REQUEST FOR: CEO ENDORSEMENT
PROJECT TYPE: FULL-SIZED PROJECT
TYPE OF TRUST FUND: LDCF

PART I: PROJECT INFORMATION

Project Title: Strengthening capacity for climate change adaptation through support to Integrated Watershed Management			
Country(ies):	Lesotho	GEF Project ID:[1]	5124
GEF Agency(ies):	FAO	GEF Agency Project ID:	618527
Other Executing Partner(s):	The Ministry of Forestry and Land Reclamation (MFLR), Ministry of Agriculture and Food Security (MAFS), Ministry of Energy, Meteorology and Water Affairs (MEMWA), Ministry of Local Government and Cheiftainship (MLGC), Disaster Management Authority (DMA), Department of Environment (DOE) and National University of Lesotho (NUL))	Submission Date:	February 2, 2015
GEF Focal Area (s):	LDCF	Project Duration(Months)	48
Name of Parent Program (if applicable): ➢ For SFM/REDD+ ☐ ➢ For SGP ☐ ➢ For PPP ☐	NA	Project Agency Fee ($):	341,306

A. FOCAL AREA STRATEGY FRAMEWORK[2]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount ($)	Co-financing ($)
CCA-1	Outcome 1.2. Reduced vulnerability to climate change in development sectors	Output 1.2.1. Vulnerable physical, natural and social assets strengthened in response to climate change impacts, including variability	LDCF	500,000	700,000
	Outcome 1.3. Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas	Output 1.3.1. Targeted individual and community livelihood strategies strengthened in relation to climate impacts including variability	LDCF	965,000	1,835,238
CCA-2	Outcome 2.1. Increased knowledge and understanding of climate variability and change-induced threats at country level and in targeted	Output 2.1.1. Risk and vulnerability assessments conducted and updated Output 2.1.2. Systems in	LDCF	500,000	850,000

1 Project ID number will be assigned by GEFSEC.
2 Refer to the Focal Area/LDCF/SCCF Results Framework when completing Table A.

	vulnerable areas	place to disseminate timely risk information			
	Outcome 2.2. Strengthened adaptative capacity to reduce risks to climate-induced economic losses	Output 2.2.1. Adaptive capacity of national and regional centers and networks strengthened to rapidly respond to extreme weather events	LDCF	424,334	950,000
CCA-3	Outcome 3.1: Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas	Output 3.1.1. Relevant adaptation technology transferred to targeted groups	LDCF	1000,000	3,700,000
		Sub-Total		3,389,334	8,035,238
		Project Management Cost		203,360	401,762
		Total project costs		3,592,694	8,437,000

B. PROJECT FRAMEWORK

(1) Project Objective: to implement sustainable land and water management practices (SLM/W) and resource conservation measures in selected watersheds to reduce vulnerability and enhance adaptive capacity at community level
(2) to strengthen diversified livelihood strategies focusing on crop, livestock and agro-forestry systems at community level in selected watersheds in three most vulnerable livelihood zones

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount ($)	Confirmed Co-financing ($)
Component 1: Strengthening technical capacity of national and district level staff and institutions on sustainable land and water management and climate-resilient livelihood strategies	TA	1.1 Strengthened technical capacity in MFLR, MAFS, MNR, MLGC, DMA and NUL at national and district levels and community representatives on climate change adaptation and integrated watershed management	1.1.1: National level MFLR, MAFS, MNR, MLGC, DMA and National University of Lesotho (NUL) staff and district level forestry and natural resources staff trained on climate change adaptation, integrated watershed management and community mobilization (60 Government staff tar at national level and 90 staff at district level) 1.1.2: Training delivered to local representatives from community based organizations on good practice examples of sustainable land and water management, water harvesting, diversified livelihood strategies (at least 24 farmer groups (1200 farm households) in 3 livelihood zones trained).	LDCF	241,888	950,000
Component 2: Assessing vulnerability of livelihoods and impacts of climate	TA	2.1 Improved data, tools and methods for assessment of impact of climate change on land suitability and land use, vulnerability and risk at the	2.1.1 Livelihood and land use (crop, livestock, agro-forestry) data base developed for most vulnerable watersheds (database will be established in Ministry of Forestry and Land Reclamation and linked to	LDCF	397,188	850,000

change on land suitability and use at watershed scale		national/district level implemented focusing on most vulnerable watersheds	potential users at the national level) and relevant staff trained (at least 30 core staff) 2.1.2 Vulnerabilities and risks (current and future) assessed for the selected watersheds in 3 livelihood zones and spatial information on vulnerability available (at Disaseter Management Authority) to facilitate adaptation planning by the Government and relevant staff trained (total 30 staff – 10 staff from each district).			
Component 3: Promoting tested Sustainable Land and Water Management (SLM/W) practices to build resilience to climate risks in vulnerable sub-catchments and watersheds	Inv.	3.1 Sustainable land and water management (SLM/W) practices (soil erosion control, soil and water conservation, water harvesting, run-off reduction, vegetative cover, range resource management) successfully adopted in selected 24 watershed and catchments (The total beneficiaries include 1200 households and approximately 4800 individuals and total area covered will be 2400 hectares (100 hectares x 24 communities)).	3.1.1 Adaptive land use and sustainable land and water management (SLM/W) practices implemented in at least 24 communities in 3 livelihood zones (this will cover 1200 households and 1200 hectares (approximately 1 hectare of arable land per household)). The crops and cropping systems will be selected based on the detailed land suitability analysis to be conducted under component 2. 3.1.2 Improved water harvesting structures at the household level implemented in 3 livelihood zones (At least 150 households possess water harvesting structures), which will also include women headed households 3.1.3 Improved vegetative cover and range resource management measures adopted in 24 communities to improve productive use of marginal lands (This will cover 600 households and 2400 individuals and cover a total area of 1200 hectares (approximately 50 hectares per community)).	LDCF	1,469,742	3,700,000
Component 4: Strengthening diversified livelihood strategies and implementation of improved income generating activities at	Inv.	4.1 Diversified livelihood strategies and small scale and household level income generating activities successfully demonstrated and adopted by target 24 communities, including women headed households (This will directly benefit	4.1.1 Community participation ensured in 24 community groups in selected watersheds of 3 livelihood zones and introductory sessions conducted and small-scale household level income generating and food and nutrition activities (e.g. horticulture, small ruminants, beekeeping) introduced to 750 households.	LDCF	988,828	2,035,238

the community level		750 households (3000 individuals). The total area to be covered under this investment will be approximately 375 hectares (approximately 0.5 hectare/household).	4.1.2 Field demonstration of locally relevant multi-purpose agro-forestry to protect and improve livelihood systems conducted in 24 locations and and adopted by the stakeholders covering 375 hectares.			
5. Dissemination of best practices, project monitoring and evaluation	TA	5.1 Stakeholders and communities aware of improved SLM/W practices, livelihood diversification and household level income generation practices through wide dissemination 5.2 Project implementation based on results based management and dissemination of best practices and lessons learned for future operations	5.1.1 A communictaion strategy prepared in close collaboration with the MOFLR, MAFS, MNR, Ministry of Local Government and Cheiftainship (MLGC) and NUL and implemented Output 5.2.1: Systematic collection of field based data to monitor project outcome indicators at all levels and evaluations	LDCF	291,688	500,000
			Subtotal		3,389,334	8,035,238
			Project management Cost (PMC)3		203,360	401,762
			Total project costs		3,592,694	8,437,000

C. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME ($)

Please include letters confirming co-financing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Co-financing	Co-financing Amount ($)
GEF Agency	FAO Technical Cooperation and Trust Fund Projects	Grant	937,000
Government Programme	Integrated Watershed Management Programme of the Ministry of Forestry and Land Reclamation (MFLR)	Grant	7,500,000
Total Co-financing			**8,437,000**

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL, AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
FAO	LDCF		Lesotho	3,592,694	341,306	3,934,000
Total Grant Resources						3,934,000

1 In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

2 Indicate fees related to this project

3 PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount ($)	Co-financing ($)	Project Total ($)
Local consultants	790,800	200,000	990,800
International consultants	60,000	-	60,000

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT?

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

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF[4]

Overall, the objective of the project, expected outcomes have not changed. The outputs are grouped and reformulated in to 11 from 19 outputs described during the PIF stage. The realignment is expected to improve efficiency of implementation as the current outputs clearly separate investment related activities from technical assistance. There are very few changes to the activities since initial PIF approval. In addition, the changes in the outputs are due to reorganization of some of the activities into more coherent components and the reformulation of outputs that adequately reflected the current circumstances and scope of activities as determined through extensive in-country consultations. The changes were as follows:

Component 1: Minor alignment has been incorporated into the outputs of the component 1. The output 1.1.1 now covers capacity development activities at the national and district levels, while output 1.1.2 targets community based organizations and the rangeland management and grazing association representatives. The training programmes are split into two phase – first during the first year and the second refresher training during the third year. The second phase of the training is necessary to ensure sustainability of interventions and will reflects the learning from the interventions and investments at the local level. This approach is introduced into the project document.

Component 2: The outcomes under component 2 are merged and two outputs are differentiated. Based on the consultation with Ministry of Forestry and Land Reclamation (MFLR) and Disaster Management Authority (DMA), the outputs and activities are consolidated and aligned. The output 2.1.1 will focus on establishment and management of a land use and land suitability data base at MFLR in close collaboration with the MAFS and associated training programmes. The output 2.1.2 would cover improved vulnerability and risk assessment tools and methods aiming to strengthen the capacity of Disaster Management Authority (DMA) with related training programmes. The number of staff to be trained as part of output 2.1.1 and 2.1.2 are clearly quantified in consultation with the relevant ministries and departments.

Component 3: There are no changes in the component 3 outcomes and outputs. The output 3.1.3 focuses on range resources management that include formation, strengthening and empowerment of grazing associations through community mobilizations. Focus will be on range inventory and monitoring and grazing management plans in 24 communities.

Component 4: The outcome 4.2 "communities aware of improved livelihood diversification and small scale and household level income generation practices through wide dissemination at the community level" is reformulated and moved to component 5. The investment activities are retained in component 4. Detailed description has been included under this component. Specific adaptation measures are described in details. The income generation activities and the integrated crop and livestock systems and management practices will be implemented in all the 24 communities depending on the local resource endowment.

4 For question A.1-A,7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question

Component 5: Dissemination of best practices, project monitoring and evaluation

Component 5 outcomes and outputs are reformulated taking into consideration of only activities relevant to technical assistance. The outcome 5.1 is related to development of communication strategy and would be taken up during the first two years; and implementation will follow in third and fourth year. The communication material development and dissemination will be carried out through the project period. The outcome 5.2 is related to results based management and establishment of baseline data and independent evaluations.

As a result of this revised design, the distribution of costs between components has changed, as given in the table below. The project management costs have been reviewed and confirmed at a level of 6% after a detailed discussion with the government and implementing partners. The component estimates in the PIF, including project management costs, were only rough estimates. The detailed project activities were elaborated during project preparation, inputs identified and unit costs systematically collected for all project activities. The budget estimates were made on the basis of detailed information and analysis. Project management costs reflect the needs of the project.

Component	Original LDCF Financing	Updated LDCF financing	Original co-financing	Updated co-financing
Component 1	400,000	241,888	1,046,157	950,000
Component 2	500,000	397,188	975,920	850,000
Component 3	1,356,060	1,469,742	2,859,002	3,700,000
Component 4.	1,015,553	988,828	2,164,029	2,035,238
Component 5	150,000	291,688	348,226	500,000
Project management	171,081	203,360	369,667	401,762
Total	3,592,694	3,592,694	7,763,000	8,437,000

A.1 National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Updates Reports, etc.

In addition to already described national strategies and plans or reports and assessments under relevant conventions, some additional aspects are included under this section. The additional details were evolved or made available during the full project formulation stage. The strategies have an overall goal to promote sustainable natural resources management and to support crop, livestock and agro-forestry systems to reduce vulnerability and enhance climate resilience.

The proposed project will promote both immediate and longer-term risk reduction and adaptation measures. Specific adaptation activities will be implemented to improve the sustainable natural resources management and climate resilience of the defined baseline activities. The LDCF proposal targets a number of priorities of the NAPA (2007) and is directly related to the two priorities:

- Improve resilience of livestock production systems under extreme climatic conditions in various livelihood zones in Lesotho
- Promoting sustainable crop-based livelihood systems in foothills, lowlands and the Senqu River Valley

The major focus of the project is to implement climate change adaptation measures at local level to reduce vulnerability of local communities and improve their livelihoods and adaptive capacity. Scaling-up and transfer of climate resilient measures will be considered. All major ongoing and pipeline initiatives of the Government, development partners are taken into consideration to enhance synergies and to avoid potential duplications.

The main existing framework for implementing climate change adaptation in Lesotho is the **National Adaptation Programme of Action (NAPA)** which identifies regions and communities vulnerable to climate change and has listed 11 adaptation priorities. The NAPA presents a foundation for integrating climate change considerations into National

Strategic Development Plan (NSDP 2011)[5]. The LDCF will address key and urgent issues prioritized in the first two priorities/options

- Improve resilience of livestock production systems under extreme climatic conditions in various livelihood zones in Lesotho
- Promoting sustainable crop-based livelihood systems in foothills, lowlands and the Senqu River Valley
- Capacity building and policy reform to integrate climate change in sectoral development plans

The proposed LDCF project is consistent with Lesotho's development priorities outlined in the **National Vision 2020** (2001-03), the **Poverty Reduction Strategy** (PRS, 2003), the Agriculture Sector Strategy of 2003, the Food Security Policy of 2005, the **National Action Plan for Food Security** (NAPFS, 2006) and the **National Strategic Development Plan (NSDP: 2012 - 2017)**. The Government policies and strategies have in all cases emphasized the statement of food security, employment generation, combating environmental and natural resources degradation in order to meet the World Food Summit target of reducing the number of hungry people by half by 2015 which is consistent with MDG-1 and attaining environmental sustainability (MDG-7). The LDCF also targets sustainable natural resources management with a view to reduce the vulnerability and enhance resilience.

The proposed LDCF links to regional programmes such as the **Comprehensive Africa Agriculture Development Programme** (CAADP) investment pillar on land and water management and increasing food supply and reducing hunger, as well as with the Africa Adaptation Programme. The UN Common Country Assessment (CCA) exercise in 2004 confirmed the long-term vision pursued by key Medium-Term National Planning Process such as the Poverty Reduction Strategy, the Agriculture Sector Strategy, the National Food Security Policy and the National HIV/AIDS Strategic Plan. It has been recognized that the country's food crisis has resulted from the nexus of poverty and natural resources degradation.

The Second National Communication to UNFCCC (2013) provides comprehensive and authoritative account of climate changes in Lesotho; which includes the strengthening institutional capacity and establishment of the multidisciplinary Steering Committee to lead the NAP process; forge greater technical and scientific cooperation; assist in the transfer, adaptation and acquisition of technologies; and increase popular participation in NAP implementation and evaluate and assess the impacts of the action programmes.

The implementation arrangements proposed in this project document are consistent with the structure of the National Desertification Steering Committee (NDSC) as presented in the Second National Communication to UNFCCC. A multi-disciplinary National Desertification Steering Committee (NDSC) has been established to advise and provide guidance on conservation, protection and sustainable use of the country's natural resources; and provide oversight in the transfer, adaptation and acquisition of technologies; and evaluate and assess the impacts of the action programmes.

The National Desertification Steering Committee (NDSC) committee includes National Environment Secretariat (Coordinator), MEMWA, MFLR, MAFS, MOLGC, DMA, National University of Lesotho. NDSC provides monthly reports on a progress regarding a number of issues including; land management, effective ways and means of reaching the grassroots communities; planning, implementation and monitoring of National, District and Local projects

However there are shortcomings in the structural arrangements; NES is a department of the Ministry of Environment with no authority over other departments and /or ministries dealing with the environment, as such its role can only be advisory. There is also a coordination gap in operational structures in the districts and local levels. The structures and their nomenclature have changed substantially over the recent years. Now at the districts have District Administrators instead of District Secretary. In addition, District Councils and Community councils have major role to play. The district council is chaired by District Council Secretary. The district council have the membership consisting of departments at the district, selected number of representatives of the community councils and Representatives of NGOs. At the local level is the community councils, which are the planning structures at village level.

[5]National Strategic Development Plan. 2011. Ministry of Finance and Economic Planning. Government of Lesotho.

SLM/W investment plan (2014 – 2024): The proposed LDCF project is consistent with The SLM/W investment plan which identifies the following barriers to improved land management as the key driver of land degradation: 1) Low capacities at all levels; 2) Inadequacy of the extension service; 3) Lack of a programmatic approach to sustainable land management (SLM) - therefore SLM is not mainstreamed in development programmes and policies; and 4) Lack of funds to finance projects such as those proposed in the NAP. The goal of the Lesotho Sustainable Land and Water Management Strategic Investment Programme (L-SLWM-SIP) is to catalyse key sectors to co-operate to reduce land degradation, improve natural resources based livelihoods and restore ecosystem services, hence the country's capacity to adapt to the effects of climate change. The objective of the programme is to strengthen inter-sectoral co-operation in order to halt degradation, restore degraded lands and prevent future land degradation.

The L-SLWM-SIP will improve coordination and promote greater cohesion of service delivery to reduce duplication of efforts across the inter-related sectors. It will mainstream sustainable land and water management (SLWM) into relevant sector policies / strategies at national level, and. harmonize policies through a joint multi-sector team of experts from GoL, NGOs, CBOs, donors, and private sector. At local level, the L-SLWM-SIP will support development of land use plans for SLWM, using a "bottom-up" approach starting with land users (individuals, village grazing associations), creating locally-owned plans, which will then be used to develop Community Council and District plans to ensure sustainable landscape and ecosystem functioning. The programme will catalyse adoption of SLWM technologies in the crop, range, wetland and forest / woodland ecosystems of Lesotho. These approaches have been proven at pilot levels in Lesotho, and include conservation agriculture, Machobane farming systems, agroforestry, and various soil and water conservation interventions.

In order to improve access to water for crop diversification and intensive livestock production, the programme will intensify household water harvesting and rehabilitate old ponds/ dams and construct new ones. The programme will also consolidate and rationalize the operations of various institutions that deal with issues of environment, water and soil conservation and land use. The program also provides instruments and mechanisms for innovative funding sources.

The Lesotho Agriculture and Food Security Investment Plan (LAFSIP – 2014 - 2018) is the medium-term strategic plan of the Government of Lesotho (GOL) aimed at achieving sustainable agricultural growth, poverty reduction and food security in the country within the framework of the New Partnership for Africa (NEPAD) Comprehensive Africa Agriculture Development Programme (CAADP). LAFSIP is fully aligned with the national goals of Lesotho National Strategic Development Plan (2012), Agricultural Sector Strategy (2006), the Subsidy Policy and the Food Security Policy (2005) and it has been informed by the National Forum on Agriculture and Food Security (2010) which reviewed the performance of the agriculture sector and explored ways for improvement.

LAFSIP has identified the following key challenges in the agricultural sector: 1) Climate change 2) Nature and structure of crop farming, 3) inadequate enabling environment for agricultural growth 4)poor rangeland management which reduces livestock productivity, 5) Land ownership 6) land and environmental degradation. The Overall Goal of LAFSIP is to contribute to Lesotho's accelerated and sustainable economic and social transformation process. The development objective aims to sustainably increase rural incomes and national food and nutrition security through commercialization and diversification, sustainable use of natural resources, and reducing vulnerability and poverty reduction. LAFSIP covers all sub-sectors including crop and livestock development, small agribusiness development, processing, marketing and storage, and sustainable development of the natural resource base.

The LAFSIP also integrates investments in infrastructure, access to rural credit and strengthening land use planning and rangeland management. The investment plan has identified four strategic priority areas programmes for improving agricultural performance which are embedded in the proposed LDCF project: Resilient Livelihoods: Reducing Vulnerability and Managing Risk, Production, Productivity, Commercialization and Diversification, Sustainable Natural Resource Management, and. Human and Institutional Capacity Development.

CAADP Institutional Structure in Lesotho: The CAADP Steering Committee comprises of Principal Secretaries for Ministries of Agriculture and Food Security (MAFS), Ministry of Finance (MoF), Ministry of Development Planning (MoDP), Ministry of Trade, Industry, Cooperatives and Marketing (MTICM), Ministry of Local Government (MLG), Ministry of Forestry and Land Reclamation (MFLR), President of Lesotho National Farmers Union (LENAFU), Chief Executive of Private Sector Foundation of Lesotho (PFSL) and Executive Director Lesotho Council of Non-

Governmental Organizations (LCN). This committee was the overseer of the whole CAADP process and the CAADP Country team reports to this committee for policy guidance during the CAADP implementation process.

The CAADP Country team drives the implementation process, and comprises of the Government Ministries, NGOs, NUL, Development partners, and farmer organizations. These include MAFS, MOF, MDP, MFLR, Disaster Management Authority (DMA), MTICM, Ministry of Energy Meteorology and Water (MEMWA), MLGC, LENAFU, LCN, PSFL, FAO, World Food Programme (WFP), and the National University of Lesotho (NUL).

Conservation Agriculture Strategic Framework (2012 – 2017): The proposed LDCF project recognizes Conservation Agriculture as the appropriate strategy for ensuring increased, efficient and sustainable agricultural production and land management in the farming systems of Lesotho. The objective of the CA strategy is to leverage the inclusion of CA in the national food security policy and strategy, promote sustainable agricultural production through practice of CA principles and appropriate technologies for smallholders and semi-commercial to commercial farmers to the extent that at least 50% of the arable land is under conservation agriculture in 20 years.

In the short to medium term, the CA strategy aims at 1) Increasing the yield from the current 0.5 tons per ha in conventional agriculture to 5.0 tons per ha on CA fields. 2) Increasing carbon sequestration through improvement in soil organic matter levels by 6% (0.5 to at least 3.0 % in CA fields and 3) Improving soil quality and health through reduced land degradation, reduced soil erosion and fertility and improved water conservation in CA catchments.The strategy also focuses on promoting coordinated and harmonized research and extension within the agricultural sector; and training extension personnel within MAFS and NGOs in CA.

A.2 GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

No change compared to the PIF.

A.3 The GEF Agency's comparative advantage:

There are some changes introduced under this section based on the recent developments related to FAO's new strategic objective which is operational from 2014. The complete descriptions of the changes are provided below.

FAO has been implementing several projects in Lesotho in the field of agriculture, food security, disaster preparedness and emergency response. FAO's comparative advantage for the proposed project lies in its long-standing experiences working with the Ministry of Agriculture and Food Security and Ministry of Forestry and Land Reclamation on issues related to climate variability and climate change. The project draws on lessons learned from a project on "Strengthening Capacity for Climate Change Adaptation in Agriculture" technically assisted by FAO to the Government of Lesotho[6]. Through this project, FAO has supported identification of viable adaptation options in agriculture. The project included development of technical and institutional capacity, and adaptation practices in three districts. Several FAO's ongoing and pipeline programmes are complementary to the proposed project and will build on already established institutional systems.

FAO's activities are guided by a clear targeting policy which ensures that they reach poor rural women and men, who are usually the most vulnerable to climate change. FAO's operations are consistent with national priorities especially on sustainable agriculture and food security. The proposed project matches with FAO's comparative advantage in capacity development in agriculture. FAO has been supporting Lesotho's efforts to develop more resilient agriculture systems and national food security strategies. Technical support will be provided locally from the national level expertise and also from FAO decentralized offices in the region and from headquarters.

This Project is aligned with FAO's Global Strategic Objective 2 (SO2): Increase and improve provision of goods and services from agriculture, forestry and fisheries in a sustainable manner. The Project's focus to help local forest user

[6] Dejene A., S. Midgely, M.V. Marake and S. Ramasamy. 2011. Strengthening Capacity for Climate Change Adaptation in Agriculture: Experience and Lessons from Lesotho. FAO Blue Book Series. Rome, Italy. Weblink: http://www.fao.org/docrep/014/i2228e/i2228e00.pdf

groups improve their forest management practices while benefiting their own livelihoods will contribute in particular Organizational Outcome 1 (OO1) under SO2: Producers and Natural Resource Managers Adopt Practices that Increase and Improve the Provision of Goods and Services in the Agricultural Sector Production Systems in a Sustainable Manner. In addition, the Project's work to strengthen the relevant policy framework in Lesotho will contribute to SO2, OO2: Stakeholders in member countries strengthen governance – the policies, laws, management frameworks and institutions that are needed to support producers and resource managers – in the transition to sustainable agricultural sector production system.

The project fit into FAO-Adapt, an organization-wide framework programme launched in 2011. It provides general guidance and introduces principles as well as priority themes, actions and implementation support to FAO's multi-disciplinary activities for climate change adaptation. FAO-Adapt provide an umbrella to FAO's adaptation activities, including short-term and long-term adaptation measures. FAO-Adapt aim to enhance coordination, efficiency and visibility of FAO's adaptation work. FAO's Interdepartmental Working Group (IDWG) on Climate Change and its subgroup on adaptation facilitate the implementation process of FAO-Adapt. Technical units in FAO Headquarters and decentralized offices lead the delivery of outputs and actions consolidated under the priority themes defined in the FAO-Adapt Framework Programme.

The Project is also aligned to, and contributing to, the "*FAO Country Programming Framework (CPF) (2013-2017)"*. In particular, it will contribute to the CPF's CPF Priority Area 4. Natural resource conservation and utilization including adaptation to climate change. The outcome 4.3 is related to climate change and institutional and technical capacities for adaptation to climate change in agriculture strengthened and adaptive capacity of vulnerable communities enhanced.

This includes four outputs: *Output 4.3.1: Improved policy advice and institutional capacity building:* Capacity building of national (institutions for climate change adaptation and policy advice and guidance in the integration of climate change priorities into agriculture and food security policies, programmes and action plans and support in the implementation of prioritized adaptation practices under the National Adaptation Programme of Action (NAPA)); *Output 4.3.2: Improved assessment, monitoring, disaster risk management (*Support in assessment and monitoring of climate risks and vulnerabilities, improvement of early warning systems and strengthening of capacities, and procedures for effective disaster risk management at all levels with emphasis on community based disaster risk management and facilitates integration to the longer-term climate change adaptation initiatives

The *Output 4.3.3: Improved community based adaptation approaches* to climate change in vulnerable districts and capacity building of local communities in the adoption of improved production practices, including adaptation innovations through ecosystem management and improved pasture, rangeland management and rehabilitation of degraded lands, promotion of Public Land and Private Land plantation and agro forestry to enhance coping capacity of farmers, and promotion of alternative energy sources and *Output 4.3.4: Improved knowledge management,* database of good practices, database on agriculture impacts of climate change on agriculture.

A.4 The baseline project and the problem it seeks to address:

There are significant changes in relation to co-financing projects. The changes are because of the fact that almost all of the co-financing projects outlined in the PIF have been completed now. Thus, new projects were identified in close collaboration with the implementing partners. The most relevant projects and interventions to which GEF financing would complement are provided at the end of this section after describing the general development context related to the project.

Geographical and topographical features: Lesotho is a landlocked mountainous country situated in the southern part of Africa between the southern latitude 28^0 and 31^0, and eastern longitudes 27^0 and 30^0. The country comprises 30 588 km^2 of land surface that is entirely surrounded by the Republic of South Africa. Lesotho's main features are the Maloti Mountains which are part of the greater Drakensberg range. Lesotho is the only country in the world with the entire land surface situated more than 1000 m above sea level. The lowest point in the country, where Senqu River flows across the border is 1 388 m above sea level, while the highest part, Thabana Ntlenyana is 3 482 m above sea level.

Agro-ecological Zones: The country is divided into four agro-ecological zones on the basis of its geographical and topographical features. The zones are often referred as livelihood zones: Lowlands, the Foothills, the Mountains and the Senqu River Valley. The Lowlands region covers an area of 5 200 km^2 or 17 % of the total surface. The southern Lowlands are characterized by poor soils and low rainfall, while the northern and central Lowlands have large deposits of volcanic soils. The Foothills comprise 4,588 km^2 of a strip of land that lies between 1 800 and 2 000 m above sea level, and forms 15 % of the total land area. The Foothills consists of very fertile land that is associated with high agricultural productivity.

The largest ecological region, the Mountains, covers an area of 18 047 km^2 and comprises high altitude plateau, bare rock outcrops, deep river valleys and wetlands. It is the source of many rivers which empty themselves towards the Indian and Atlantic Oceans. The region forms the main livestock grazing resources in Lesotho. The fourth region, the Senqu River Valley, forms a narrow strip of land along the Senqu River, and penetrates deep into the Drakensberg ranges. Senqu River Valley covers only 9 % (2 753 km^2) of Lesotho's total area. The soils of the Senqu River valley vary from rich to very poor, thereby rendering the area the most unproductive region in the country.

Natural Resources: While Lesotho is endowed with relatively abundant water resources, it is known to be a resource poor country with minerals existing in non-economic deposits. The arable land not only constitutes 9 % of total land area but that land is gradually shrinking due to severe soil erosion, land degradation and encroachment by human settlements. There is growing food deficit due to both agricultural production and productivity being undermined by increasing human and animal pressures, poor land management practices, and adverse weather conditions. The country is characterized by depleting vegetative cover due to overgrazing and deforestation which lead to serious impacts of environmental degradation. All of these factors are collectively responsible for Lesotho's downward spiral in providing food security for the citizens. There are no strategic reserves for providing food during the most difficult period of depleted household food reserves as being experienced now.

The climate is marked by four identifiable seasons. Normal annual rainfall of 700 mm is received during the months of October to April, with averages of 1 200 mm recorded in the mountain region. The low averages of 500 mm are recorded in the Senqu River Valley. Periodic droughts and hazardous farming conditions are a result of increasingly erratic precipitation, marked by high intensity, short-duration precipitation often associated with severe soil erosion. Snowfall during winter months of May-July is a common occurrence especially in the coldest region - the Mountains. Due to its altitude, the country remains cooler throughout the year than most other regions at the same latitude. Lesotho has a temperate climate, with hot summers and cold winters. Maseru and its surrounding lowlands often reach 30°C in the summer. Winters can be cold with the lowlands getting down to −7° C and the highlands to −18° C at times. The mean summer temperature is about 25° C and the mean winter temperate about 15° C.

Demographic features: The population of Lesotho is estimated at 1.88 million. In 1996, however, the population census estimated the population to be 1.84 million people, suggesting that the growth rate had gone down from 2.8% in the 1976 - 86 periods to 1.5% in the 1986 - 96 periods. The growth dropped further between 1996 and 2006 to 0.1%[7].Population distribution by ecological zones shows that most of the population is concentrated in the Lowland region. Population density increased from 53 people per km^2 in 1986 to 61 people per km^2 in 1996, and 62 people per km^2 in 2008. The density on arable land increased from 569 people per km^2 in 1986 to 588 people per km^2 in 1996. The landless are, therefore, compelled to migrate to the urban centers resulting in a myriad of social problems. According to the national 2006 population census, literacy rate has dropped to 66 percent in comparison with the censuses and surveys during which literacy rate was estimated at 80% in earlier years. It is still higher for females than males and it declines with increase in age[8].

Economy and its growth: Domestic economic growth was estimated to have slowed down in 2011 following a robust expansion in 2010. This mainly reflected varying patterns of subdued performance in all the main sectors of the economy. The secondary and tertiary sectors recorded 6.3 per cent and 2.9 per cent, respectively, while the primary (agriculture) sector registered 3.9 per cent in 2011. Real GDP growth was estimated at 4.3 per cent in 2011 compared with a revised 5.6 per cent in 2010. The primary sector grew at a slower rate of 3.9 per cent in 2011 compared with 4.0

[7] Bureau of Statistics. 2008. Statistical Yearbook. Government of Lesotho.
[8] Bureau of Statistics.2006 Population and Housing Census Socio-economic Indicators. Government of Lesotho.

per cent in 2010. The growth of the industry was largely underpinned by the strong recovery of the mining and quarrying sub-sector at the back of the surge in diamond prices during the year. The agriculture, forestry and fishing sub-sector contracted at an estimated rate of 1.8 per cent in 2011 compared with a strong growth of 10.9 per cent in the previous year. The contraction resulted from poor performance of the crops sub-sector, which was largely affected by heavy rains, floods and storms experienced during the 2010/2011 agricultural year.

It is estimated that close to 76% of households in Lesotho live in the rural areas and 70% derive all or part of their livelihoods from agriculture. Therefore, the contribution of this sector is of critical importance in determining livelihoods and the socio-economic conditions in Lesotho. The country's limited arable land together with a mountainous topography, variable climate and severe erosion constrain the agricultural sector to generate adequate levels of employment and incomes to support the increasing population, thereby aggravating the poverty situation over time. The unfavourable climate conditions in Lesotho have been found to be related to many indicators of poverty amongst rural and farming households. Despite the poor performance of agriculture, Lesotho still regards agriculture as having a critical contribution to the economy. It is believed that targeting agricultural development by enhancing its productivity is a potentially effective way of addressing the poverty situation in Lesotho.

Agricultural production trends: Lesotho's crop agriculture is dominated by maize, which accounted for 64% of the area planted in 1998/99. The other major cereal crops are sorghum, occupying a planted area of 14% during 1998/99, while wheat followed with a share of a planted area of 12% in the same year. Pulses occupied a share of area planted amounting to 10% in 1998/99. These are the most sensitive crops in terms of supporting the livelihood of the majority of the population in food security. The lowest total areas under cultivation were in 1990/91 at 136 500 hectares down from a high of 450 000 ha in 1960. It was 219 133 ha in 1998/99; and it has continued to drop, reaching 124 032 hectares in December 2011, representing a significant decrease of 39% below the previous season[9].

The yield estimate per hectare for maize in 2011/12 season was 140kg per hectare, 78% lower than in the previous season. For 2012/13 cropping season, the total area planted to maize was 114 543 ha showing an increase of 17.25% compared to 97, 711 ha of the previous year. Generally, the total area under cultivation, production levels, and crop yields are very erratic, a factor much related to rainfall and inadequate capacity for resilience. Therefore, the country is heavily dependent on imports to satisfy the local demand for major staple crops, and quite frequency on donor support during the most critical periods of food deficit caused by droughts.

In the period 1960 to 1965 Lesotho's average annual grain production was 232,600 metric tons, the average yield per ha was 0.812 metric tons and average annual imports were 12 400 metric ton. In the period 2006 to 2010, the average annual grain production had fallen to 108 800 metric tons (a fall of 53%), average annual yield per ha was only 0.612 metric tons (a fall of 25%) and average annual grain imports had risen to 155 000 metric tons. In the same period the average area of grain harvested annually had fallen from 287,000 ha to 178 000 ha, a fall of 40%. Production for the 2014/15[10] is estimated to be 85,774 metric tons (mt), for maize, 12 401mt for wheat, and 5,170mt for sorghum. Total national cereal requirement for this period will be 344 594 mt. Domestic production can only 30% of this demand, at 186 595 mt. The decline is attributed to late planting operations.

Forestry: There is no comprehensive and updated data on the extent of tree cover in Lesotho. However, it is generally known that the country is one of the least forested in Africa. Although the indigenous forests are of low occurrence they remain a very important resource to rural communities by providing fuelwood, construction material, medicine, forage and shelter. However, despite various efforts on conservation the destruction of this natural vegetation continues unabated, although the rate of depletion has not been ascertained quantitatively.

Lesotho is a grassland country, and does not have large natural forests. The Government through the Ministry of Forestry and Land Reclamation has embarked on woodlots projects throughout the country, aimed at afforestation and reforestation. Forest plantations account for 49,000 ha; while woodlands (indigenous forests) are estimated to cover 97

[9] Lesotho Vulnerability Assessment Committee. 2012. Lesotho Food Security and Vulnerability Monitoring Report. Disaster Management Authority, Prime Minister's Office.

[10] Lesotho Vulnerability Assessment Committee. 2014. Early Warning Bulletin (in Lesotho Times dated July 17 -23, 2014). Disaster Management Authority, Prime Minister's Office. Maseru

000 ha.[11] The total land cover under forests is, therefore, 146 500 ha. Anecdotal evidence indicates: "*As the human population of Lesotho increased through the 1800s and 1900s, so the forest and shrubland patches and riparian vegetation were increasingly denuded in the ongoing quest by local people for firewood and building material. Today, very little remains"*[12]. In the Sehonghong/Mashai area inhabitants are said to have experienced thick indigenous tree covers of *Cheche (Leucosidea sericea), Lelothoane (Buddleia salvifolia)* and willow (*Salix capensis*). Programmes to re-stock these would be a desirable undertaking.

Livestock and rangelands: Cattle, sheep and goats which are raised extensively on communal rangeland dominate the livestock sector. Cattle are mainly used for subsistence which includes draught power, milk, fuel sources, socio-cultural uses and ceremonies. Sheep are of the merino type and raised for the sale of their wool, slaughter and for ceremonial purposes. Goats are of the angora type and are mainly kept for their mohair. Horses and donkeys are kept for human transport and transportation of goods. The largest single monetary contribution to cash income from livestock is that provided by the sale of wool and mohair followed by sale of live animals.

Livestock numbers have fluctuated over the years reaching a peak in 1986/87. In 2010, cattle numbers were 626 343, sheep around 1 228 557 and 813,792 goats[13]. Livestock herd sizes are mainly controlled by natural factors such as fertility and mortality than planned management. In recent years, livestock theft has caused great concern among livestock farmers as it has become a common occurrence, not only in the mountain areas, but all over the country.

The major problem facing the livestock sub-sector is overstocking which has resulted in range degradation. It is estimated that Lesotho is overstocked by about 24%[14]. The communal nature of rangelands, that lacks the governance impetus to ensure that grazing management strategies are enforced effectively, is one of major contributing factors to the problem of overgrazing. For this reason, empowerment of user groups through formation of grazing associations presents itself as a viable option.

As a result, sheep production has dropped from 3 million kg in 1976 to slightly over 2 million kg in 1996, and yield from 2.9 kg to 2.4 kg per sheep during the same period. The decrease in mohair production has been comparatively smaller between 1988 and 1998 period, fluctuating around 1 kg per goat with a total production of 0.6 million kg. Mohair yields in South Africa average at about 2 kg per head (Government of Lesotho and African Development Fund, 2000). Poor nutrition associated with degraded range resources is responsible for low livestock productivity. The average lamb/kid survival rates are low at about 40%. Intensive livestock production is potentially well suited to Lesotho conditions as it poses little threat to environmental degradation, while at the same time having potential to bring greater returns per unit area of land. Dairy farming and poultry and rabbit farming are some of the intensive livestock production practices with potential in Lesotho.

Land tenure: Land administration in Lesotho has for a long time been governed by a dual system of customary law and the more formal statutory administration. The former was more prevalent in the rural areas while the latter was more applicable in urban areas. This dual system became increasingly problematic as the intersection between urban and rural area grew with the expanding peri-urban area. Effects of improper land management as influenced by the current dual land tenure system (state and customary land tenure system) and the chiefs' involvement and such disempowered legal inclusion of chiefs as replaced by local government administrative structures is widely discussed.[15] A series of measures to reconcile this dual system have been taken over the years culminating in the enactment of the Land Act of 2010. The main input into the act was the land policy review commission which assessed the land tenure system and evaluated its appropriateness in relation to equitable access, security of tenure, improved land productivity and efficient administration.

[11] Ramanyaka, T., Principal Forestry Officer (Research). 2014. Personal communication. Department of Forestry

[12] Boshoff, A. and Graham, K. 2013.Historical Incidence of the Larger Mammals in the Free State (South Africa) and Lesotho. Centre for African Conservation Ecology and Nelson Mandela Metropolitan University, Port Elizabeth, South Africa

[13] Bureau of Statistics. 2010. 2009/2010 Livestock Agricultural Census: Livestock Report. Government of Lesotho

[14] Palmer. A. R. 2013. National Monitoring of Processes of Landscape Change. Sustainable Land Management project, Ministry of Forestry and Land Reclamation.

[15] Daemane,MMM (2012). Problems of land tenure system in Lesotho since post-independence: Challenging perspectives for sustainable development in land administration and management. Journal of Sustainable Development in Africa (Volume 14, No.8, 2012)

In reviewing these policies and eventually enacting the law, Lesotho received substantial support from the development partners, notably the United States of America and the World Bank. Institutional reforms including establishment of key institutions like Land Administration Authority (LAA) were undertaken. LAA is now making major strides towards reconciling the long standing customary land allocations practices with the dictates of the new act. The gender discriminations that were so pervasive in the customary law are now being eliminated as women can now own and inherit land.

In as far as the agricultural land is concerned, the land act attempts to deal with the twin evils of landlessness and land hoarding by clearly stipulating how the agricultural land should be used and looked after. In theory any crop land that is not utilized over three consecutive years is according to the act considered abandoned and therefore due for reallocation to people that can put it to good use. While this provision is difficult to implement due to political reasons it does however discourage land hoarding by speculators.

Whereas the legislative process have been useful in opening up land for commercial transactions and ensuring security of tenure for all gender groups, the entrenched customary practices in the rural areas will take time to give way to the espoused statutory practices. For instance, in most rural areas land rights for cropping are only respected over the cropping season. After harvest, communal grazing rights generally take over as livestock owners allow their animals to roam freely and graze on crop residues. This presents a major challenge for introducing and adopting conservation based production technologies such as Conservation Agriculture which requires controlled management of crop stubble. A lot of effort is therefore needed to gradually wean farming communities from their customary practices and help them abide by the dictates of the current statutes.

Climate change vulnerability and problems the project will address

Watersheds in Lesotho are severely affected by increasing climate variability. Watersheds in most vulnerable livelihood zones face threats of land degradation and declines in agricultural production. The major livelihood activities of the watersheds are dominated by the crop and livestock production sub-sectors. The agriculture sector contribution to the Gross Domestic Product (GDP) has declined from over 20 percent in the 1980s to the current 8 percent. This is partly attributed to recurring droughts and weather extremes, poor crop, livestock and rangeland management practices in watersheds. Approximately 90 percent of the farmers are subsistence growers, producing mainly for domestic consumption with little surplus for the market. Well over half of the rural population, extremely dependent on subsistence agriculture, lives below the poverty line.

The livestock sector is crucial for income generation, farm operations and food security of the rural population especially in the foothills and mountain watersheds. This sector is a major contributor to the country's GDP through production of wool, mohair, meat and milk, but is entirely dependent on communal grazing. About 70 percent of Lesotho's land area is rangelands. The annual soil loss from rangelands is estimated at 18 tonnes per hectare per year compared to 20 tonnes per hectare per year of soil lost from cropland.[16] Overgrazing and the recurring droughts have reduced the regenerative capacity of grasslands and range resources, negatively affecting the carrying capacity as well as the number and quality of livestock. The impacts are likely to worsen under projected climate change scenarios.

Chronic food insecurity is a defining feature of poverty in the watersheds of Lesotho. The root causes of the problem are linked to the low levels of agricultural productivity and crop failures attributed to climate variability and extreme events and associated issues: land degradation and soil erosion, inefficient water control and management. In the decade 1995/96 to 2004/05, on average 33 414 ha of planted area (≈ 30-50%) failed each year: in the lowlands (17 069 ha), in the mountains (9 248 ha), in the foothills (5 180 ha) and in the Senqu River Valley (1 915 ha). Consequently, Lesotho is currently heavily dependent on imported food, estimated at 60 percent of its annual cereal demand. The 2006/07 growing season recorded one of the most severe droughts in the recent past. While the 2010/11 season was characterized by the worst floods in recent memory, the 2011/12 season started with a drought extending from the spring into the mid-summer of 2011 and seriously threatened the staple food production outlook for 2011/12. An analysis of crop yield time series from 1973/74 to 2009/10 indicated that yield levels are even less in recent years

[16] National Resource Inventory of Lesotho. Ministry of Agriculture. 1988.

compared to the late 1970s owing to increased vulnerability to climate risks. The major reasons could be attributable to poor crop, livestock and natural resources management, in addition to inefficient use of agricultural inputs.

The underlying climate related causes of the watershed degradation and loss of livelihoods would be further fuelled by the projected **climate change** impacts on major livelihood zones of Lesotho supporting arable farming and livestock production. For example, according to the Lesotho Meteorological Services, models predict a temperature increase of 1.0 to 1.5 °C in 2030 and 2050. In the Second National Communication, climate change scenarios for annual temperature and seasonal precipitation for 100 years from the year 2010 through to 2100 were modelled.

Temperature predictions anticipate a gradual increase in annual mean temperature change ranging from 0.4 - 4.7ºC in the north and variations from 1.6 - 3.8ºC in the south by the year 2100. Overall, summer precipitation in the north will be slightly above normal for all scenarios while the southern region precipitation will be below normal. Autumn will experience an above normal precipitation in both northern and southern regions of the country. On the other hand, below normal winter precipitation for both the north and the southern region are predicted with the northern region showing a significant drop below normal.[17]

As indicated in the most recent FAO studies, regardless of the various scenarios on climatic variability, frequency and intensity of extreme events, the majority of households in Lesotho are vulnerable to the slightest change in climate and it is crucial to create more awareness and action amongst policy-makers about the implication of changes in temperature and rainfall to the country's food security and well-being in the coming decades. The precipitation projections for Lesotho are significant and likely to have severe impacts on water resources, rangeland management and agriculture as the growing season is pushed forward and perhaps shortened. Furthermore, climate change might threaten the already declining staple grain production and further degrade rangelands in lowland, foothills and mountain areas.[18]

Climate change will also have detrimental impacts on the watersheds in the country already ravaged by recurrent droughts. This will, in particular, affect the wetland resources in the alpine zones of the mountain watersheds which sustain the perennial flow of the rivers and supply water to the Lesotho water development projects both in the highlands and lowlands. Moreover, high temperatures, reduced precipitation and climate variability could exacerbate incidences of soil erosion, land degradation and loss of valuable natural resources at watershed scale. The latter would also affect the lifespan and sustainability of the water development infrastructure. However, smallholder and subsistence farmers are even more highly vulnerable to a slight shift in climate variability. Hence building resilience at watershed scale is the first step towards national food security.

There are a number of institutional and systemic barriers to dealing with climate change risks in Lesotho. The NAPA listed inadequate capacity of national and local institutions and communities, and shortage of human resources with requisite skills as some of the major barriers to the implementation of climate change adaptation programmes and practices. Thus there is an urgent need for the strengthening of technical expertise of national and local institutions and communities on climate change adaptation options to effectively respond to climate impacts, as well as for evaluating and prioritizing best practices in areas of sustainable land and water management, water harvesting, crop-livestock interactions, agro-forestry and rangeland management.

Remaining barriers to address threats of climate change vulnerabilities

 # Inadequate technical and institutional capacity: Despite the extreme form of vulnerability that is found in Lesotho today, and the growing interest by policy makers on issues of climate change, the country has not yet developed a climate change policy to support planning for national adaptation. Consequently, the country is unable to respond to challenges posed by climate change in a coordinated manner especially on improving diversified livelihood strategies at household level to reduce the loss due to climate risks and enhance sustainable land and water management (SLM/W) at

[17] Ministry of Energy, Meteorology and Water Affairs. 2013. Lesotho's Second Communication to the Conference of Parties of the United Nations Framework Convention on Climate Change. Maseru

[18] Dejene A., S. Midgely, M.V. Marake and S. Ramasamy.2011.http://www.fao.org/docrep/014/i2228e/i2228e00.pdf.FAO Blue Book Series. Rome, Italy.

watershed scale. Similarly, several institutions recognize that failure to integrate climate change in the actions and measurers that aim at addressing national development priorities tends to weaken the achievements of many noble initiatives. These institutions are not able to take action because of lack of capacity that cuts across all the issues referred to in the preceding text.

 # Insufficient information on climate vulnerability and risk: Several institutions are involved in collecting data and information that can be utilized to assess vulnerabilities and impacts. Currently, most of the information gathered is not translated appropriately into vulnerability and risk assessments. This results in institutions not utilizing the relevant data which may impact their livelihoods and health. Lesotho has a decentralized administration system with districts, community councils, agricultural resource centres and sub-centres. Community councilors, extensions officers are not in position to assist the communities they serve because they have not been provided with information on climate change impacts or crop suitability in different timescales. Furthermore, there is lack of a feedback mechanism through which primary users of information or beneficiaries could inform the packaging and targeting of appropriate forecasting.

 # Lack of experience with innovative resources management practices: Lack of experience with new and innovative technologies at community level is one of the barriers hampering widespread introduction of new practices. There are technologies such as conservation agriculture being introduced to manage extreme events such as drought. There are, however, challenges with low rate of adopting conservation agriculture. These challenges include: the labour intensive nature of the work involved, difficult access to inputs, communal grazing of crop residues despite the legislation that prohibits the practice, namely, legislation in the Range Management and Grazing Control Regulations of 1980, as amended. Permanent soil cover is not easy to attain as demanded by conservation agriculture. In addition, soil is heavily compacted upon by livestock, making it difficult for implements, especially hand-held planters or hoes, to penetrate in the next planting season.

 # In-adequate sensitization and training of herders and livestock owners on range management and livestock husbandry practices: Issues related to range management and livestock production are intertwined due to heavy dependence of the latter on range forage resources. The barriers that affect introduction of innovative range and livestock management practices are: (I) in-adequate sensitization and training of herders and livestock owners on range management and livestock husbandry practices; (ii) lack of integration of innovative grazing management systems and (iii) poor introduction of intensive livestock systems that exclude grazing, implying the necessity to, first produce surplus food from croplands for human consumption, then growing fodder on marginal lands in an agroforestry system. These barriers and unsustainable practices cause land degradation and inadequate resource base for promoting diversified livelihood strategies including agro-forestry systems and alternate tree crops.

Baseline projects that will provide co-financing for the project

Background: In an effort to contribute to addressing the technical shortcomings cited in the NAPA and make progress on implementing priority adaptation needs, FAO and the Government of Lesotho have piloted a Technical Cooperation Programme (TCP) project ***"Strengthening capacity for climate change adaptation in the agriculture sector"*** from 2009 to 2011. The overall development goal of the project was to contribute to the reduction of risks associated with climate change and variability among smallholder and subsistence farmers in three selected watersheds covering three livelihood zones in Lesotho. The TCP promoted an integrated and community-based approach in addressing climate change risks through strengthening of technical and institutional capacity at national, district and local levels. The emphasis was mainly on identifying, evaluating, prioritizing and testing locally relevant adaptation practices, focusing on selected areas of crops, livestock and forest-based livelihood systems, to stabilize and improve yields. The TCP, through targeted training strengthened the technical capacity of staff at district and community levels to address these issues.

The TCP was implemented in three districts (Thaba Tseka, Mafeteng and Mohale'sHoek) identified in the NAPA as the most vulnerable to climate change and variability. Rantsimane, a sub-catchment of the Senqu River in Thaba Tseka, represents the vulnerable areas of the mountain ecological and livelihood zones. Thaba-Tšoeu Ha Mafa, a sub-catchment of the Tsoaing River in Mafeteng, is on the transition zone, between the foothills and the mountains. Mabalane, a sub-catchment of the Kolo-La-Pere River in Mohale's Hoek, is in one of the drought prone parts of the southern lowlands of Lesotho. The two lowland sub-catchments also represent the densely populated rural areas of the

country. Taken together, these three catchments represent a major transect of vulnerability ranging from the south western lowlands to the mountain zones of Lesotho, via a transitional site between the southern lowlands and the foothills.

The Programme was structured in three well-defined phases, with planned transitions from one phase to the next. The first phase involved the assessment of climate change related impacts and vulnerabilities on crop, livestock and forest-based livelihood systems in the sub-catchments. Furthermore, baseline studies on local climate-related vulnerabilities and coping and adaptation strategies were conducted, validated at national and local levels, and documented. During the second phase, an inventory of potential suitable adaptation practices (i.e. crops, livestock, crop-livestock interaction and agroforestry) relevant to southern lowland and mountain ecosystems was undertaken, drawing from various sources, with particular focus on the pilot sub-catchments in view of their specific vulnerabilities. These adaptation practices were screened using key criteria, notably: (i) comparison with the list of potential adaptation measures options suggested in the NAPA document; (ii) enhancement of both productivity and ecosystem services, and (iii) capacity to address drought risk management. Finally, field demonstrations were conducted on key potential adaptation practices identified above, for farm level application. All these practices are very well received by the local communities and have a very good potential for up-scaling in the three identified most vulnerable livelihood zones with a holistic perspective of Integrated Watershed Management Programme.

Baseline Programme (co-financing projects):

Integrated Watershed Management Programme: This programme, funded by the Government of Lesotho, is an on-going programme, since 2007 to-date. It supports the afforestation and rehabilitation of existing forest resources, rehabilitation and construction of water conservation infrastructures, protection of wetlands and reseeding of degraded rangelands. All the activities are aimed at enhancing food security in the short-term, through employment creation, and in the long-term through rehabilitation of degraded lands for sustainable production. Thus, it focuses on creating temporary employment for local communities to enable them to have access to food, through increased purchasing power as a result of earning wages.

The overall goal of the project is to rehabilitate degraded lands with an objective of arresting soil erosion and improving agricultural productivity. The objective, on the other hand is creation of temporary employment by engaging individuals in local communities in the rehabilitation of degraded lands. Each of the 80 political constituencies throughout the country identifies three micro-catchment areas for rehabilitation works annually. However, the investments are not considering climate change impacts and vulnerability, which is crucial to ensure sustainability in the long-run.

Components of the project are closely related to activities of the three departments of Ministry of Forestry and Land Reclamation (MFLR): i) Rehabilitation of existing forest reserves; ii) Engagement of forest rangers; iii) Purchase of tree seedlings from local farmers; iv) Planting of fruit trees along contour bunds; v) Bee-keeping for honey production. Soil and water conservation activities are: i) Rehabilitation of gullies through the construction of silt traps and check dams; ii) Construction of terraces and waterways; iii) Construction of dams; iv) Construction of roof/storage tanks; v) Re-seeding of degraded marginal fields. Range Resources Management activities were: i) Protection of wetlands through the sensitization and training of herders; ii) Removal of invasive plants such as *Chrysocoma* species (*Sehalahala*); iii) Reseeding of degraded rangelands; and iv. Declaration of the areas to development purposes to ensure their protection from livestock grazing.

One of the main challenges is to sensitize and engage the communities in the rehabilitation of degraded lands, with a view to reaching sustainable natural resource management. The programme, by working through all structures of local government, ensures that communities are in charge of reversing erosion, tree planting, improving marginal lands and protecting water resources. Impacts of the Project with respect to the primary objectives of poverty alleviation and food security through rehabilitation of degraded lands, for a period of five years from 2007 indicates the potential opportunities if climate change impacts and vulnerabilities are considered explicitly. This gap will be addressed through the LDCF project.

The GEF LDCF will support additional activities especially to reduce the impacts of climate risks and build more robust sustainable land and water management technologies at the community level. Tested sustainable land and water

management practices including soil erosion control, soil and water conservation, water harvesting, run-off reduction, vegetative cover and range resources management will be promoted within the communities.

FAO-supported project: FAO is supporting an initiative "Capacity building in agribusiness development" that aims to enhance the capacity of Lesotho National Farmers' Union (LENAFU) and the entrepreneurial skills of farmers' organizations at national, district and field level in agribusiness management and marketing to enable them to better respond to market opportunities. It also aims to strengthen farmer-to-farmer cooperation and exchange of innovative practices and technologies. This will involve: providing training in leadership management, financial management, group promotion and other critical skills, ensuring active participation of women and other social groups in decision making roles and bodies; training farmer leaders and farmers in agribusiness development and management and to use, manage and adapt improved techniques, technologies and methods, including those related to conservation of natural resources, integrated pest management and appropriate post- harvest technologies, storage, processing and marketing. This project presents a very good opportunity to complement the agribusiness training with capacity building on climate resilient practices targeting this important group of stakeholders.

A.5 <u>Incremental /Additional cost reasoning:</u> describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

There are minor changes to the description of additional cost reasoning. The revised text is presented below.

Additional activities that will be financed by the LDCF include promotion of livelihood diversification and demonstration and adoption of improved adaptation practices in order to reduce vulnerability and enhance adaptive capacity. The adaptation interventions will be focused on sustainable land and water management (SLM/W) practices at watershed and community level, diversified livelihood and improved income generating activities at the household level. The project will be implemented in three most vulnerable districts following the agro ecological-zone approach. The component wise additional LDCF activities are described below:

Component 1: Strengthening technical capacity of national and district level staff and institutions on sustainable land and water management and diversified livelihoods in selected vulnerable livelihood zones

The proposed project will improve technical expertise of national, district level MFLR, MAFS, MEMWA, Disaster Management Authority, Ministry of Local Government, and National University of Lesotho staff on climate change adaptation especially focusing on household level livelihood diversification and sustainable resource management and conservation. An effective adaptation response to climate change can only result from the efforts of the institutional and technical capacity on climate change adaptation.

Sustainability of outcomes related to capacity development activities is always an issue. To ensure sustainability and continuous use of improved technical capacity, the training programmes and resources will be integrated into the regular training activities of the Government in each of the Ministry. In addition, all capacity development activities will be conducted in close involvement of National University of Lesotho (NUL) so that the government can access resource persons to organize similar training programmes even after completion of the project. The implementing partners will select appropriate trainees based on their involvement in capacity development programmes.

The LDCF project will train at least 150 government staff at national and district level. In addition, the LDCF resources will be used to train the local representatives from community based organizations (CBOs) on good practice examples of adaptation especially on livelihood strategies focusing on crops, livestock and agro-forestry, and sustainable land and water management (SLM/W) and soil and water conservation (At least 24 farmer groups (1 200 farm households) in selected watersheds of three livelihood zones. The LDCF project will complement the baseline project aimed to strengthen the national farmers union.

Component 2: Assessing vulnerability of livelihoods and impacts of climate change on land suitability and use at watershed scale

Activities under this component will focus on improvement of databases, tools and methods for assessment of vulnerability and risks specifically in collaboration with the Disaster Management Authority (DMA). The project will provide training to at least 30 core staff at the Ministry of Forestry and Land Reclamation (MFLR), Ministry of Natural Resources and the Ministry of Agriculture and Food Security which should lead to better interpretation of land use and land suitability database. Additional 10 staff in each district (30 total) will be trained on risk and vulnerability assessment, and translation into adaptation actions. In addition, a comprehensive risk and vulnerability assessment for current and future period will be updated for the 3 livelihood zones. The vulnerability and risk assessment and spatial information products to be generated will be critical for designing adaptation practices under component 3 and 4.

Component 3: Promoting tested Sustainable Land and Water Management (SLM/W) practices to build resilience to climate risks in vulnerable sub-catchments and watersheds

The proposed LCDF project will introduce and transfer Sustainable Land and Water Management (SLM/W) and conservation measures and climate-resilient practices to enhance adaptation in 24 communities in three livelihood zones. Water conservation techniques and soil management practices to control soil erosion and enhance resource conservation (e.g. conservation agriculture, Machobane Farming System, zero tillage and other minimum disturbance techniques) in watershed scale will be promoted based on the existing and future climate risks. The total beneficiaries will be 50 households per community (24 x 50 = 1200 households and approximately 4800 individuals). The total area to be covered outcome 3 will be 2400 hectares (100 hectares x 24 community). This includes 50 hectares of arable land and 50 hectares of rangelands in each community.

The project will analyse and propose adjustments to cropping practices and systems applicable at different temporal and spatial scales. Short-term adjustment will explore practices to optimise production without major system changes. These include changes in planting dates and cultivars, changes in external inputs, water conservation and land use management practices.The long-term adjustments or major structural changes may include changes in land allocation, enhancement of irrigation efficiency and changes in farming systems and land use due to farmer's response to the differential crop suitability under climate change.

Furthermore, the proposed LDCF project will also introduce improved soil conservation measures, improved vegetation cover and innovative range resource management measures. Improved vegetative cover and range resource management measures will be adopted in 24 selected communities to improve the productive use of marginal lands. The total direct beneficiaries of this intervention will be at least 600 households (2400 individuals) and will cover a total area of 1200 hectares (approximately 50 hectares per community as the rangelands are owned by the community). Introduction of crop varieties tolerant to heat and water stress and better compatibility to new agricultural technologies e.g. crop varieties with higher “harvest index” will help maintain irrigation efficiency under conditions of reduced water supplies or enhanced demands. Crop substitution may be useful also for the conservation of soil moisture e.g. some crops use less water and are more water and heat resistant, so that they tolerate dry weather better than others.

Component 4: Strengthening diversified livelihood strategies and dissemination of improved income generating activities at the community level

The prominent options for diversified livelihoods in Lesotho are crop - livestock, agro-forestry systems, agri-horticulture systems and small scale income generating and livelihood diversification activities. Animal production and management (focusing on wool and mohair on mountain ecosystem and dairy in lowland areas) in the long term will be successful. Livestock should be integrated with cropping activities to diversify the risks. The baseline projects described above focuses on broader deforestation related issues. A holistic approach combined with a robust community participatory analysis is needed to build diversified livelihood systems. Diversified livelihood strategies and small scale and household level income generating activities will be successfully demonstrated and adopted by 24 target communities, including women headed households. This will directly benefit 750 households (3000 individuals). The

total area to be covered under this investment will be approximately 375 hectares (approximately 0.5 hectare/household).

The proposed LDCF project will focus on Agro-forestry and agri-horticulture systems in smallholder rural areas that retain wild fruit trees in their fields. The trees serve as a source of fuel wood (dead branches) and provide shelter, fodder for livestock and food. These agro-forestry systems can serve as windbreaks and also serve as a source of fuel wood, timber and in some cases, veneer wood. Sometimes the orchards are under-planted to pasture in order to include a livestock enterprise. There are additional benefits for the local communities from beekeeping component within the orchard. The LDCF will support farmers to grow fodder tree and shrub species in "fodder banks" for livestock. These trees also provide other benefits such as fuel wood and poles that can contribute additional household income.

Component 5: Dissemination of best practices, project monitoring and evaluation

This component will cover development of a communication strategy and ensure dissemination of good practice examples and case study results for wider adoption. National level replication foresees development of a communication strategy in close collaboration with the MFLR, MAFS and other implementing partners. The communication and dissemination strategy will review current mechanisms and prepare detailed guidelines for communication of project results and good practices. Case studies will be documented and will be compiled into simple documents for dissemination among the stakeholders. Dissemination of land use data will be ensured through customized database to be developed in the Ministry of Forestry and Land Reclamation (MFLR). The vulnerability and risk information products will be hosted and disseminated through the Disaster Management Authority.

The proposed LCDF will also support establishment of a monitoring and evaluation system to monitor impact and outcome indicators, including LCDF/SCCF Adaptation Monitoring and Assessment Tool (AMAT) indicators (Attached separately). It will include mid-term and final evaluations, and wide dissemination of best-practices to facilitate their scale-up by the Government and non-government organizations.

A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

An additional risk has been identified during the preparation stage in relation to sustainability in application of tools and methods for assessment of land use and vulnerability and risk assessment and maintenance and frequent update of the database. Risks anticipated during the project implementation and critical mitigation actions have been considered to facilitate effective planning and reduce any adverse impact on the performance of the project. In this project, there are four major potential risks identified. These are outlined in the matrix below:

Risk	Impact	Probability	Mitigation
Institutional conflicts over ownership of the project	Slow-down of project implementation and jeopardize integration of relevant experiences into national programmes	L	The project formulation process has secured the understanding and commitment to establish a Steering Committee of key relevant line Ministries (i.e. MFLR and MAFS and local government), Meteorological Services, Disaster Management Authority at both national and district levels in order to ensure effective coordination and participatory decision-making.
Highly fragile environment for intensifying crop and livestock production	High-risk aversion to innovations among subsistence farmers and herders and high vulnerability to climate-related hazard	M	Building resilience of local ecosystem and ensuring stability in yields with little or no expansion on cropland or rangeland and optimal use of chemicals and fertilizer. Reducing vulnerability through reliance on improved farming practices, improved natural resources management including erosion control, micro-scale water control, pasture and fodder management, agroforestry and diversification of livelihood options.
Conflicts in the	Could lead to low interest in	M	Participatory approach in decision-making and

management of communally owned resources	participation and failure of communally implemented innovations/practice.		building community consensus at the initial stage including some training on conflict management of common resources.
Sustainability/ institutionalization of technical assistance related to data base development and management and capacity development activities	Inefficient utilization of the resources and non-use of database and technical expertise for implementation of adaptation practices	L	The concerned ministries and institutions were consulted and a thorough assessment was done to identify the host institution for data collection and management especially related to the land use and vulnerability and risk assessment. The capacity development activities under component 1 and 2 are designed based on the needs assessment and participants will be identified in close consultation with the respective ministries. The training resources will be integrated into the regular training activities.

A.7 Coordination with other relevant GEF financed initiatives

The project will build on the lessons learned from the FAO-supported TCP pilot project **"Strengthening capacity for climate change adaptation in the agricultural sector"** that focused on building the capacity of farmers to better respond to climate change impacts and increase food security. The project focused on subsistence farmers and has fostered the linkages between Government and Non- Governmental Organizations. Several successfully tested adaptation practices will be scaled-up through this LDCF project.

The project will closely work with the UNDP/LDCF and IFAD/LDCF projects as this is important for exchanging lessons and avoiding any duplication. These include the IFAD-managed **"Adaptation of Small-scale Agriculture Production (ASAP)"** which is under preparation and **"Reducing vulnerability from climate change in the Foothills, Lowlands and the lower Senqu River Basin"** proposal recently submitted by UNDP.

The IFAD LDCF project incorporates adaptation into the Smallholder Agriculture Development Programme which supports commercialization of Lesotho's agriculture. The programme will focus on smallholder farmers who are already engaged in market-oriented production or have good potential to become commercially active. The nature of the agricultural sector in Lesotho at the moment is such that the majority of farmers/households are subsistence farmers (about 90% as mentioned in earlier sections) producing mainly for household consumption with little surplus for the market. And this group of stakeholders will be the main target of the proposed LDCF project. The projects will be complementary, one contributing to the commercial agriculture sub-programme of the National Action Plan for Food Security and the other to the 'household' food security sub-programme.

The focus of the UNDP-led proposal (which builds on the land rehabilitation programme of the Ministry of Forestry and Land Reclamation – MFLR) is on strengthening the tools and capacity of MFLR (at national and constituency/district level) **for mainstreaming climate change adaptation into land rehabilitation** (the main tool being a geo-based agro-ecological and hydrological information system), implementation of climate-smart land rehabilitation pilots and mainstreaming CCA into national land management strategies.

These projects will be implemented or involve more or less the same Ministries and Departments which provides an opportunity for coordination but also a risk of duplication. So an inter-institutional coordination arrangement has been agreed between the concerned Ministries. This will be established during project implementation stage. There will have to be strong interaction particularly between FAO and UNDP supported teams during preparation of these projects.

Close coordination is expected with the recently submitted LDCF/UNEP project on "Strengthening climate services in Lesotho for climate resilient development and adaptation to climate change (2nd phase of the LMS/GEF/UNEP LDCF NAPA Early Warning Project)". The project objective is to strengthen the climate monitoring capabilities, early warning systems and human resources in Lesotho in order to effectively address climate impacts and better plan adaptation to climate change. The Lesotho Meteorological Services (primary executing partner), Disaster Management

Authority, Ministry of Energy, Meteorology and Water Affairs are the implementing partners of the project. The outputs related data base development and assessment of risks and vulnerability will benefit from this project.

The project will build on lessons learned from other past and ongoing projects, including: the IFAD-supported SANReMP project that strongly focuses on natural resource management and economic agricultural activities; and the **"Health, Economic and Agriculture Livelihood training for Households in the Senqu River Valley- HEALTH SRV Project"** that aimed to improve the capacity of vulnerable rural households to cope with recurrent drought through improved agricultural production systems. Close coordination is expected with the World Bank project on **Smallholder Agricultural Development Project (SADP)** as FAO's Investment Centre Division is closely involved in implementation support missions.

Coordination arrangement will be established with the activities supported by the Government of Lesotho under the Disaster Risk reduction funds provided by the Government of Japan. Specific collaboration arrangement will be established with programmes and projects under UNDP's Environment and Energy unit. These include GEF funded projects on Sustainable Land Management and Lesotho Renewable Energy-Based Rural Electrification, and Japanese funded Africa Adaptation Programme. The three projects are implemented through the Ministry of Forestry and Land Reclamation and the Ministry of Natural Resources. The project will also explore the merits and will look at the possible lessons learnt from the African Monitoring of Environment for Sustainable Development (AMESD) Programme - a partnership pan- African programme between the African Union Commission (AUC) and the European Union (EU).

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1. Describe how the stakeholders will be engaged in project implementation:

This section presents some additional details that were not explicitly addressed during the PIF stage.

The integrated watershed management in Lesotho is a complex issue which presents diverse challenges. Therefore, effective climate change adaptation requires a multi-stakeholder approach. Thus, a stakeholder engagement plan will be prepared within 3 months after start of the project to ensure participation of all relevant government agencies and direct beneficiaries including women, farmers and livestock herders. During the project preparation phase, local representatives were consulted to identify women headed households especially for household level livelihood diversification activities. Representatives of women groups and village council representatives participated in the final workshop. Baseline data collection during the first six months of the project will quantify the exact number of women beneficiaries.

Under the project, the Ministry of Forestry and Land Reclamation (MFLR) will be the National Focal Point in facilitating the implementation of the Project, and will work closely with the Ministry of Agriculture and Food Security (MAFS), Ministry of Energy Meteorology, Water Affairs (MEMWA); Department of Environment (DOE), the Disaster Management Authority (DMA) and the National University of Lesotho (NUL). The National Project Steering Committee (NPSC) will be constituted with representatives from implementing partners, FAO and other development partners such as UNDP and IFAD. The Steering Committee will be chaired by the Principal Secretary of MFLR. The NPSC will be responsible for reviewing overall progress of the project and provide guidance and decisions to overcome constraints during implementation. The stakeholder mapping is presented below.

Table 1. Key stakeholders and their roles and responsibilities

Institution	Expectation / Relevance
Ministry of Forestry and Land Reclamation (MFLR)	• National Focal Point in facilitating the implementation of the Project, • Capacity building, protection and rehabilitation of the physical environment through forestry, management of rangeland resources, control of soil erosion, and water harvesting • Small dam planning, design and construction
Ministry of	• Knowledge management on crop, livestock, and irrigation planning and design,

Agriculture and Food Security (MAFS),	• Support on agricultural research, information and extension services / community mobilization including LENAFU • Capacity building on GIS, crop modelling and vulnerability mapping
Ministry of Energy Meteorology, Water Affairs (MEMWA);	• Provide information on climate trends and predictions to support planning and implementation of response to impact of climate change, • Capacity building on GIS, modelling and vulnerability mapping • Capacity building on climate change adaptation • Supply water to rural communities
Ministry of Local Government and Chieftainship (MLGC)	• Support and strengthening decentralized planning and implementation of sustainable land and natural resource management and administration, Protection of grazing land and agro- forestry initiatives • Integration of climate change issues into district development plans • Capacity building of district and community councils
Department of Environment (DOE)	• Knowledge management and awareness raising on environmental issues, • Capacity building on environmental policy
Disaster Management Authority (DMA)	• Conduct vulnerability assessment and crop forecast to assess vulnerable areas/ food insecurity. • Management of early warning system and response to potential disaster situations resulting from climate change; • Coordinate and mainstreams disaster risk reduction actions, through Disaster Management Teams • Capacity building in vulnerability mapping and development of disaster management plans.
National University of Lesotho (NUL)	• Conduct climate change-related research • Capacity building on agriculture, climatology, hydrology, water resources analysis, management and conservation of Soils, Range resources,
Food and Agricultural organization (FAO),	• Provide Project oversight to ensure compliance to GEF policies and guidelines; provide financial and narrative reports to GEF • Provide technical support on climate change related issues, including conservation agriculture; by drawing upon its capacity at the global, regional and national levels • Ensure that the Project efficiently and effectively meets its objectives and achieves expected outcomes and outputs as outlined in the Project document
United Nations Development Programme (UNDP)	• Provide technical support on climate change related issues, including provision of small grants • Provide support in building capacity of farmers union • Key agency for channelling and supervision of GEF resources, advice on procedures • Key member of project Steering Committee
International Fund for Agricultural Development (IFAD)	• Key partner through small holder agricultural development programme in support of commercialization of agriculture and diversified livelihoods • Capacity building in market-oriented production
Natural resource users, grazing associations and resource user groups (Direct beneficiaries)	• Extensive indigenous technical knowledge and familiarity with concepts of group action, committee operations etc. • Commitment to SLM/W because of livelihood interests in a sustainable environment • Strong potential interest in achieving SLM/W and different resource users may have different SLM priorities • Gender differences may arise in SLM/W decision making • Political and other factional differences may hinder consensus and decision making in some local contexts • Leading agents of SLM/W through user groups or associations
Community Councils	• Legal authority for SLM/W, but little capacity to exert this authority at field level • Committed to fulfilling their NRM responsibilities, but currently uncertain how to go about this • Still exploring all aspects of their new role as local authorities • Likely to embrace user group concept as a way of fulfilling their legal responsibilities • Decision making could be hindered by (party) politics or other internal differences • Locus of legal authority for SLM and supervise government field staff who, under the newly decentralized system, are administratively answerable to Community Councils • Supervise and guide resource user groups acting on their behalf and provide modest levels of resourcing to these groups for their daily operations
NGOs	• Strong technical and institutional expertise in SLM and related fields • Detailed understanding of local development needs, opportunities, constraints

	• Currently engaged in various SLM-related activities, notably on-farm • Long standing interest in the environmental and SLM sectors • Members of project Steering Committee • Potential collaborator in SLM model development, training and knowledge management/ networking activities
Informal organizations especially women groups/Women associations	• Represent and ensure that women participate and benefit from the project women representatives

All relevant stakeholders at national and district level were consulted during the project design stage. These stakeholders included government ministries, non-government organizations, farmer organisations and development partners. Stakeholder ministries were briefed and made commitments to achieve the project objectives through collaboration. All relevant stakeholders were appraised about the project during the inception and project preparation completion workshops. In order for sustainable implementation of the project at community level, community meetings were held in the project sites and the project introduced to them. Community members had inputs into what livelihoods, and integrated water management strategies they wished to be introduced in their communities.

The community meetings were also attended by traditional authorities and community councilors. The relevant stakeholder ministries at district level e.g. Ministry of Agriculture and Food Security, Disaster Management Authority, also participated in the community meetings. This was to make them aware of the project at resource center and community levels. Representatives of the target communities participated in the project preparation completion workshops where they gave inputs.

With regard to sustainable implementation at community level, two modes of engagement were feasible in the context of the project. The first was a communal approach, especially for issues of rangelands, community woodlots, trees on pasture and rangelands. The second was intervention at individual household level. On both counts, it was critical that there be full involvement by the community and beneficiary households from the outset. The project engaged strongly with the communities during inception and momentum towards full participation was accelerated through the on-farm demonstration phase.

Lessons from the pilot phase of the project were that communities and farmers in all three pilot sites did not favour grants as practiced under many development projects in the country. The '*Neheletse* system' would ensure that beneficiaries consider the inputs given to them as credit which requires repayment. However, other inputs would be grants. The use of OPVs ensures that beneficiaries plant seeds obtained from their production and this will be sustained from season to season. A major component of the project is strengthening capacity at national, district and community levels and this will ensure sustainability. This means capacity building empowers stakeholders at all levels to deal with climate change impacts and this will be sustained beyond the life of the project.

B. 2. Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):

At the village council level, integrated watershed management approaches employed through this LDCF project will improve the gender equality, social inclusion, equity and empowerment through increased participation of women and socially disadvantaged groups such as poor, marginal communities (men and women) towards adoption of climate-resilient practices. The over-burdening and drudgery of works for women with respect to farm work will be improved by the project interventions. LDCF funds will reduce the vulnerability of communities in 3 districts and at least 24 village councils by improving alternative income generation opportunities. The project will have awareness raising activities on climate impacts and adaptation with the farmers by leveraging existing extension methods. In total 24 communities will directly benefit and 50% of the farmer groups will be women groups. The large scale field demonstration of adaptation practices and implementation of alternate livelihood strategies will directly engage at least 3000 farmers.

The LDCF project will lead to socio-economic empowerment of women and socially disadvantaged and excluded local communities on climate change adaptation. It will increase ownership of men and women in the project activities through their equal participation in social forums, workshops, training and exchange visits. The expected socio-economic and environmental benefits from the project will be the reduction of huge recurrent economic damages or losses in disaster-prone areas, and changes in the socio-economic status of vulnerable communities. Enhanced farm productivity will improve farmers' economic conditions while reducing their vulnerability and generating adaptation benefits. Climate-risk information will also become accessible to farmer groups including women groups.

Since women are largely engaged in climate sensitive sectors, any degree of adverse climate change effect increases their vulnerability. Household dependent on natural resources base become more vulnerable than those whose livelihoods come from sectors that are less climate sensitive. For example, any degree of changes in the availability of water, firewood, and agricultural production directly affects their quality of life. The adaptation interventions that will engage specifically women and vulnerable communities are small scale vegetable cultivation on the reclaimed lands, homestead vegetable cultivation with drought tolerant and short duration crops, rain-water harvesting, women's participation in conservation measures and integrated watershed management.

At national and district levels, the project funding will enable the Ministry of Forestry and Land Reclamation (MFLR) and Ministry of Agriculture and Food Security (MAFS) to channelize their efforts on climate change adaptation through its departments. It is expected that at least 170 staff from different departments will benefit from capacity development programmes.

B.3 Explain how cost-effectiveness is reflected in the project design:

The Project follows on from previous collaboration between FAO and Lesotho on adaptation interventions. The Project will build on the lessons learned from the previous phases of the support to ensure cost-effectiveness. The present Project builds on the specific implementation arrangements developed during the previous FAO support between 2008 and 2011. This includes development of technical capacity in the MOFLR at national and district levels.

Several alternative approaches were considered for cost-effectiveness. These alternatives included combination of institutional, technical capacity development and are closely linked to field level implementation of viable SLM/W practices. The alternative approach of integrated watershed management promotes community participation compared to conventional extension approaches. The field level activities will channeled through 24 village councils already identified during the project preparation phase.

The Project aims to minimize the mobilization of international experts. This will reduce the costs associated with travel and consultancy. International experts will be hired on specific topics such as data base management, mapping and vulnerability and risk assessment. At the local level, the Project will rely extensively on farmer-farmer experience sharing.

C. DESCRIBE THE BUDGETED M&E PLAN

Table: Summary of the main M&E reports, responsible parties, timeframe and costs

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs

Type of M&E Activity	Responsible Parties	Time-frame	Budgeted costs
Inception Workshop, annual planning meetings, final project workshop	PMU, supported by the LTO/LTU, BH	Inception workshop within three months of project start up, annual workshops as per the schedule and work plan agreed and final workshop a month before closure of the project	Total five workshops/planning meetings @ US$ 2500/event. Total cost works out to US$ 12,500.
Baseline survey for impact evaluation (questionnaire design, survey, travel expenses)	PMU and external experts. The project team and LTO/LTU to provide support to design the survey questionnaire and collate data relevant to AMAT indicators.	Within three months from start of the project	USD 20 000
Mid-term Evaluation (Including questionnaire design, survey and compilation)	External experts in consultation with the project team and other partners (includes survey of participating households, travel expenses and report writing) to evaluate the progress against AMAT indicators	After completion of two years of implementation	USD 40 000 for independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel
Final impact evaluation (Including questionnaire design, survey and compilation)	Independent terminal evaluation includes detailed ex-post analysis will be made based on the survey with participant households (5 participants per group), survey of control households, travel expenses, impact evaluation report writing and final evaluation.	At the end of project implementation	USD 40 000 for external, independent consultants and associated costs. In addition the agency fee will pay for expenditures of FAO staff time and travel.
Supervision visits and rating of progress in PPRs and PIRs	LTO, other participating units	Annual or as required	The visits of the LTO/LTU will be paid by GEF agency fee. The visits of the NPD and NTC will be paid from the project travel budget
Monitoring by the district level agencies	The district level agencies in close collaboration with concerned implementing partners and PMU will coordinate the monitoring in collaboration with the technical experts.	Twice in a year	USD 12 000 (USD 4000 for each district)
Project M & E reports (includes project progress reports, co-financing reports, terminal reports)	PMU, with inputs from NPC, NTA and other partners. The project implementation report by PMU supported by the LTO/LTU and cleared and submitted by the GCU to the GEF Secretariat.	Semi-annual/annual or as required	USD 11 000 (as completed by NTC and PMU)
Terminal Report	NTC, LTO/LTU, TCSR Report Unit	At least two months before the end date of the Execution Agreement	From respective contracts and consultants working for the project.
Total Budget			**USD 135 500**

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Mr. Stanley M. Damane	Director, National Environment Secretariat	MINISTRY OF TOURISM, ENVIRONMENT AND CULTURE	JULY, 2, 2012

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Gustavo Merino Director, Investment Centre Division Technical Cooperation Department FAO Viale delle Terme di Caracalla 00153, Rome, Italy		February 2, 2015	Selvaraju Ramasamy Climate Impact, Adaptation and Environment Unit Climate, Energy and Tenure Division (NRC), FAO, Rome	+3906 57056832	Selvaraju.Ramasamy@fao.org
Jeffrey Griffin Senior Coordinator FAO GEF Coordination Unit Investment Centre Division FAO				+3906 57055680	GEF-Coordination-Unit@fao.org

ANNEX A: PROJECT RESULTS FRAMEWORK

Component 1: Strengthening technical capacity of national and district level staff and institutions on sustainable land and water management and climate-resilient livelihood strategies

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Outcome 1.1 Strengthened technical capacity in MFLR, MAFS MNR, MLGC, DMA and NUL at national and district levels and community representatives on climate change adaptation and integrated watershed management	Number and type of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability	Limited training programmes organized at the watershed scale (score of 1 for indicator 2.2.2 of AMAT tool)	Score of 2 – Initial awareness raised	Tools and refined training packages ready (score of 2)	Implementation of training packages at the national and district levels (score of 3 substantial training for practical applications)	Mainstreaming training into Government's regular capacity development actions (score of 4 knowledge effectively transferred)	The national and district level staff are capable of implementing the adaptation projects and programmes	M&E reports.	Government is willing to mainstream capacity development actions into their regular activities
Output 1.1.1 National level MFLR, MAFS, MNR, MLGC, DMA and National University of Lesotho (NUL) staff and district level forestry and natural resources staff trained on climate change adaptation, integrated watershed management and community mobilization	Number of national level staff within MFLR, MAFS, MNR, MLGC, DMA and National University of Lesotho (NUL) staff at national and district level trained on climate change adaptation and integrated watershed management	FAO organized an introductory 3 days training in 2011, but focus on water shed related issues were minimum.	Training needs assessment, Preparation of draft curriculum and training manual; conduct of the first phase of training in 2 batches (30 participants each) at the national level and three batches at district levels	Refinement of the curriculum	Second phase of training in 2 batches (30 each) at the national level and 3 batches at the district level	Finalization of the training manual and integration into the regular training programmes	60 Government staff trained at the national level and 90 staff trained at the district levels	Training records, M&E reports	GoL maintains climate change action on adaptation as priority within development policy.
Output 1.1.2 Training to the local representatives from community based organizations (CBOs) on good practice examples of sustainable land and water management, water harvesting, diversified livelihood strategies and range resources	Number of farmer groups and group representatives from CBOs trained on good practices of sustainable land and water management, water harvesting,	Community level training activities are very limited.	First phase of training to CBOs and their representatives in 4 communities in each district (4 x 3 = 12)	First phase of training to remaining 4 communities (4 x 3 = 12)	Second phase of the training to 12 communities trained in year 1.	Second phase of the training to 12 communities trained in second year	24 farmer groups (1200 household) and 60 representatives	Training records, M&E reports, Community mobilization reports	Community representatives understand and access necessary resources to implement the new knowledge gained from the training programmes.

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
management (at least 24 farmer groups (1200 farm households) and 20 representatives in each of the three livelihood zones (60 representatives) and 20 representatives in each of the three livelihood zones (60 representatives) will be trained).	diversified livelihood strategies and range resources management								

Component 2: Assessing vulnerability of livelihoods and impacts of climate change on land suitability and use at watershed scale

			Milestones						
Results chain	**Indicators**	**Baseline**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**End of project target**	**Means of verification and responsibility**	**Assumptions**
Outcome 2.1 Improved data, tools and methods for assessment of impact of climate change on land suitability and land use, vulnerability and risk at the national/district level implemented focusing on most vulnerable watersheds	Risk and vulnerability assessment conducted. Updated risk and vulnerability assessment Relevant risk information disseminated to stakeholders	Currently no comprehensive data bases available for use for policy and operational decisions and are not systematically disseminated	The Government agencies aware of what data sets are in place at the country level	The national implementing partners are exposed to new data bases and analytical tools and methods	Data base in place	The government agencies are capable of managing the data independently and update them when required	The Government agencies share the data to users and data sets are effectively used for decision making (The end project target is to ensure the value of 1 for all three indicators – please refer the AMAT tool)	M & E reports	The government would sustain the technical and operational capacity through their own budgets
Output 2.1.1 Livelihood and land use (crop, livestock, agro-forestry) data base developed for most vulnerable watersheds (database will be	Data base and number of land use assessment conducted Number of national level staff trained	Currently no database exists No database training organized so far in the country	Assessment and conduct of feasibility study Data collection and mapping	Assessments, data collection and analysis Conduct of training programme to selected staff	Data base design	Data quality checking and validation Update of data base and second phase of training to	A comprehensive database available for use At least 30 national level staff trained	M&E reports, MFLR and the validation reports	The government agencies cooperate and regularly update the database

established in Ministry of Forestry and Land Reclamation and linked to potential users at the national level) and relevant staff trained (at least 30 core staff)			Training manual preparation			the staff	and a manual validated and packaged		
Output 2.1.2 Vulnerabilities and risks (current and future) assessed for the selected watersheds in 3 livelihood zones and spatial information on vulnerability available (at Disaseter Management Authority) to facilitate adaptation planning by the Government and relevant staff trained (total 30 staff – 10 staff from each district).	Number of watersheds vulnerability and risks assessments conducted A product on spatial information on vulnerability Number of vulnerabilities and risks assessment trainings conducted	No assessments conducted at the watershed scale No targeted training conducted to the district level staff	Data collection, downscaling for assessment of vulnerabilities and risks Synthesis of training resources and review of training manuals	Design a methodology and conduct of assessment Integration of the results of the analysis from output 2.2.1 into the training resources	Delivery of products to the target watersheds Conduct of the training to the district level staff	- Second phase of the training to the district level staff	At least 70% of the selected watersheds have comprehensive vulnerability and risks assessments At least 30 staff trained on use of the spatial information products for the decision making	Vulnerability and risks assessment products M&E reports of MFLR Vulnerabilities and risks assessments reports, M&E reports, DMA, MFLR	Sufficient data available and shared by concerned departments for analysis The district level staff are available for the training and motivated to make use of products for better informed decision making

Component 3: Promoting tested Sustainable Land and Water Management (SLM/W) practices to build resilience to climate risks in vulnerable sub-catchments and watersheds

Results chain	**Indicators**	**Baseline**	**Milestones**				**End of project target**	**Means of verification and responsibility**	**Assumptions**
			Year 1	**Year 2**	**Year 3**	**Year 4**			
Outcome 3.1: Sustainable land and water management (SLM/W) practices (soil erosion control, soil and water conservation, water harvesting, run-off reduction, vegetative cover, range resource management)	Percent target groups adopting adaptation technologies by type (refer AMAT indicators 3.1.1.1 & 3.1.1.2)	There are very few households have the capacity to reduce the impacts to some extent (only those having off-farm employment)	The local communities aware of the importance of SLM/W for reducing the impacts of climate variability	At least 25% of the selected communities are capable of implementing the SLM/W practices	At least 50% of the selected communities are capable of implementing the SLM/W practices	At least 75% of the selected communities are capable of implementing the SLM/W practices	The SLM/W practices are successfully demonstrated in all selected 24 communities and are being continued even after end of the project.	Monitoring and Evaluation reports	The SLM/W practices to be introduced to the communities are relevant and are capable of reducing the vulnerability and impacts

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
successfully adopted in selected watershed and catchments. (Total beneficiaries - 1200 households and 4800 individuals and total area covered will be 2400 hectares).									
Output 3.1.1: Adaptive land use and sustainable land and water management practices implemented. (1200 households and 1200 hectares)	Number of communities practicing land use and sustainable land and water management practice	No communities practice land use and sustainable land and water management practice in selected watersheds	At least 3 communities in practice in land use and sustainable land and water management practice	At least 7 additional communities in practice in land use and sustainable land and water management practice	At least 8 additional communities in practice in land use and sustainable land and water management practice	At least 6 additional communities in practice in land use and sustainable land and water management practice	All 24 communities in practice in land use and sustainable land and water management practice	Field monitoring and supervision; M&E reports; Dept of Soil and Water Conservation (DSWC), MFLR	Community members are cooperative and agree to work as their sweat (in-kind) contributions.
Output 3.1.2: Improved water harvesting structures at the household level implemented	At least 150 households possess water harvesting structures	No households possess water harvesting structures	At least 20 hh possess water harvesting structures	At least 50 additional hh possess water harvesting structures	At least 50 additional hh possess water harvesting structures	At least 30 additional hh possess water harvesting structures	All 150 hh possess water harvesting structures	Stone built water tanks with irrigation systems and roof tanks in place Dept of Soil and Water Conservation, MFLR	Community members are cooperative and agree to work as their sweat (in-kind) contributions
Output 3.1.3: Improved vegetative cover and range resource management measures adopted to improve productive use of marginal lands (600 households and 2400 individuals and cover a total area of 1200 hectares)	At least 10% improvement in vegetative cover in 24 communities	Recommended stocking rates Animal Unit (AU)/ha: Thaba Tseka -5.6; Quthing – 6.0; Mafeteng – 7.8	Preparatory activities implemented to improve vegetative cover in all 24 communities	At least 3% improvement in vegetative cover in 24 community groups	At least 5% improvement in vegetative cover in 24 groups	At least 7% improvement in vegetative cover in 24 communities	At least 10% improvement in vegetative cover in all 24 community groups	Grazing associations/ schemes effectively in control and their reports. Range assessment reports; Dept of Range Resources Management	Community Councils and Chiefs delegate grazing control powers to grazing associations. Range condition monitoring is carried out annually

Component 4: Strengthening diversified livelihood strategies and implementation of improved income generating activities at the community level

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Outcome 4.1: Diversified livelihood strategies and small scale and household level income generating activities successfully demonstrated and adopted by 24 target communities.(benefit 750 households (3000 individuals). Area covered under this investment 375 hectares).	Households and communities have more secure access to livelihood assets % increase per capita income of farm households due to adaptation measures applied	2 – Poor access to livelihood assets No or limited income from diversified livelihood activities. The baseline income is very low due to low levels of yield (~450 kg/ha)	Selected communities aware of the livelihood diversification and measures to protect their livelihood activities	20% of the selected communities are capable of increasing their income by 10% during the second year	40% of the selected communities are capable of increasing their income by 20% during the third year	60% of the selected communities are capable of increasing their income by 40% during the fourth year	At least 60% of the selected communities increase their household income by 40% (3 – 4) moderate to secure access to livelihood assets (Refer AMAT tool)	Household survey and project M & E reports with AMAT indicators	The diversified livelihood strategies to be implemented are capable of increasing the income of the households
Output 4.1.1: Community participation ensured and introductory sessions conducted and small-scale household level income generating activities introduced to 750 households	Number of communities with active participation Number of introductory sessions Number of household level income generating activities	No active participation in community level activities and no sessions adopt house holed level income generating activities	Introductory sessions conducted in all 24 communities	At least 12 communities established small scale household level income generating activities	Additional 12 communities established small scale household level income generating activities	All 24 communities/ households practices small scale income generating activities	Sustainable mechanisms established to promote small scale income generating activities	M & E reports and independent evaluation	Suitable income generating activities are identified and communities are willing to adopt
Output 4.1.2: Field demonstration of locally relevant multi-purpose agro-forestry to protect livelihood systems implemented and adopted (375 hectares)	Number of field demonstrations on multi-purpose agro-forestry systems conducted Number of communities adopted the improved livelihood protection	There is no existing field demonstrations organized None of the selected communities adopted improved practices	Field demonstrations implemented in 8 communities covering three livelihood zones and at least 7 communities are capable of adopting the practice	Field demonstrations planned and conducted in additional 8 communities and at least 7 communities are capable of adopting the practice successfully	Field demonstration planned and conducted in 8 communities and at least 7 communities are capable of adopting the practice successfully	All 24 communities aware of locally relevant multi-purpose agro-forestry systems for their livelihood protection and adopted by the district level institutions	Field demonstration conducted in all 24 communities with their active participation and replication strategy developed and agreed by the district level institutions	Field demonstration and evaluation reports	Locally relevant multi-purpose agro-forestry systems are available and preferable by the communities

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
	practices		successfully						

Component 5: Dissemination of best practices, project monitoring and evaluation

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
Outcome 5.1: Stakeholders and communities aware of improved SLM/W practices, livelihood diversification and household level income generating practices through wide dissemination	Strengthened capacity to transfer appropriate adaptation technologies (refer the indicator 3.2.2 of AMAT tool)	A score of 1 means no capacity achieved	Initial awareness raising and baseline assessments	Measures in place to increase the capacity to transfer appropriate technology	Moderate capacity achieved (AMAT score of 2)	High capacity achieved (AMAT score of 3)	The implementing partners are capable of transferring the technology to the beneficiaries	Communication strategy, case studies and data bases available in respective implementing partners	The adaptation technologies are relevant to the selected communities
Output 5.1.1 A communictaion strategy established in close collaboration with the MOFLR, MAFS, MNR, Ministry of Local Government and Cheiftainship (MLGC) and NUL and implemented	Communication strategy established and endorsed by the stakeholders and number of communication materials developed	There is no communicatio n strategy currently available	Initial consultation workshops conducted with the relevant stakeholders in all three districts and at the national level and feedback from local community representatives incorporated	Draft communicatio n strategy prepared and circulated for feedback from the implementing partners	Final communication strategy endorsed by the Government and ready for implementation and Communication materials developed based on the field activities and results of the field demonstrations incorporated	The communicat ion strategy implemente d and updated based on the experience and lessons learned and successful case studies documented and widely distributed among the developmen t partners	A communicatio n strategy established and adopted by all stakeholders and communicatio n materials relevant to all successful SLM/WM practices and case studies documented and widely communicated	Reports of the consultation workshops and final communication strategy document and printed materials available with all stakeholders and community groups	Stakeholders are willing to adhere to the strategy; The communication materials are easy to understand and useful to replicate the practices by the national and district level stakeholders
Outcome 5.2: Project implementation based on results based management and dissemination of results for future upscaling	Monitoring and dissemination of adaptation for scaling up	There are limited data available to properly monitor the impact of the project	Baseline studies and initial assessments	Mid-term evaluation	Publication of results and wider dissemination	Final evaluation Replication and up scaling strategy discussed	The replication and up scaling strategy agreed and the results of the final evaluation	M & E baseline reports, mid-term and final evaluation reports and replication and up scaling strategy	The implementing partners are willing to up-scale and replicate the successful interventions

Results chain	Indicators	Baseline	Milestones				End of project target	Means of verification and responsibility	Assumptions
			Year 1	Year 2	Year 3	Year 4			
(replication)						with implementing partners	integrated		
5.2.1 Systematic collection of field based data to monitor project outcome indicators at all levels and evaluation conducted	Indicator tracking table populated quarterly Project Implementation review, midterm and final evaluation s conducted Number of publications based on field experiences to be used for recommendations	Generic data available and provided in annex, but not specific to the watersheds There are few examples available based on the FAO TCP project completed in 2011.	Baseline studies conducted and document available within six months Compilation of recommendations	One midterm evaluation Half yearly publication of newsletters and tested good practice examples for recommendations	Half yearly publication of newsletter 1 video documentaries produced	One final evaluation Half yearly publication of newsletter 2 video documentaries produced	All baseline studies completed The evaluation completed as per the standards	Base line data reports Evaluation reports	MFLR's Information Unit will have the capacity in terms of equipment MFLR Information Unit will play an active role; these videos will be placed on MFLR and FAO websites

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).

GCP/LES/049/GFF USG comments on LDCF proposal Lesotho: Strengthening Capacity for Climate Change Adaptation through Support to Integrated Watershed Management Programme

----- Forwarded by Amanda Olesia Adams/Person/World Bank on 02/20/2013 05:19 PM -----

From: "Chan, Christina" <ChanC1@state.gov>
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Date: 02/19/2013 03:55 PM

Subject: USG comments on LDCF proposal Lesotho: Strengthening Capacity for Climate Change Adaptation through Support to Integrated Watershed Management Programme

Dear GEF Secretariat:

Thank you for the opportunity to review the PIF entitled "**Lesotho***:* **Strengthening Capacity for Climate Change Adaptation through Support to Integrated Watershed Management Programme in Lesotho**" under consideration for LDCF funding.

The United States welcomes this project concept. With a view toward further strengthening this proposal, we would like to urge FAO, as it prepares the proposal for CEO endorsement, to:

· Expand on how the Ministerial Steering Committee mentioned in B.4 will function and its expected deliverables. We appreciate the establishment of such an inter-ministerial steering committee, and also note the challenges related to coordinating between various ministries as well as the importance of ensuring inter-ministerial ownership of program activities; and

· Expand on how the various components will be linked. We appreciate that the crops and cropping systems described in Component 3 will be selected based on the vulnerability assessments conducted under Component 2. It is worth exploring how these vulnerability assessments might also inform activities under Components 1 and 4.

In addition, we expect that FAO, in the development of its full proposal, will:

· Expand on how it will ensure the sustainability of climate change adaptation education for decision makers at the national and district level;

· Clarify how it will communicate results, lessons learned and best practices identified throughout the project to the various stakeholders both during and after the project; and

· Outline how it will engage users, including women, farmers, and herders, in the development and implementation of the program.

Thank you again for the opportunity to provide feedback on this important PIF. We look forward with anticipation to seeing our feedback incorporated in the project proposal at the CEO endorsement stage of this process.

Sincerely,
Christina Chan

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Responses to the comments

1) How the Ministerial Steering Committee mentioned in B.4 will function and its expected deliverables. We appreciate the establishment of such an inter-ministerial steering committee, and also note the challenges related to coordinating between various ministries as well as the importance of ensuring inter-ministerial ownership of program activities

   Under the project, the Ministry of Forestry and Land Reclamation (MFLR) will be the National Focal Point in facilitating the implementation of the Project, and will work closely with the Ministry of Agriculture and Food Security (MAFS), Ministry of Energy, Meteorology, Water Affairs (MEMWA), Department of Environment (DOE), the Disaster Management Authority (DMA) and the National University of Lesotho (NUL). The National Project Steering Committee (PSC) constituted as part of the Technical Cooperation Project (TCP) with representatives of the above-mentioned line ministries and FAO will be strengthened by engaging UNDP, IFAD and chaired by the Principal Secretary of MFLR. The NPSC will be responsible for reviewing overall progress of the project and provide the administrative decision-making to overcome constraints during implementation. The PSC will:

   - Provide overall guidance, in particular provide advice when substantive changes are needed in the project's planned outputs, strategies or implementation arrangements;
   - Review project's progress reports and making appropriate recommendations;
   - Mobilize multi-agency support for the project and its activities;
   - Assess performance and approve project work-plan and budget revisions;
   - Support project planning by bringing in specialized information and experiences.
   - Ensure that adequate mechanisms are in place to guarantee the transparency and accountability as well as the efficiency of project operations.

   The Project Steering Committee will meet regularly, at least every three months, and extraordinarily whenever circumstances require. The National Project Coordinator (NPC) will serve as secretariat of the PSC with the responsibility to call meetings, distribute information and follow up on their recommendations. The activities relevant to a particular ministry or institution will be closely aligned with its regular functions and mandate. For example, the land use assessment and land use data base will be aligned with the existing GIS unit of the Ministry of Forestry and Land Reclamation and the tools and methodologies for vulnerability and risk assessment will be aligned with the Disaster Management Authority (DMA). This will ensure sustainability of and ownership of the specific activities by concerned ministries/institutions. Detailed consultations about the ownership of the individual activities have been carried out during the project preparation and the stakeholder mapping with roles and responsibilities is presented below.

2) How the various components will be linked. We appreciate that the crops and cropping systems described in Component 3 will be selected based on the vulnerability assessments conducted under Component 2. It is worth exploring how these vulnerability assessments might also inform activities under Components 1 and 4.

   The Ministry of Forestry and Land Reclamation (MFLR) is keen to develop their capability to integrate land use and land suitability data in their existing facility in close collaboration with Ministry of Agriculture and Food Security (MAFS). The assessment will focus on livelihood diversification and land suitability and contribute to implementation of sustainable land and water management practices in vulnerable catchment and sub-catchments to be implemented under component 3 and strengthening of diversified livelihood strategies and improved income generating activities to be implemented under component 4. Similarly, vulnerability and risk assessment to be carried out in close collaboration with Disaster Management Authority (DMA) in different time scales (from seasonal to inter-annual to long-term) will be used to decide on cultivating a specific crop for which the demand is expected to grow following an adverse climatic event. Thus updated vulnerability and risk assessment and spatial information products is critical for designing adaptation practices under component 3 and 4.

3) Expand on how it will ensure the sustainability of climate change adaptation education for decision makers at the national and district level

Sustainability of outcomes related to capacity development activities is always an issue. To ensure sustainability and continuous use of improved technical capacity, the training programmes and resources will be integrated into the regular training activities of the Government in each of the Ministry. In addition, in all the capacity development activities will be conducted in close involvement of National University of Lesotho (NUL) and thus the government can access resources persons to organize similar training programmes even after completion of the project. The implementing partners have assured of selecting appropriate trainees based on their involvement in capacity development programmes. Additionally, preparation of training strategy and plan as part of this component will ensure selection of appropriate number and participants for the training programme.

4) Clarify how it will communicate results, lessons learned and best practices identified throughout the project to the various stakeholders both during and after the project; and

This component will cover development of a communication strategy and ensure dissemination of good practice examples and case study results for wider adoption. National level replication foresees development of a communication strategy in close collaboration with the MFLR, MAFS and other implementing partners. The communication and dissemination strategy will review the current mechanisms and prepare detailed guidelines for communication of the project results and good practices. Case studies will be documented and will be compiled into simple documents for dissemination among the stakeholders. Dissemination of land use data will be ensured through customized database to be developed in Ministry of Forestry and Land Reclamation (MFLR). The vulnerability and risk information products will be hosted and disseminated through the Disaster Management Authority.

5) Outline how it will engage users, including women, farmers, and herders, in the development and implementation of the program.

The integrated watershed management in Lesotho is a complex issue which presents diverse challenges. Therefore, effective climate change adaptation requires a multi-stakeholder approach. Thus, a stakeholder engagement plan will be prepared within 3 months after start of the project to ensure participation of all relevant government agencies and direct beneficiaries including women, farmers and livestock herders. During the project preparation phase, the local representatives were consulted to identify women headed households especially to focus on household level livelihood diversification activities. The representatives of the women groups and village council representatives participated in the final workshop. The baseline data collection during the first six months of the project will quantify exact number of women beneficiaries.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[19]

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG GRANT APPROVED AT PIF:			
Project Preparation Activities Implemented	***GEF/LDCF/SCCF/NPIF Amount ($)***		
	Budgeted Amount	***Amount Spent To date***	***Amount Committed***
Activity 1: Stakeholder consultations	8,000	4,700	
Activity 2: Analysis of institutional gaps, capacity development needs and strategies for strengthening institutional capacity	8,000	3,000	
Activity 3: Establishment of analytical frameworks, methods and tools for assessment of livelihood zone profiles, vulnerability and impacts of climate change at watershed scale	9,500	8,000	
Activity 4: Stocktaking and prioritizing of adaptation and diversified livelihood practices and developing proposals for communication and awareness raising	21,500	26,470	
Activity 5: Detailed design of project components, result framework, and results-based budget	13,000	15,440	
Total	60,000	57,640	

19 If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent funds, Agencies can continue 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 activities.

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

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