi-stakeholder national land platforms and joint strategies for coordinated action into good land governance, which focuses on policy dialogue and coordination.

Other international donors initiatives:

(c) Tanzania Climate-Smart Agriculture Programme (2015-2025) funded by DFID, and coordinated by VPO and MALF and part of the Agriculture Climate Resilience Plan 2014-2019, has six strategic priorities, namely: i) improved productivity and incomes; ii) building resilience and associated mitigation co-benefits; iii) value chain integration; iv) research for development and innovations; v) improving and sustaining agricultural advisory services, and vi) improved institutional coordination.

(d) The Global Climate Change Alliance Program, supported by the EU is for overall objective to increase local capacity to adapt to climate change, by supporting the establishment of a number of eco-villages where adaptation measures are tested in sectors such as agriculture, rangeland management, water management, sanitation and biomass energy. The main activities include climate smart agriculture, water use efficiency, diversification and renewable energies.

(e) The Feed the Future program in Tanzania, supported by USAID through the Global Hunger and Food Security Initiative (2011-2017) is aiming at reducing food insecurity through investments aimed at improving agricultural productivity, improve market access through roads, increased trade through value chain efficiency, supplementary feeding programs.

(f) The USAID Mobile Application to Secure Tenure project (MAST) is currently at the pilot stage in Iringa and Njombe districts to test a new, participatory approach for capturing land rights information, as well as a lower cost methodology for quickly building a reliable database of land rights claims.

(g) The Land Tenure Support Programme (DIFID/DANIDA/SIDA) supports the Government of Tanzania, through the Ministry of Land Housing and Human Settlements Development (MLHSD), to make information on land records and processes of land allocation publicly available, and clarify and address current constraints to protecting legitimate land claims. Ultimately, these measures are expected to strengthen security of tenure, contributing to growth in agricultural production and more and better-planned investment in urban infrastructure, including housing.

(h) The Kilimanjaro Initiative, is a women-led initiative supported by Action Aid-ILC-Oxfam-Care that aims to claim African women's rights to access and control over land and natural resources.

(i) The Land Rights Research and Resources Institute (LARRRI/HAKIARDHI) is a Tanzanian NGO that promotes and ensures realisation of the rights to land through policy dialogue and research and awareness raising at community level.

Other GEF funded initiatives

(j) The project Strengthening Climate Information and Early Warning Systems in Tanzania to Support Climate Resilient Development and Adaptation to Climate Change (2013-2017) funded by the LDCF and implemented through UNDP and the Tanzania Meteorological Agency (TMA). This project aims to provide more technologies to reinforce capacity of the national early warning network to better anticipate and respond to extreme climate events.

(k) The upcoming Ecosystem-based adaptation for Rural Resilience in Tanzania (2017-2021), funded by the LDCF will be implemented by VPO and UNEP and aims to improve stakeholders capacity to adapt to climate change through ecosystem-based adaptation approaches and undertake resilience building responses and strengthen information base on ecosystem-based adaptation to support an up-scaling strategy.

### 3) Alternative scenario

The project's goal is to improve food and nutrition security in the targeted villages and the development objective is to reverse land degradation trends in central Tanzania and Pemba (Zanzibar) through sustainable land and water management and ecosystem-based adaptation.

To achieve its objective, the project is structured into three inter-related components: Component 1 will set the enabling conditions for sustainable land and water management at landscape level sustaining ecosystem services and enhancing



food security. It will strengthen institutional capacity at inter-village and district levels and establish inter-village committees with the goal of developing landscape level inter-village participatory resources and livelihood diagnostics and land use planning processes to foster an integrated and holistic management of natural resources. Component 2 will support the implementation of sustainable land and water management priorities, conservation farming practices, rehabilitation and sustainable management of rangeland and wood land resources, and income generating activities agreed within said plans. Component 3 will focus on monitoring and assessing the progress in sustaining ecosystem services, household resilience and food security. Based on assessment results Component 3 will also support incorporating lessons learned in local and district level natural resources governance systems and contributing to the continuous improvement of the landscape level approach to natural resources management, supporting integration of best practices in policy making at the district, regional and national levels.

The project area covers the semi-arid agro-ecosystem of five districts including Kondo, Mkalama, Nzega, and Magu in Mainland Tanzania and Micheweni in Zanzibar (Pemba Island). In each district the project area covers one or two wards with two or more villages (in total 22 villages) sharing the same resources in a landscape. The estimated population in the five districts is 1.9 million people, or about 247,000 households. The total population of selected villages is over 69,000 individuals, the project's interventions will reach 30,000 direct beneficiaries, and will turn 9,000 hectares into conservation and climate-smart farming and sustainable management, as well as 500 hectares of degraded land into reforested area. Table 2 in the PDR (para 32) provides current land-uses linked to production systems and estimated areas within these land-uses targeted by the project for SLM and biodiversity conservation. Three sub-groups of beneficiaries have been targeted, namely food insecure subsistence smallholder agro-pastoral farmers; mostly food secure subsistence smallholder agro-pastoral farmers and market oriented agro-pastoral farmers (see Section A.3. Stakeholders for more details).

**Component 1: Institutional capacity building for sustainable land management and biodiversity conservation at landscape level.**

With the support from the National Land Use Planning Commission and relevant line ministries Component 1 will build capacity of customary, village and district institutions in natural resources management and joint village land-use planning at the landscape level. This will support the development of climate change adaptation capacities and mainstreaming of sustainable land and water management and biodiversity conservation practices among selected village communities sharing the same resources.

**Output 1.1: Local and district level institutional capacity strengthened in participatory joint land-use mapping, planning and access, and use regulation in support of SLM, forest conservation and sustainable agro-pastoralism.**

This output will support the establishment of inter-village natural resources committees building on and reviving customary institutions, where possible. The committees will be facilitated by district staff and integrate elected representatives from villages and groups using shared resources within a landscape (water, crop and pasture land and forest resources). This output is based on geographical targeting. Through an initial mapping, all resources users of the landscape will be identified including settled as well as migratory users. Based on this mapping it will be assured that village and group representatives integrated in the inter-village NRM committees are representing and giving voice to all resources user groups (agro-pastoralists, pastoralists, hunter-gatherers) and meaningful consultation processes are followed to reach informed consent on joint VLUP and priority actions to be implemented under component 2. In addition, to support conflict risk management and inclusion of all voices and needs a conflict-sensitive approach within the landscape approach will be adopted and a grievance mechanism will be promoted to receive and facilitate resolution of concerns of the various resource users will also be agreed and established under the committee. All three project target subgroups should also be represented in the committees with at least 80% coming from households in the food insecure and the mostly food secure subsistence agro-pastoral farmers subgroups. At least 30% should be women and 30% should be young (<35 years old). The quota of women in leading positions within the inter-village NRM committees should be at least 30%.

A review of existing village plans, customary institutions and community organizations, village level committees, training needs and priorities will be conducted to identify already existing resources user and management groups that

the joint VLUP process can build on to avoid creating yet another layer of village organizational structures. Committee members, district and village staff, and communities involved will be trained to address gaps and needs identified and building on the lessons learned and proven models developed under the SRMP 2 project and other joint village resources governance and landscape management experiences in Tanzania. The training will cover: (i) awareness raising on the benefits of joint VLUPs; (ii) climate change effects and related vulnerabilities and adaptation strategies building resilience; (iii) participatory diagnostic and mapping of natural resources and their use in different livelihood activities and the linkages to landscape level dynamics and sustainable ecosystem services; (iv) inclusive consultation processes leading to consent through joint village participatory land-use planning and use regulation building on customary institutions and agreements and supporting sustainable land and water management and biodiversity conservation; and (v) options for biodiversity conservation and sustainable land and water management and conservation farming practices and technologies. The training will as much as possible use the learning-by doing approach and be delivered by relevant sector ministries and service providers including NGOs and research institutions. Through quotas the different groups of trainees (community members, village and district staff) should include at least 80% coming from households in the food insecure and mostly food secure subsistence agro-pastoral farmers subgroups, at least 30% should be women and 30% should be young (<35 years). When present as resources users in the landscape hunter gatherers and pastoralists should also be included. Training approaches increasing women's and youth participation will be implemented (for further detail see Appendix 2).

Output 1.2: Governance instruments in place to support integrated landscape management and SLM practices. Based on the participatory landscape diagnostic and mapping of resources and their use for livelihood activities conducted as part of the capacity building under output 1.1, the output 1.2 will support the participatory development of joint VLUPs, the implementation of which will be supported by component 2. The development of the plans will be supported by the Tanzania National Land Use Planning Commission's Guideline for Village Land Use Planning, Administration and Management (2013) also taking into account the complements developed under the SRMP 2 project for joint village land-use planning to reach landscape level management capturing shared resources governance issues. The joint VLUPs will include land-use zoning, resources access and use regulations by different user groups building on existing bylaws and governance systems, adjusted and complemented as needed, and granted certificates to established user groups of customary rights of occupancy and use. The joint VLUP will also identify and prioritize areas for land and vegetation cover rehabilitation and biodiversity conservation and identify technologies and sites for rainwater harvesting, infiltration for aquifer recharge, and soil conservation. Finally, the joint VLUP will give recommendations for conservation and climate smart farming practices suitable for the farming systems in the landscape. The plans should have a simple monitoring system managed by the local stakeholders with indicators allowing for following the progress and outcomes of the implementation of the plan for future iterations of the planning process. Indicators used should monitor the progress in increased ecosystem services food security and income disaggregated by different resources user groups (the three project sub-target groups, pastoralists and hunter-gatherers where applicable). This monitoring will be supported by Component 3.

Component 2: Up-scaling of sustainable and climate-smart agriculture, land, water and pastoral management systems. This component will support the implementation of the actions prioritised in the landscape level inter-village land-use plans developed and agreed by the inter-village NRM committees in Component 1. The component will support the sustainability of ecosystem services and food and nutrition security in five focus areas: i) conservation agriculture and other climate smart agricultural practices; ii) rain water harvesting and micro-catchment management; iii) sustainable rangeland management; iv) tree nurseries and sustainable woodland management; and v) income generation activities and linkages to markets for sustainably produced and climate-resilient commodities. Conservation of habitats sustaining drylands biodiversity will be an integrated activity in rangeland, woodland and micro-catchment conservation and management. The component will apply the FFS experimental learning approach for delivering capacity building and strengthening of NRM groups as well as gender and youth sensitive strategies to insure that at least 30% participation of women and 30% participation of youth in the different thematic FFS groups. This will be ensured through the community-led methodology of Gender Action Learning System (GALS) to be applied to FFS and with emphasis on generating benefits particularly relevant for women and youth.

Output 2.1: Farmer's capacities strengthened in experimental learning and adoption of conservation and climate smart farming and sustainable land and water management (SLM) SLM practices.

The Farmer Field School (FFS) approach, tested and proven in Tanzania, will be used as a delivering mechanism for the adoption by farmers of conservation and climate smart farming practices, permaculture and landscape level SLM. The field schools groups will not only be for crop farmers but also be established for water and catchment area, rangeland and woodland management building as much as possible on existing village and joint village NRM groups and customary institutions. The FFS approach builds experimental learning skills among farmers and a farmer-to-farmer learning and exchange environment. It will be supported by: i) on-farm or in the landscape experiments, validation studies and demonstrations of conservation farming and SLM practices; ii) on-farm or in the landscape adaptive field trials; iii) field days, farmer exchange and exposure visits; and iv) classroom-based training session.

Building FFS organisational structure. The effective deployment of the FFS approach requires an organisational structure with adequate human resources as well as a step-wise procedure. In the context of LDFS the proposed structure consists of: (i) Project Coordinator and selected District Officer playing the role of Focal Persons for the FFS at national and district level respectively; (ii) FFS Master Trainers; (iii) FFS Facilitators; and (iv) Lead Farmers. An international FFS master trainer will be contracted to train national master trainers from the MALF and focal points from the five districts, who will again train FFS facilitators working with lead farmers, selected by the different FFS groups, in facilitating and leading the FFS groups and sessions.

Development of Curricula. Building on previous experiences, the WOCAT SLM database and the Compendium of Best Practices for Sustainable Land Management in Tanzania (VPO, 2014), four general curricula will be adapted from existing curricula for FFS covering four of the five main areas of support of the component: i) conservation agriculture and other climate smart agricultural practices; ii) rain water harvesting and micro-catchment management; iii) sustainable rangeland management; iv) tree nurseries and sustainable woodland management. Further, the FFS groups can be the starting point for the creation of small producer groups and cooperatives for income generation and linking to market supported under output 3.1. The FFS curriculum will in each target area be adapted from the four general curricula through a consultative process in which both farmers and facilitators have a say. Whereas the former will largely articulate problems and bottlenecks experienced in current farming, land and water management practices, the latter should promote innovative and sustainable farming (i.e. climate smart agriculture, conservation agriculture and permaculture), land and water management practices as well as other relevant topics that are beyond the farmers' current knowledge, such as integrated pest management, but fit with the overall transformation of the farming system. All FFS curricula will include basic nutrition education.

Output 2.2: Improved management of dryland agro-pastoral and woodlands landscapes

Thematic natural resources user and management groups will be strengthened or formed in the four main areas of support of this component mentioned above and supported through FFS. Some of these groups will be inter village according to the needs identified and actions prioritized in the joint VLUPs and the granted certificates of customary rights of occupancy and use. Recognising that the main objective of the conservation and climate smart agriculture and water management FFS is to increase the production and food security, at least 80% of the beneficiaries participating in the FFS groups should come from households in the food insecure and mostly food secure subsistence agro-pastoral farmers subgroups. Considering that the beneficiaries participating in the rangeland and woodland thematic groups will mainly be defined based on resources users, the project will not put a quota for the participation of the three target subgroups for these groups. However, the targeting of the joint village planning process in component 1 will insure that vulnerable groups, hunter-gatherers and pastoralists are participating when applicable and their access to resources is taken into account. The subgroups of food insecure and mostly food secure subsistence agro-pastoral farmers would have a high participation since they represent more than 80% of the population using the landscapes.

FFS on conservation agriculture and other climate smart agricultural practices. Farmers will do experimental learning and sharing and select most locally suitable practices in: contour bounds and other land erosion physical prevention

measures; conservation agriculture (minimum tillage, soil coverage and/or rotational farming); integrated soil fertility management (mulching, green manure and manure from livestock, crop rotation and intercropping and agroforestry with multiple benefit species for soil fertility, livestock feed, and fruits and wood harvesting); integrated pest management; climate smart practices (diversifying and incorporating better adapted drought tolerant and short cycled crop varieties and adjustment of cropping calendars to climate variability spreading risks); and where appropriate, permaculture. The selection of varieties will include consideration of agro-biodiversity and the in situ conservation of productive landraces.

FFS on rainwater harvesting and micro-catchment management. Water user FFS groups will also receive technical assistance and input (material and equipment) support for rainwater harvesting and management using charco and small earth dams for livestock and vegetable production and in some cases micro supplementary irrigation schemes implemented with the support from the Ministry of Water. The water management will include: access and use regulation to avoid livestock causing degradation of the dam and surrounding grazing areas; agreed plans for operation and yearly maintenance removing silt; and conservation of the catchment establishing water source and biodiversity conservation areas and planting or facilitating regeneration of vegetation cover. Where possible, opportunities for fish farming in the pounds will be pursued using the successful experience from the now finalized Climate Change Adaptation Regional Project co-financed by the LDCF.

FFS on tree nurseries and sustainable woodland management. With the support from the National Tree Planting Strategy, the Ministry of Natural Resources and Tourism and the district extension staff, woodland management groups will receive technical assistance and inputs for the establishment and operation of community tree nurseries to improve local seedling supplies. They will also be trained in woodland management including sustainable harvesting, forest habitat and biodiversity conservation and tree planting for establishment of woodlots or rehabilitation of woodland combined with natural regeneration using a mixture of multi beneficial native tree species such as Acacia gum providing poles for construction, firewood, fruits nuts and animal feed through sustainable harvesting. The areas for wood lots and wood land rehabilitation will be the ones identified and agreed upon in the landscape level land use plans because of their importance for reversing land degradation and increase soil and biomass productivity, hydrological regulatory functions, and biodiversity conservation.

To reduce the pressure on woodland resources, biodiversity habitats and CO<sub>2</sub> emissions, the villages will also be trained in the use of energy-efficient cook stoves reducing women unpaid labour. These will not only use less charcoal or firewood compared to traditional stoves, but they will also reduce the burden on women for collecting firewood and improve indoor air quality, hence reducing impacts on health. Young promoters will be trained in the construction and maintenance of the efficient stoves. For demonstration purposes alternative energy solutions will be supported for local institutions such as schools and health clinics. Support will be given to established local input supply and building maintenance capacities.

FFS on sustainable rangeland management. With the support from the MALF and district extension staff rangeland management groups will also be strengthened or established and receive technical assistance in different rangeland management practices including stocking balancing, assisted and natural rangeland rehabilitation and conservation of rangeland biodiversity, and the enforcement of no grazing zones in the rainy season for building fodder buffers for prolonged dry periods. In this regard the Ngitiri indigenous practice already used in semiarid areas in Tanzania regulated by bylaws will be supported eventually complemented by pasture improvement measures. “The system involves setting aside land ranging from about 0.5 ha of degraded cropland and rangeland in the case of individual ngitiris to 500 ha for communal ngitiris. These areas are restricted of any livestock and crop production during the rainy season thus allowing vegetation regeneration. Once vegetation has regenerated after the rainy season, Ngitiris are then used for grazing as standing hay, during the periods of acute fodder shortage in the months of August to October.”

Output 3.1: Households adding value and accessing markets with a diversified basket of produce.

This output will be implemented after the second project year to support the beneficiaries in the processing and access to markets for crop and livestock products, as well as for non-timber forest products (NTFP) from sustainable managed

landscapes, with the aim of increasing all-season income generation. As a result of the targeting strategy applied for the implementation of outputs 2.1 and 2.2 to progress farmers towards market participation maturity, output 3.1 will primarily target mostly food secure subsistence agro-pastoral farmers and market-oriented agro-pastoral farming households. When the Food insecure households will start to see production yields improvements, these will also be offered the support of this output to facilitate their access to markets through producer groups which can be mixed with participants from all three subgroups. Targeting strategies will be applied to include women (>30%) and youth (>40%) in the producer groups and ensuring their access to generated benefits.

Business Coaches will provide trainings on post-harvesting and market linkages on crop, livestock and non-timber forest commodities identified through a viability and feasibility assessment, including financial and commercial aspects. The viability and feasibility assessment will be conducted by the PCU, the DFTs together with the relevant community members.

Producer groups established as a results of FFS under output 2.2 will receive training to build their capacities in e.g. organisational strengthening, reduction of post-harvest losses, processing and packaging, accountant, marketing and small business planning and management. Each producer group will be supported in the development of their business plans and receive small inputs for its initial implementation. The small production activities could include beekeeping, processing traditional medicine from plants and trees, NTFPs such as wild fruits mwani (aquatic medicinal plants) farming, mat and basket making. For the drylands agro-pastoralists and pastoralists there is a particular opportunity for income generation by improving livestock marketing. Support options in this respect will therefore be explored in close collaboration with the IFAD funded MIVARF project including following the models such as the Market Access Company (MAC) in Kenya which offers market access and Transaction Security Services (TSS) to pastoralists .

### Component 3: Monitoring and assessment

This component will build the capacities of and support district staff and Inter-village NRM Committees in adopting monitoring and assessment (M&A) tools for evaluating and documenting progress in improving ecosystem services and household resilience to climate variability and change and the benefits to food security of the targeted villages. The tools will serve as decision support for the landscape level NRM through the inter-village committees and future iterations of joint village land-use plans. They will strengthen the evidence base for upscaling of successful landscape level SLM models and practices to other districts and regions. They will also allow for reporting on the achieved global environmental benefits (GEBs) of the project and as such contribute to the IAP-FS monitoring and evaluation of programme level achievements and comparing results with other IAP-FS child projects.

Output 4.1: Strengthening District and National M&A capacities to document progress in ecosystem services and household resilience and report on GEBs are strengthened.

Monitoring of ecosystem services in Tanzania is not systematic at district level and it is largely based on visual perceptions. Data collection, analysis, storage and retrieval can be challenging because of: i) inadequate funding, ii) lack of training and instruments to measure key parameters and establish functional databases (for example in the use of remote sensing and GIS analysis, training on data capture and management), and iii) shortage of frontline staff. The District level structures for monitoring and reporting are present but require support to work effectively.

Building on existing capacities at national and district levels, the IAP-FS includes adding an assessment dimension to the conventional M&E with focus on documenting progress in improving ecosystem services and resilience and the linkages to increased food security for the target population. To this end, the assessment tools offered under the IAP-FS and supported by programme partners include the GEF tracking tool for the IAP-FS programme, the Land Degradation Surveillance Framework (LDSF) supported by ICRAF, and the Ex-Ante Carbon Balance tool (EX-ACT) for calculating project carbon benefits developed by FAO and widely used by IFAD and partners.

In addition, the household resilience to climate variability and change will be monitored through a resilience scorecard tailored to the project's outputs . A household is more resilient if more answers to the following questions are positive: 1) have one or more household members participated in the formulation of joint village land-use plan?; 2) is at least one family member participating in a FFS or a producer group, that has increased household production and/or incomes?; 3)

has the household adopted a climate-smart production system including measures for the sustainable management of soils and water in at least 1/4 of its cultivated land?; 4) has the household access to a secure water source (rainwater harvesting and micro supplementary irrigation) for at least 1/5 of its cultivated land?; 5) in the last years has the family used weather forecast information to take decision on crops and varieties to cultivate and time of planting?; 6) does the family have access to a renewable energy source for household and production needs?. The questionnaire will be applied at project start up, midterm and end. The scorecard questions may further be supported by the application of the IFAD Multidimensional Poverty Assessment Tool (MPAT), which is also household based and includes questions designed to capture climate adaptation capacities and covers food security.

Under this output relevant line ministries, district staff and members of inter-village NRM committees and the different NRM groups will be trained in the application of these M&A tools to assess and monitor the project performance and sustain the use of the tools for decision support after the end of the project.

Output 4.2: M&A results and knowledge products available for policy development and decision support for landscape level resources management.

Districts and the members of the different village and inter village NRM groups will be supported in implementing the M&A tools establishing the baseline at project start up and assessing progress at midterm and the end of the project.

The Land Degradation Surveillance Framework (LDSF) is built around a hierarchical field survey and sampling protocol using 5 sampling areas of 10 km by 10 km one for each of the 5 project sites. The data collection at plot-level is based on a modification of the FAO Land Cover Classification System (LCCS), and includes information on slope and landform, vegetation cover types and strata, land use, land ownership and primary current use. Other information collected includes presence/absence of soil and water conservation structures.

In each sub-plot, signs of visible erosion/degradation are recorded, together with rock/stone/gravel cover on the soil surface. Both woody and herbaceous cover ratings are made using counts, distribution and density, texture and depth recordings, and a vegetation rating scale is used from 0 (bare) to 5 (> 65% cover). High resolution satellite imagery will be acquired for sampling sites and used to develop predictive models using the data collected for the generation of high resolution maps of soil condition, vegetation cover and land degradation risk factors for these sites to assist with the national baseline assessments of land degradation/erosion, vegetative cover and soil carbon.

The Ex-Ante Carbon Tool (EX-ACT), developed by FAO will be used for monitoring carbon benefits of the project. The EX-ACT is a land-based accounting system to estimate the impact of agriculture and forestry development projects on the carbon-balance. It estimates carbon stock changes. The tool helps project designers to estimate and prioritize project activities with high benefits in economic and climate change mitigation terms. It is mostly used at project level, but can be used for policy analysis and to advocate for more environmentally friendly approaches to food security. EX-ACT uses default values for mitigation options in the agriculture sector based on land-use, such as forest cover, vegetation type, current agricultural management systems, and degree of land degradation. The EX-ACT tool can be informed by the data generated by the LDSF monitoring exercise.

Based on the data generated and analysed knowledge products will be developed for decision support and up scaling of landscape level planning and NRM in policies and investments. The project results will generate broader lessons on how the landscape level land use planning and governance and conservation practices regenerate improved ecosystem services and food security through specific strategies for improving farmer's adoption rates and gender equality and involvement of youth. As such the project results will also contribute to the implementation of the SRMP-3, the Dryland Development Project and the National Tree Planting Strategy and other supportive policies, and identify where harmonisations may be needed and where the remaining gaps may be. Tanzania is in an on-going process of reforming its land policy which gives the LDSF an opportunity to offer practical experiences and identify bottlenecks in the current framework and efficient entrance points for sustainable land use planning and natural resources management at a joint village landscape level. To maximize the project results, emphasis will be placed on developing case studies and individual stories as well as reporting on quantitative results. The underlying premise is that with better awareness of the

agro-ecological connections, the importance of joint participatory planning, governance and management processes, and practices leading to increased productivity and access to food, this should provide a motivation to upscale investments in ecosystem approaches.

#### Output 4.3 Project is linked to regional program

Under this component, the PCU and project beneficiaries at the district, region and national level will link this project activities and results to the regional GEF IAP-FS programme in order to exchange knowledge and lessons learnt on best practices with the other 12-country participating in the programme, by participating in IAP-FS programme meetings.

Each country project has committed to participating in the peer-peer applied management opportunities which are an integral part and distinct feature of this program, and which will be cost shared with the cross-cutting coordination and applied knowledge management and capacity building “hub” project. Countries will not only participate in, but also host site visits in village and communities on specific themes of interest to exchange knowledge and lessons learned among the 12 countries.

#### 4) Incremental / additional cost reasoning and expected contributions from the baseline

##### Outcome 1:

**Baseline scenario:** In the baseline scenario, institutions at the local level do not have the capacity to support sustainable land management practices and conservation of ecosystem services at the landscape level. Resources are used without considering environmental feedback among ecosystems services at a larger scale than the village scale. For instance, building a water reservoir in one village may result in negative impacts in the neighbouring village downstream.

Local government budgets often fail to provide sufficient resources towards addressing environmental degradation and concerns, resulting in an imbalance between development sectors. In addition, legal frameworks at local level are often inadequate to support the sustainable management of resources, resulting in a lack of enforcement of national policies. In addition, current land use planning frameworks only happen at village level and do not necessarily include environmental services, leading to a disregard for the degradation of the production base.

**GEF alternative scenario:** The GEF project will be used to address these barriers at the local level by integrating several villages located within the same landscape to share resources through landscape level joint-village participatory land use planning. Inter-village natural resources committees will be established among at least two neighbouring villages and will include community members, local government staff as well as civil society organization and NGOs. Training will be provided to ensure that committee members as well as district officials, village staff and communities have the skills to map different land uses, recognize ecosystems services, identify biodiversity hotspots and solve potential conflicts over resources.

The project will also work with communities and local governments to raise local awareness of the links between food security and sustainable natural resources management.

##### Outcomes 2 and 3:

**Baseline scenario:** In the baseline situation, efforts at addressing food insecurity have had mitigated success due to the widespread lack of technical capacity for sustainable production among communities and extension services, and have been undermined by climate shocks in the past few years. In addition, increasing population pressure, high poverty rates and unsustainable management practices contribute to a loss of cultivable land and grazing land. Land degradation and deforestation further accelerate biodiversity loss, leading to the disappearance of habitats for key flora and fauna. Scarcity of water and energy resources impact communities in sustaining their livelihoods, especially women who spend high amounts of time fetching water and firewood for domestic use. Water scarcity for agriculture is also an issue, with a more variable onset of wet seasons and longer dry periods. The lack of knowledge and practical skills on natural resources management amongst government staff and farmers hinders the introduction of more sustainable NRM practices at the landscape level.

GEF alternative scenario: In the GEF alternative scenario, GEF funds will support the implementation of sustainable land and water management priorities, conservation farming practices, rehabilitation and sustainable management of rangeland and wood land resources, and income generating activities. The GEF project will build capacity of both farmers and government staff through the introduction of Farmer Field Schools in four different themes, for which the curriculum will be tailored to the communities' needs, namely, FFS on conservation agriculture and other climate smart agricultural practices; FFS on rainwater harvesting and micro-catchment management; FFS on tree nurseries and sustainable woodland management; and FFS on sustainable rangeland management. In addition, producer groups established as a results of thematic FFS, will receive training to build their capacities on organisational strengthening, reduction of post-harvest losses, processing and packaging, accountant, marketing and small business planning and management in order to improve access to markets and increase income generating activities.

#### Outcome 4:

Baseline scenario: In the baseline situation, there is no comprehensive effort to conduct an assessment of ecological services and their status. Data on environmental degradation is often gathered using diverging methodologies. This does not allow for the adequate measurement of the impact or environmental cost of development initiatives.

Furthermore, while lessons are being continuously identified, these are not properly integrated into the next phases of development planning at the local or regional level.

GEF alternative scenario: The GEF project will support incorporating lessons learned in local and district level natural resources governance systems and contributing to the continuous improvement of the landscape level approach to natural resources management, supporting integration of best practices in policy making at the district, regional and national levels. The GEF project will introduce the use of several M&A tools to allow for systematic and standardized M&A, such as the Resilience Scorecard, the Land Degradation Surveillance Framework (LDSF) and the EX-ACT tool to estimate carbon emissions.

#### 5) Global Environmental Benefits (GEBs)

The project will maintain globally significant biodiversity in semi-arid areas of Tanzania through improving sustainable land management in production systems (agriculture, pastureland, rangelands, and forests) that buffer the landscape and are under increased pressure from inadequate landscape and resources management. These improved practices introduced by LDSF will lead to, not only increased productivity and biodiversity, but also reduced land degradation and carbon emissions. The project will reverse land degradation trends and restore vegetation cover on over 9,500 hectares of land. More details on this are elaborated in the description of project's interventions in the project document (Appendix 4).

#### 6) Innovativeness, sustainability and scaling-up

##### Innovativeness:

The project is founded on the idea of inter-village NRM committees as a forum for participatory planning and management of shared natural resources at the landscape level. Committee members will be trained on how to lead participatory processes in an inclusive manner, to understand the trade-offs between different uses of natural resource and the related potential conflicts in terms of access by different stakeholders, through the landscape approach including a conflict sensitive approach with conflict analysis conducted as part of the participatory planning and management of shared natural resources at the landscape level. The actual planning process will be carried out with the support of the project and will include seeking free, prior and informed consent from those affected by the proposed interventions. The Project will thereby safeguard the inclusion of vulnerable groups such as women-headed households, pastoralists and hunter-gatherers.

By adopting a landscape approach, LDSF will look at landscapes from a multifunctional perspective, combining natural resources management and sustainable use with food security and livelihood considerations. The project approach recognizes that landscapes and ecosystems span beyond village and ward administrative boundaries and a more collaborative and participatory approaches, including all resources users, are needed to enable more adaptive forms of management. The landscape approach versus a narrower village approach allows for building climate change resilience



of ecosystems and their services through adaptation and application of SLM practices. At the same time, the landscape approach allows for identifying and implementing conservation measures for habitats important for maintaining the biodiversity housed in the landscape.

#### Sustainability:

Sustainability of this project rests on the key elements provided under Component 1, namely the improvements brought to the natural resources governance systems in place. This includes the landscape based approach, as well as mechanisms put in place to promote multi-village land use planning. It is expected that the distinct benefits of that approach will become visible to beneficiaries rapidly, and will be extended gradually to broader landscapes and other regions.

Furthermore, the use of FFS-type farmer based extension systems also promote home-grown, local innovation and support systems that tend to last longer and fulfil different needs than government supported extension systems. Farmers trained as facilitators will benefit from knowledge which will enable them to become leaders in their community, facilitating the broad dissemination of tested successful practices.

Component 3 will also support the project's sustainability strategy, in that it will generate and distribute policy-relevant knowledge and scientific evidence to support changes in natural resources management that can be enacted at the local level. The demonstration of both local and global benefits will help leverage further investment funds from national and international sources.

#### Scaling-up:

The project's activities will be scaled-up in other communities within project districts, but also non-targeted districts, through the creation of other landscape level NRM committees and the multiplication farmer field school approaches, which can be easily adapted and disseminated. Inter-village NRM committees will play a crucial role in continuously monitoring and assessing LDFS outcomes and impacts, using M&A tools and will contribute to the sustainability and up scaling of the project's interventions, assisting district administrations in taking up the project's successful practices in other wards and villages.

Importantly, it is expected that the field school approach will lead to the broader dissemination of knowledge on sustainable and profitable agricultural practices that can be replicated in other areas. Field visits and study tours among communities will be organized, along with a strong awareness raising campaign, which will assist in the dissemination of lessons learned to other parts of the targeted regions, and eventually to the rest the country.

*A.2. Child Project?* If this is a child project under a program, describe how the components contribute to the overall program impact.

The project for Reversing Land Degradation Trends and Increasing Food Security in Degraded Ecosystems of Semi-Arid Areas of Tanzania (LDFS) is one of 12 national child projects under the IAP-FS programme that will contribute to national, regional and global agendas. Anchoring the IAP firmly in local, national and regional policy frameworks will enable the scaling up of more sustainable and resilient production systems and approaches across the targeted geographies.

The four components of this child project are closely linked to the intended results of the overall program. Through the establishment of inter-village NRM committees, Component 1 will contribute to achieving the Program component on the establishment of institutional frameworks for influencing sustainability and resilience. Component 2 will contribute to achieving programmatic component 2 on the scaling up of integrated approaches and natural resources management. Finally Component 3 will contribute to Program level component 3 on monitoring and assessment. This project will participate actively in activities foreseen under the framework of the regional hub project, which is designed to create linkages among sub-projects and beneficiary countries (Outcome 4).

*A.3. Stakeholders.* Elaborate on how the key stakeholders engagement, particularly with regard to [civil society organizations](#) and [indigenous peoples](#), is incorporated in the preparation and implementation of the project.

1. In line with IFAD's policy, the first LDFS design mission team included an expert in Indigenous Peoples' rights who held consultations with pastoralists and hunter-gatherers. Initial consultations were held mainly in the districts of Nzega with pastoralists, and in Mkalama with hunter-gatherers to assess how the project could particularly affect these

groups and to understand their needs and priorities. The second LDFS design mission team validated the Theory of Change in cooperation with stakeholders during consultations with communities and a two-day workshop with district officers from the five selected districts. Within communities, consultations were first held in large mixed focus groups and then split by gender focus groups to understand differences among gender. District level consultations were held during a two-day workshop with technical officers including, agriculture, livestock, environment, water resources, fisheries to learn about current challenges faced at the district level and corresponding solutions implemented so far. In addition, meetings were held in Dar es Salam with relevant line ministries (MALF, MOWI, MNRT) and VPO staff, supplemented by a literature review.

An assessment will be conducted during the start-up phase of the project implementation to identify all resource users of the landscape – including agro-pastoralists, pastoralists and hunter-gatherers - and to ensure their FPIC on joint VLUP. In addition, to support conflict risk management and inclusion of all voices and needs, a grievance mechanism to receive and facilitate resolution of concerns of the various resource users will also be agreed and established under the inter-village natural resources committees. Finally, best-practices used by pastoralists and hunter-gatherers on sustainable land and water management, ecosystem-based adaptation, and biodiversity conservation will be collected for implementation purposes. Wherever possible and appropriate, traditional knowledge and practices will be blended with modern scientific approaches to support IPs, among others, in enhancing the resilience of the ecosystems in which they live and in developing innovative adaptation measures.

Smallholder farmers vulnerable to climate change impacts will be the primary beneficiaries of LDFS. The three main target subgroups are described below but hunter gatherers (Mkalama) and pastoralists (mainly also in Mkalama) will also be included where these groups are present as resource users in the targeted landscapes:

- (a) Food insecure subsistence smallholder agro-pastoral farmers – those with not enough access to productive land and water or other resources to produce enough to cover their food needs, who rely regularly on food aid and are very vulnerable to climate shocks. The project’s primary objective for these farmers is to increase production for home consumption through improved access to water and conservation and climate smart farming, and some selling of surplus for income generation. According to the poverty and livelihoods analysis of LDFS target areas , food insecure smallholder farmers account for approximately 50% of the project area population;
- (b) Mostly food secure subsistence smallholder agro-pastoral farmers this group includes those who are normally able to fulfil their own needs, but who are not able to produce much excess to sell. They are very vulnerable to climatic or other shocks to their livelihoods which in severe situations lead to periods with food insecurity, and want to improve their agricultural productivity. The project’s objective for this group is to stabilise production outputs through conservation and climate smart farming and improve their income generation through access to markets with a diversified choice of products. They account for approximately 40% of the project area population;
- (c) Market oriented agro-pastoral farmers – this group includes those who are regularly able to sell excess production to market. They have adequate land and some skills that they wish to use to increase their surplus production available for sale. They account for approximately 10% of the project area population and can showcase income generation options and pull other farmers into market oriented activities through demonstration and participation in producer groups.

These households will participate in the project as members of existing or new community groups, which will be selected on the basis of their cohesion, inclusiveness and demonstrated commitment to sustainable land management and biodiversity conservation at landscape level. They will be identified during the initial community consultation process, which will focus on ensuring that all community members take part in the process. The three target subgroups may be identified by using list of people/households receiving food aid managed by the village and district governments. Options to participate in and benefit from different resources management groups such as the Natural Resources Management (NRM) committees, Farmer Field Schools (FFS), Water User Associations, tree nurseries and wood land management groups should make participation more attractive and allow households to better understand the benefits of SLM practices at landscape level.

For most outputs at least 80% of the beneficiaries participating should come from households in the food insecure subsistence agro-pastoral farmers subgroup and the mostly food secure subsistence farmers subgroup. In the specific case of output 3.1, instead, the main focus at the start of the project will be on the market oriented farmers and the mostly food secure subsistence farmers. The output will then gradually integrate support for the food insecure groups as they improve their production outputs supported by output 2.1 and 2.2.

During project implementation, further consultations will be held before activities are implemented, both through the participatory land use planning exercises as well as through the preparation of environmental impact assessments, where needed

*A.4. Gender Equality and Women's Empowerment.* Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men.

The 2012 Population and Housing Census in Tanzania reveals that 51% of the population is made up by women. According to the National Election Committee, 53% of the registered voters during the 2015 General Elections were women. However, despite being the majority, women still face under-representation in formal politics, which negatively affects the representation in the country's decision-making bodies. According to the 2010 Tanzania Demographic and Health Survey (TDHS), women are more likely than men to be poor and illiterate, to be subject to gender-based violence and they usually have lower access to medical care, property ownership, credit, training and employment. Distribution of income among men and women is disproportionate, with men owning all major means of production such as land, livestock and financial capital, while women provide labour but do not have access to cash for basic needs. Women-headed households have lower incomes compared to those headed by men.

Within the LDFS, gender-sensitive training delivery will be ensured, by for example selecting suitable location, timing and duration of the trainings; training couples rather than just one spouse; and ensuring language and literacy levels reflect the abilities of the participants. The project will adopt the Gender Action Learning System (GALS), which aims to facilitate addressing unequal gender and social relations and enhancing ownership of project activities by the target groups. GALS is a versatile methodology that uses a set of pictorial tools that can reach both literate and illiterate people, it can be integrated with a variety of interventions (such as rural finance, natural resource management, value chain development), and can be used for households and groups. In LDFS it will be applied in the context of FFS (ref. output 2.1), where at least 80% of the beneficiaries participating in the FFS should come from households in the food insecure subsistence agro-pastoral farmers subgroup and the mostly food secure subsistence farmers subgroup.

LDFS gender strategy will cut across the three main different target groups and will be entrenched in the project's three components as described below.

Component 1: Institutional capacity building for sustainable land management and biodiversity conservation at landscape level. The gender strategy will promote gender equality by increasing women's access to skills and knowledge, and strengthening women's decision-making roles at an institutional level. The first output is based on geographical targeting, however, it will be assured that village representatives are representing all three target subgroups with 80% coming from households in the food insecure subsistence agro-pastoral farmers subgroup and the mostly food secure subsistence farmers subgroup. The project will set quota among district and village staff (>30% women) and community members (>30% women, >30% youths) trained on landscape-level integrated natural resources governance and management, climate change adaptation and biodiversity conservation. The project will adopt training approaches that increase women's participation (i.e. increasing the use of female extension staff and trainers; selecting appropriate materials, language and media; and ensuring that the timing and venues are also convenient for women). Furthermore, quota of women in leading positions (>30%) will be within inter-village NRM committees (see paragraph on Direct Targeting.)

For the second output, the project will provide trainings for women in group formation, leadership skills, confidence building and negotiating skills to enhance gender balance at institutional level which currently is very low, mainly because of lack of trained women on sustainable NRM. In consideration of the GDI ranks of the target district, among

the lowest of the entire Country, gender awareness trainings will be conducted at community level to increase general understanding about the importance of including women in rural development opportunities.

Component 2: Upscaling of sustainable and climate-smart agriculture, land, water and pastoral management systems. In consideration of the gender gaps highlighted above, and in particular to i) unequal access to resources (land, water, credit) in favour of men, ii) women's low levels of literacy and numeracy, iii) lack of business development and management skills, especially records keeping, and iv) limited voice, leadership and decision making capacity in NRM groups (land, water, forestry, livestock/agriculture, and producer groups), the project will support the following initiatives.

To increase women's access to skills and knowledge, the project will set a quota for women (>30%) in FFS and any other existing or established learning group, increase the use of women extension staff and trainers; select appropriate materials, language and media; and ensure that the timing and venues are convenient also for women. In target areas like Mkalama, where women face issue of men's migration because of food insecurity, the project will develop women's skills in areas that are not traditionally considered to be in the women's domain (e.g. Sustainable Land Management), educating women and men about ownership and inheritance rights, including land. In areas where cultural context does not allow male/female mixed groups, the project will conduct gender awareness at a community level and set up women's self-help groups for knowledge-sharing on conservation farming practices. In particular, the project will apply the community-led methodology of Gender Action Learning System (GALS) to be applied to FFS, with emphasis on generating benefits particularly relevant for women and youth.

For market-oriented women and girls, the project will develop and/or strengthen women's business and entrepreneurship skills for development of climate-resilient commodities, such as bee-keeping, medical plants, wild fruits, mat and basket making. The small entrepreneurs will be connected with existing savings and credit co-operative societies like SACCOs or village community banks like VICOBA.

To strengthen women's decision-making roles, the project will work with water/land/forest/livestock/agriculture groups to increase their participation as members and leaders. Selected female members of project groups will be trained in leadership skills, confidence building and negotiating skills.

To improve women's well-being and ease their unpaid workloads, the project will promote the upscaling of labour-saving technologies (i.e. minimum tillage in conservation agriculture, efficient cook stoves, planting and managing woodlots for household needs, and improving water management) for activities performed by women in relation to marketable commodities, as well as other household tasks (water supply, food processing, fuel supply). Nutrition, and eventually maternal health care and health, will be included in the FFS curricula.

Lastly, LDFS will raise awareness among communities on ownership and inheritance rights, including land, promoting joint land titling or assets registered in woman's name.

Component 3: Monitoring and assessment. Gender will be mainstreamed within the overall M&E system, including the logical framework. Firstly, the baseline survey to be conducted at the beginning of the project will be gender-sensitive by analysing i) access to and control over productive resources and inputs; ii) access to information and the use of existing knowledge; iii) division of labour and time use between men and women; iv) existing skills, capacity needs, and priorities in the uptake of conservation farming practices; and v) participation in decision-making and sharing of expected benefits from the project, and how these aspects are determined by gender and power relations. These issues will be addressed during project implementation and results will be evaluated against targets on a quarterly basis through the M&E system. Based on data disaggregated by sex and age (when needed), progress in gender responsive activities will be monitored, and precautions will be taken to avoid widening gender disparities or negative impacts and further gender-related challenges. In the project evaluation stage, the project will examine the progress toward project objectives and specific LDFS outcomes and sub-outcomes, including gender-related outcomes, and disseminate the findings.

A.5 Risk. 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):

The proposed project has the following expected positive social and environmental impacts:

- (i) Reduction in food insecurity and malnutrition;
- (ii) Increased household resilience to climate variability and change;
- (iii) Reduced land degradation prevalence.

The main social and environmental risks to the project and their mitigation measures are as follows:

#	Risk	Description	Impact	Likelihood	Mitigation measures
1	Increased conflict over water resources	The project's interventions to increase water availability may cause conflict amongst potential water users and downstream users	Medium	Medium	The landscape approach to land use planning with joint village LUPs will communities upstream and downstream to prevent conflicts over shared resources
2	Disturbance due to construction	Small-scale construction activities for Chaco dams may cause noise and air pollution, construction waste may be left behind	Low	Medium	The firm hired to carry on construction activities will be required to demonstrate environmental and social responsibility.
3	Unsafe water supply	Water in Chaco dams, used for domestic purposes, may be contaminated by livestock	Medium	Low	Training through FFS will provide knowledge on access and use regulations to avoid livestock causing degradation of the dam and surrounding grazing areas.
4	Climate shocks and regional economic shocks could impact food supply	Climate shocks may interrupt project's activities. Regional economic shocks may impact food prices, leading to more food insecurity.	Medium	Medium	The project will propose technologies for rapid uptake that will enable smallholder farmers to increase their food production quickly for visible impact and as reserves in case of climate shocks.
5	Lack of incentives for farmers to adopt sustainable practices introduced by the project	The current system of incentives may be insufficient to ensure continued long-term stewardship of natural resources; population increases may jeopardize sustainability of management systems.	Low	Low	The project expects to put in place improved incentive systems, such as creation of small enterprises and producer groups, FFS, collaborative management of agro-pastoral spaces, farmer-based extension, as well as landscape based land use planning.
6	Lack of institutional capacity to upscale and replicate successful interventions from the project	There is a risk that local government authorities do not have the capacity to maintain the developed institutional mechanisms beyond the duration of the project	Medium	Medium	The project will strengthen district and village/ward level capacities at institutional and individual levels. Repeated trainings will ensure that knowledge remains within the institutions even if staff departs. Consideration will also be given to assisting land use planning committees in identifying lasting sources of financing for priorities identified during the planning process.
7	Social tensions and conflicts due to income increases	There is a risk that increases in income could create social conflicts and rivalries within and across villages	Low	Low	The project's three-tiered targeting strategy will ensure that all social groups are representing and benefit from the project, allowing for upward mobility and for the creation of wealth across the community.

A.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 LDFS is designed to provide a bottom up approach to planning and agreeing on specific interventions, within the broader framework of the intended objective and Theory of Change. For example, setting up of inter-village committees will help in creating long-lasting frameworks for improved decision making at village and district levels. These committees will also act as a forum for agenda setting and for determining land use priorities in a collegial manner.

The organizational framework is designed around the implementation capacity available in the project districts, while establishing strong operational linkages with relevant line ministries. Farmers will have a crucial role in selecting, planning and implementing activities through their Village Plans, thereby ensuring the success and sustainability of the project expected impacts. The project will seek to maximize inter-district exchanges between both implementers as well as farmers, which will reinforce the common learning and problem-solving capacity.

Furthermore, using the FFS approach will allow the project to design its interventions in a way that is more responsive to the real needs of farmers and farmer groups. The FFS approach will allow a low-risk, learning-by-doing approach, which will also enable individual farmers to become facilitators and leaders within their communities. All physical interventions supported by the project, such as improvements in water infrastructure, increase in production of selected commodities, or reforestation, will be implemented through a FFS-type of arrangement. This will help maximize learning and ownership of the results.

#### Organizational framework

The project implementation period will be of 5 years. IFAD will act as the GEF Implementing agency for the GEF funding of this project. The project will be coordinated by the Vice President's Office (VPO) Division of Environment as the lead Executing agency for the project. The VPO has the overall responsibility on environment management in Tanzania and has an extensive experience in coordinating the execution of GEF and LDCF funded projects in the Country.

A Project Steering Committee (PSC) chaired by the Permanent Secretary of the VPO, with representation of the relevant sector ministries, will be responsible for overseeing project implementation. The Project Coordinator will act as the secretariat of the PSC. The PSC will meet twice a year to provide strategic direction to project implementation, monitor progress and approve Annual Work Plans and Budget (AWPBs.)

Day-to-day project management and implementation will be the responsibility of the Project Coordination Unit (PCU) housed under the VPO office in Dodoma. The PCU will consist of a National Project Coordinator (seconded from the VPO staff), a Senior Accountant (seconded from the VPO), a full time Monitoring and Evaluation Officer (seconded by the VPO/recruited externally) and technical staffs (i.e. NRM specialist and a LUP Specialist hired on a contract basis.) Short-term specialist expertise will be contracted according to need and financial resources. Project procurement will be undertaken by the VPOs dedicated procurement team in line with IFAD and Government procurement guidelines.

The PCU will be responsible for the overall planning and management of project activities; guiding, supporting and supervising project implementation; procuring goods and services; financial management of the project resources; and monitoring and reporting on implementation and financial progress. It will work in collaboration with line ministries and government services including the Regional Secretariat and District Facilitation Teams to define performance-based MoUs based on district AWPB and determine backstopping arrangements according to the needs and priorities of the target districts.

A Technical Advisory Committee (TAC) will be established to advise the PCU and the PSC on the quality of progress reports, AWPBs, and on any technical issues. The TAC will assist the PCU in establishing potential linkages with relevant ministries for technical support. It will be chaired by the VPO Director of Environment and consist of: the VPO Director of Environment, the District Executive Directors of respective project districts, and of the relevant Directors of the following line ministries: the Ministry of Agriculture, Livestock and Fisheries (MALF); the Ministry of Water and Irrigation (MOWI); the Ministry of Natural Resources and Tourism (MNRT); the Prime Minister's Office Regional

Administration and Local Government (PORALG); the Ministry of Finance and Planning (MFP); the Minister of Agriculture, Natural Resources, Livestock and Fisheries (MANRLF)- Zanzibar; the Ministry of Lands, Water, Energy and Environment (MILWEE) – Zanzibar.

Project implementation at district level will follow the guidelines for decentralization by devolution (D by D). District Facilitation Teams (DFT) will be set up in the selected districts, and their offices equipped. The DFT will be at the front line of the project, engaging with communities and their leaders at the village level, therefore they will have the responsibility to implement the project activities as per their mandate, and to monitor and report on implementation and financial progress directly to PCU and to their Regional Secretariat. The District Council Management Team will be responsible for approving the district-level Annual Work Plan and Budget (AWPB) and monitoring the progress of implementation. The quarterly reports of all five districts will then be reviewed and consolidated by the PCU and submitted to the TAC for approval and then to PSC and IFAD for clearance.

The DFT will consist of the technical staff responsible for environment, agriculture, land use planning, livestock, fisheries and water resources, namely: the District Natural Resources Management Officer and Extension Officer; the District Environmental Officer; the District Agricultural Officer and Extension Officer; the Livestock Officer and the Livestock Extension Officer; the District Treasurer and Community Development Officer/Gender focal desk, and the District Planning Officer – under the overall guidance provided by the District Executive Director.

Prior to the Project start-up workshop, the VPO and the target Districts will jointly develop the Project Implementation Manual (PIM), which will guide implementation the project, and a draft AWPB. The PIM and the AWPB will be submitted to the PSC and IFAD for non-objection. When and activity of item is not detailed in the AWPB, authority to incur expenditure should be sought from the Project Steering Committee and IFAD.

A start-up package will include a series of launch workshops to be conducted to ensure buy in of all stakeholders. At the national level, participants will include key government policy- and decision-makers, representatives of research institutes and other technical experts, key NGOs, relevant private-sector bodies, financial institutions, donor bodies and representatives of civil society. The district-level launch workshops will bring together the District Council and technical departments, NGOs, development partner-funded projects and representatives of farmer, livestock keepers and water user groups /organizations. At village level sensitization workshops will also be conducted. Gender balance will be sought among participants at all levels.

Project management is financed by GoT and GEF. An IFAD-GEF funded start-up grant enables GoT to recruit key staff and initiate priority actions immediately upon signing the LDFS grant agreement with IFAD. This means that project implementation will commence in mid-2017.

In preparation to implementation readiness, attention must be given to:

- Timely inclusion of adequate counterpart funds into the financial year budgets of MoA;
- Selection and recruitment of the Project Manager and Project Financial Controller; who will then be responsible for further mobilisation of PCU staff;
- Revision of draft Project Implementation Manual (PIM), Financial Management Manual (FMM) and Procurement Manual (PM) and formal adoption and submission to IFAD;
- Revision of draft AWPB and 18 month Procurement Plan (available in the Project Life File) and formal submission of the same.
- Establishment of the PSC



Additional Information not well elaborated at PIF Stage:

*A.7 Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

The project design is based on multi-benefit approaches, combining local and global environmental benefits with improved food security and income. The introduction of climate-smart agriculture will not only guarantee production and income resistant to the impacts of climate change, it will also reduce land degradation and thereby ensure landscape health in the longer term. Under Component 1, the LDFS project will engage all resources users and relevant stakeholders at the landscape level by providing training on identifying environmental priorities to sustain agricultural and food value chains. This participatory approach will further empower communities to engage and own the project's outcomes from inception until the end of the project's implementation.

Through thematic FFS under Component 2, the LDFS project will deliver training on climate smart and resilient practices to farmers that will promote an integrated natural resources management at the landscape level in agro-pastoral systems, while contributing to soil health, water conservation, biodiversity conservation, diversification of production systems, hence increasing income, as well as resilience and stability of ecosystems services in the face of climate change.

Tools used under Component 3 (Monitoring and Assessment) to monitor and assess project implementation progress will create a standardized evidence base for landscape level natural resources management (NRM), which will further support the up-scaling of the landscape level NRM approaches to increase food security, ecosystem and community resilience, and contribute to the global environmental benefits (GEB) within policy integration and projects investment. Finally, Component 3 will contribute to the GEF-IAP-FS monitoring and evaluation of the regional level programme, providing inputs to compare results with other IAP child projects.

*A.8 Knowledge Management.* Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

The M&E Specialist supported by the TAC and DFTs will ensure that stories are collected on a regular basis, providing factual information on changes and benefits achieved at village and landscape levels as well as documenting global environmental benefits and up-scaling to other landscapes. The M&E Specialist will develop simple and user-friendly tools for data collection, data entry, data processing and analysis.

Knowledge Management (KM) will be a process by which value is generated from project intellectual and knowledge-based assets. It will include a detailed plan on how information will be obtained and disseminated project reports and reviews, development of knowledge products, policy workshops and the use of communication channels. To share lessons learnt and promote upscaling, the PCU is expected to use a range of different media and approaches, such as farmer field visits, website, radio, video, press releases and articles for local and international newspapers and the IFAD website.

The project will benefit from and contribute to the GEF-IAP Food Security Programme knowledge network. The regional knowledge network, IFAD Africa, will provide opportunities to participate in regional thematic workshops, visit sites of similar projects, and guidance for the start-up of KM activities. Tools, such as case studies and stakeholder interviews, will complement the M&A tools described above to deepen the understanding of factors contributing to adoption of SLM practices and success or failure to show impacts on ecosystems services and food security. One of the main purposes of knowledge creation and sharing will be to support policy making by building a comprehensive body



of evidence, lessons learned, and good practices. The M&A tools will provide a cost-effective way of building strong cases, and inform policy makers for further up-scaling.

## **B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:**

**B.1 Consistency with National Priorities.** Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

The project will directly contribute to seven of the 17 Sustainable Development Goals (SDGs), namely SDG1: to end poverty in all its forms, SDG2: to end hunger, achieve food security and improved nutrition and promote sustainable agriculture, SDG 5: achieve gender equality and empower all women and girls, SDG 6: ensure availability and sustainable management of water and sanitation for all, SDG 13: take urgent action to combat climate change and its impacts, SDG 15: protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss, and SDG 16: promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

The geographical focus of the LDFS on semi-arid areas is aligned with the United Nations Convention to Combat Desertification (UNCCD) and its 10-Year Strategy (2008-2018), adopted in 2007 with specific goals "to forge a global partnership to reverse and prevent desertification/land degradation and to mitigate the effects of drought in affected areas in order to support poverty reduction and environmental sustainability". The five districts targeted by the LDFS belong to the seriously degraded areas identified in Tanzania's revised National Action Plan to combat desertification (NAP, 2014). Drivers of land degradation identified by the NAP include overgrazing, deforestation and inadequate land use plans. The LDFS project will contribute to not only focus on the seriously degraded areas identified in the NAP, but will also provide support in establishing an enabling environment through inter-village NRM committees to develop landscape level land use plans to ensure shared responsibility of the prevention of further land degradation and the promotion of land rehabilitation with reforestation, afforestation and rangeland rehabilitation activities.

The project is also aligned with Tanzania's National Biodiversity Strategy and Action Plan (NBSAP: 2015-2020), which supports the implementation of the Aichi Biodiversity goals and targets (2011 – 2020) under the Convention on Biological Diversity. LDFS will notably contribute to reducing the rate of degradation and fragmentation of ecosystems and the loss of habitats by 2020 (Target 5 of NBSAP), through the promotion of participatory landscape land use planning to identify degraded areas. LDFS will also support Target 18 of NBSAP, which aims at respecting and safeguarding the conservation and sustainable use of biodiversity by using traditional knowledge, innovation and practices, through the continuous learning and knowledge transfer planned within LDFS Farmer Field School Approach.

The LDFS is aligned with Tanzania's Initial National Communication (2003) to the UNFCCC, as it meets the shared objectives of climate change mitigation and adaptation in sectoral policies and in its national economic development. Furthermore, Tanzania's Intended Nationally Determined Contributions (INDCs), which has targeted, for climate change adaptation, to reduce climate-related disasters from 70% to 50% and increase access to safe water from 60% to 75%, and for mitigation, to reduce GHG emissions between 10 to 20% by 2030 relative to business as usual scenario of 138 to 153 million tonnes of CO<sub>2</sub>-eq. The LDFS will support Tanzania's INDCs adaptation targets through Component 2's investments in improving the resilience to climate shocks of agricultural and pastoral systems, such as climate-smart agricultural practices, rainwater harvesting and micro-catchment management. The LDFS will also contribute to reducing carbon emissions through the introduction of sustainable woodland and rangeland management, as well as the distribution of improved cook stoves, which will avoid carbon emissions of 307,607 tons of CO<sub>2</sub>-eq and create carbon sinks of 915,247 tons of CO<sub>2</sub>-eq. Enhancing participatory forest management programmes, strengthening tree planting initiatives, protecting and conserving natural forests to maintain ecological integrity and increasing forest carbon stocks are among the climate change mitigation actions of Tanzania's INDCs for the forestry sector, which will be shared by the LDFS project. The National Adaptation Programme of Action (NAPA, 2007) was prepared with the primary

objective of identifying and promoting activities that address urgent and immediate needs for adapting to the adverse impacts of climate change in the country. The LDFS project is in line with NAPA's priority projects, which target the improvement of food security in the drylands through the promotion of drought-tolerant crops, namely in Singida and Dodoma regions; two of the LDFS targeted regions. The LDFS project is also in line with the process and roadmap for formulating national adaptation plans (NAPs) for Tanzania, launched in July 2015, which aims to "address the country's medium- and long term adaptation needs by mainstreaming climate risks into all sector-specific and national development planning, as well as to reinforce coordination, and promote evidence-based decision-making in order to facilitate adaptation planning". The Vice President Office is responsible for the NAP process and is developing the Roadmap and the stocktaking assessments.

The LDFS will also contribute to the 2015 Paris agreement under the Framework Convention on Climate Change in the areas of greenhouse gas mitigation and adaptation to climate change through the work to reduce pressure on natural resources and restore healthy ecosystems in ledge management systems and links to policy makers for scaling up of successful approaches.

The LDFS is aligned with IFAD's Strategic Framework 2016-2025 and will contribute to its development goal, which is to invest in rural people to enable them to overcome poverty and achieve food and nutrition security through remunerative, sustainable and resilient livelihoods, while respecting IFAD's five principles of engagement, namely targeting, empowerment, gender equality, innovation, learning and scaling up and partnerships. The three strategic objectives are to: i) increase poor rural people's productive capacities; ii) increase poor rural people's benefits from market participation; and iii) strengthen the environmental sustainability and climate resilience of poor rural people's economic activities. IFAD's three main outcomes are to: i) develop enabling policy and regulatory frameworks at national and international levels; ii) increase investment in the rural sector; and iii) improve country-level capacity for rural policy and programme development, implementation and evaluation.

The project is also aligned with the IFAD Tanzania COSOP 2016-2021 of which the overall objective is to "contribute to transforming the United Republic of Tanzania's agricultural sector – including crops, livestock and fisheries – towards higher and more sustainable productivity, profitability, commercialization and increased smallholder farmer incomes for improved livelihoods, food security and nutrition, and overall resilience of communities to shocks and stresses".

The LDFS is also well aligned with national policies, such as:

- a. The National Environmental Policy of 1997, which provides the framework needed to mainstream environmental considerations into decision-making, guidelines to help determine priority actions, as well as monitoring and reviewing of policies, plans and programmes in the country;
- b. The National Agriculture Policy of 2013, which aims to promote agricultural practices that sustain the environment by improving adaptation measures to climate change (Tanzania Agriculture Resilience Plan 2014-2019), public awareness on sustainable agriculture and enforcing relevant environmental laws and regulations;
- c. The National Livestock Policy (2006) which seeks to strengthen technical support services on environmental issues, promote proper land use planning for livestock production and strengthen inter-sectoral coordination on environmental issues;
- d. The National Water Policy (2002) whose specific objective is to address cross-sectoral interests in water, watershed management and integrated and participatory approaches for water resources planning, development and management;
- e. The National Wildlife Policy of 2007, which aims to conserve wildlife and wetland resources, develop sustainable utilization of wildlife and wetlands, strengthen resource monitoring and research, enhance communication, education and public awareness;
- f. The National Forest Policy of 1998 of which the ultimate goal is to ensure sustained functioning forest ecosystems capable of supporting livelihood of the rural poor from various forest products;
- g. The National Land Policy of 1995, which advocates for the protection of land resources from degradation by addressing issues related to land use planning, proper management of land resources, land resource sharing, and

promote multiple land use techniques in conflicting land uses, as well as involving communities in resource management, land uses and conflict resolution;

h. The National Tree Planting Strategy that aims to plant and conserve trees all over the country by engaging communities and other stakeholders to improve forest cover;

i. the National Energy Policy (2015) in regards to the use of different energy sources to reduce emission of GHGs in Tanzania, as the policy stresses the need to create conditions for provision of secure, reliable, affordable, safe, efficient, cost-effective and environment friendly modern energy services to all;

j. The National Climate Change Communication Strategy, which aims at facilitating effective communication on climate change information at national and local levels linking to regional and international communication strategies in order to enhance management of climate change impacts and explore associated opportunities .

**C. DESCRIBE THE BUDGETED M & E PLAN:**

<b>M&amp;E Activity</b>	<b>Responsible Parties</b>	<b>Timeline</b>	<b>Budget</b>
<b>Monitoring of project progress and performance</b>	PCU (Project Coordinator and M&E Specialist)	Continuous	Within Component 3 budget
<b>PIRs</b>	PCU and IFAD	Annually	
<b>Inception workshop</b>	PCU and IFAD	During the first two months after the project is declared effective	Within Component 3 budget
<b>Adjustment of biophysical and socio-economic baseline</b>	PCU, IFAD, key Government partners and international institutions (ICRAF)	Baseline established in Y1	USD 125,000
<b>Measurement of project outcome and impact indicators</b>	DFTs, PCU, IFAD, key Government partners	Mid and End of the project	Within Component 3 / PMC budget
<b>Measurement of project output indicators and progress and performance</b>	PCU (M&E Specialist), DFTs, Local support institutions	Annually	Within Component 3 / PMC budget
<b>Perform and supervise data collection</b>	PCU (M&E Specialist), DFTs, Local support institutions	Continuous monitoring activity	
<b>Six months and annual progress reports</b>	DFTs and Project Coordinator, M&E Specialist	Every 6 months and annually after project start up	Within Component 3 / PMC budget
<b>Participate to GEF IAP Regional implementation workshops</b>	Project Coordinator and/or M&E Specialist, TAC	Every two years	USD 50,000 (Y1, Y3 and Y5 = USD 150,000 total)
<b>Organize project supervision missions</b>	PCU and IFAD	Every six months	Paid by GEF agency fee
<b>Mid-term external evaluation</b>	External consultants (Oversight by IFAD)	Mid-term of project implementation	USD 30,000 (Y3)
<b>Tracking Tool</b>	PCU and international institutions (ICRAF)	CEO Endorsement; at mid-term; and project completion	Part of baseline adjustment and outcome and impact indicator measurement
<b>Final external evaluation</b>	PCU External consultants (Oversight by IFAD)	After project completion, but no more than 12 months later	USD 30,000 (Y5)
<b>Project completion report</b>	PCU External consultants (Oversight by IFAD)	Before project closure	Within Component 3 / PMC budget
<b>Completion workshop</b>	PCU and IFAD	At project completion	Within Component 3 / PMC budget

**PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)**

**A. GEF Agency(ies) certification**

**This request has been prepared in accordance with GEF policies<sup>8</sup> and procedures and meets the GEF criteria for CEO endorsement under GEF-6.**

<b>Agency Coordinator, Agency Name</b>	<b>Signature</b>	<b>Date (MM/dd/yyyy)</b>	<b>Project Contact Person</b>	<b>Telephone</b>	<b>Email Address</b>
Margarita Astralaga, Director, Environment and Climate Division Programme Management Department, IFAD			Stephen Twomlow Environment and Climate Division IFAD	+39 06 5459 2681	s.twomlow@ifad.org

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<sup>8</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

**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).  
See attached (not possible to paste the table)

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

See attached (not possible to paste the table)





**ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS<sup>9</sup>**

A. Provide detailed funding amount of the PPG activities financing status in the table below:

<b>PPG Grant Approved at PIF:</b>			
<b>Project Preparation Activities Implemented</b>	<b>GEF/LDCF/SCCF Amount (\$)</b>		
	<b>Budgeted Amount</b>	<b>Amount Spent to Date</b>	<b>Amount Committed</b>
In-country liaison with VPO; Targeting and gender expert (gender, youth, IP mainstreaming) design team	39 000.00	37 018.14	-
NRM - Scoping mission	12 000.00	11 677.44	89.51
Team leader - Design mission	4 300.00	-	3 901.01
Adaptation expert supporting the team leader - Design mission	20 000.00	18 073.63	-
Team Leader - Scoping mission	22 000.00	21 012.11	-
M&E expert	7 250.00	7 157.60	-
Financial expert - Design mission	6 000.00	5 738.50	-
Procurement expert	2 936.00	3 311.27	-
Baseline studies	70 000.00	-	70 000.00
<b>Total</b>	<b>183 486.00</b>	<b>103 988.69</b>	<b>73 990.52</b>

<sup>9</sup> If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.

**ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)**

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