



# PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: FULL-SIZED PROJECT

TYPE OF TRUST FUND: LDCF

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## PART I: PROJECT IDENTIFICATION

<b>Project Title:</b>	Strengthening capacities of agricultural producers to cope with climate change for increased food security through the Farmers Field School approach		
<b>Country(ies):</b>	Mozambique	<b>GEF Project ID:<sup>1</sup></b>	5433
<b>GEF Agency(ies):</b>	FAO	<b>GEF Agency Project ID:</b>	622616
<b>Other Executing Partner(s):</b>	Ministry of the Coordination of Environmental Affairs (MICOA) and Ministry of Agriculture (MINAG)	<b>Submission Date:</b>	5 June, 2013
<b>GEF Focal Area (s):</b>	CCA	<b>Project Duration (months):</b>	48
<b>Name of parent program (if applicable):</b>		<b>Agency Fee (\$):</b>	855,000
<ul style="list-style-type: none"> <li>For SFM/REDD+ <input type="checkbox"/></li> <li>For SGP <input type="checkbox"/></li> <li>For PPP <input type="checkbox"/></li> </ul>			

## A. FOCAL AREA STRATEGY FRAMEWORK<sup>2</sup>:

	Focal Area Objectives	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-Financing (\$)
CCA-1		LDCF	1,100,000	4,300,000
CCA-2		LDCF	3,800,000	13,400,000
CCA-3		LDCF	4,100,000	12,300,000
Total project costs			9,000,000	30,000,000

## B. PROJECT FRAMEWORK

<b>Project Objective:</b> To enhance the capacity of Mozambique's agricultural and pastoral sectors to cope with climate change, by upscaling farmers adoption of CCA technologies and practices through a network of already established Farmers Field Schools, and by mainstreaming Climate Change Adaptation (CCA) concerns and strategies into on-going agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming.							
Project Component	Grant Type <sup>3</sup>	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative Co-financing (\$)	
1. Mainstreaming improved climate-resilient agricultural practices in the framework of PEDSA/PNISA with emphasis on provinces and districts assisted by the EU/MDG/FAO project	INV	1.1. Increased resilience of at least three productions systems (staple crops, vegetables, mixed tree/crop /animal production systems), through the adoption of improved CCA strategies, practices and a broader choice of adapted genetic material, in	1.1.1 Multi-stakeholders FFS-based knowledge building strategy formulated and applied to fostering CCA strategies and practices  1.1.2 National, provincial and district-level managers of agricultural and pastoral programs trained on strategies for incorporating CCA in rural development through Farmers Field Schools and other extension approaches  1.1.3 At least 12 targeted districts assisted by the EU/MDG/FAO project and other partner programs in 5 selected provinces	LDCF	3,000,000	14,000,000	

<sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>2</sup> Refer to the reference attached on the Focal Area Results Framework and LDCF/SCCF Framework when completing table A.

		<p>assisted by the EU/MDG/FAO project and other partner programs (surface and yields at least maintained in cultivated or pastoral land of assisted farmers groups).</p>	<p>plans which include FFS-based and other extension services for promoting adoption of CCA practices</p> <p>1.1.4 At least 50,000 smallholder and emergent farmers will benefit from more climate-resilient production systems, being able to demand and access specific agricultural inputs provided by the baseline initiatives, specifically suited to support the CCA strategies and practices promoted by the FFS network under component 2</p> <p>1.1.5 Improved soil, water and crop management practices piloted in selected areas of the targeted districts</p> <p>1.1.6 Seeds of a more diverse set of crop / pastures varieties chosen from existing climate stress tolerant cultivars/ varieties made available in local seed systems and piloted in different ecosystems and production systems in the targeted districts</p>			
2. Capacity building and promotion of climate resilient agricultural practices and technologies through Farmer Field Schools (FFS) and other extension approaches in the framework of the EU/MDG/FAO project and other partner initiatives	TA	2.1. 50,000 farmers and agropastoralists adopt improved climate resilient practices, mostly through 2,400 Farmer Field Schools (FFS) facilitating experimental learning on CCA strategies and practices	<p>2.1.1 Training material on CC adaptation best practices developed and integrated into extension curricula, including Farmer Field School curricula.</p> <p>2.1.2 800 FFS facilitators trained in climate change adaptation and ecosystem resilience strategies and practices support CCA in 2,400 FFS reaching at least 50,000 farmers</p> <p>2.1.3 At least 200 non-FFS extensionists (Government, NGOs, private providers, etc) are trained in climate change adaptation and ecosystem resilience strategies and practices, and support 10,000 additional farmers</p> <p>2.1.4 Methods developed and MICOA's CDS (Centros de Desenvolvimento Sustentavel) officers trained to monitor progress towards more sustainable and climate-proof production systems</p> <p>2.1.5 Weather forecast decision support tools for farmers developed in coordination with Instituto Nacional de Meteorología, PPCR and other partners are tested with 20% of participating FFS and other beneficiary groups</p>	LDCF	4,200,000	10,000,000
3. Climate change adaptation strategies mainstreamed into agricultural sector policies and programs, with emphasis on rural extension / outreach strategies and plans	TA	3.1. Increased institutional capacity and cross-sector coordination for designing and implementing efficient extension/ outreach approaches, strategies and mechanisms in support of mainstreaming climate change adaptation in the agricultural and	<p>3.1.1 Knowledge and understanding of CC-induced threats (obtained from a growing network of FFS and other farmers groups under other extension schemes) are incorporated into broader CC impacts assessments conducted by other partners / programmes under PNISA</p> <p>3.1.2 Agricultural policy / capacity assessment identifying gaps and opportunities for mainstreaming climate change adaptation into the rural development sector policies.</p> <p>3.1.3 Joint MINAG/MICOA coordination mechanisms strengthened in support of</p>	LDCF	900,000	4,000,000

			animal production sectors	the implementation and monitoring of extension/ outreach strategies for CCA.  3.1.4 Comparative assessments of the efficiency and cost-effectiveness of FFS and non FFS-based extension approaches for up-scaling CCA, carried out in selected districts  3.1.5 Good operational practices and "lessons learned" for enhanced adaptation to climate risk of the agricultural sector are developed, disseminated and replicated at national level in support of sound CCA policy making and programming  3.1.6 Draft investment proposals formulated for the financing of more effective extension strategies for mainstreaming and up-scaling CCA in the agricultural and pastoral sectors			
4. Project monitoring and evaluation		TA	4.1 Project implementation based on results based management and application of project lessons learned in future operations facilitated	4.1.1 Project monitoring system operating providing systematic information on progress in meeting project outcome and output targets  4.1.2 Timely biannual project progress reports available for adaptive and results based management  4.1.3 Midterm and final evaluation conducted	LDCF	500,000	1,000,000
Sub-Total						8,600,000	29,000,000
Project management Cost					LDCF	400,000	1,000,000
Total project costs						9,000,000	30,000,000

#### C. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME IF AVAILABLE, (\$)

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Ministry of Agriculture through the IFAD-funded PRONEA Support Project (PSP)	Loan	6,500,000
National Government	Ministry of Agriculture through its National Agricultural Extension Programme - PRONEA and other PNISA-related projects	In-kind	1,000,000
National Government	Ministry for the Coordination of Environmental Affairs through PECODA and other programmes	In-kind	400,000
GEF Agency	FAO	In-kind	100,000
GEF and Multilateral Agencies	EU through FAO (EU/MDG/FAO)	Grant	20,000,000
GEF and Bilateral Agencies	Belgium through FAO (GCP/MOZ/079/BEL)	Grant	2,000,000
<b>Total Co-financing</b>			<b>30,000,000</b>

#### D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA(S) AND COUNTRY<sup>1</sup>

GEF Agency	Type of Trust Funds	Focal Area	Country Name/ Global	Grant Amount (\$ (a)	Agency Fee (\$) (b) <sup>2</sup>	Total (\$) c=a+b
<b>Total Grant Resources</b>						

<sup>1</sup> 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

<sup>2</sup> Indicate fees related to this project.

**E. PROJECT PREPARATION GRANT (PPG)**

Please check on the appropriate box for PPG as needed for the project according to the GEF Project Grant:

	<u>Amount Requested (\$)</u>	<u>Agency Fee for PPG (\$) <sup>5</sup></u>
• No PPG required		
• (Upto) \$50k for projects up to & including \$ 1 million		
• (Upto) \$100k for projects up to & including \$ 3 million		
• (Upto) \$150k for projects up to & including \$ 6 million		
• (Upto) \$200k for projects up to & including \$ 10 million	200,000	19,000
• (Upto) \$300k for projects above \$ 10 million		

**PPG AMOUNT REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND/OR MTF PROJECT ONLY**

Type of Trust Funds	GEF Agency	Focal Area	Country Name/ Global	PPG (\$) (a)	Agency Fee (\$) (b)	Total (\$) c=a+b
<b>Total Grant Resources</b>						

<sup>4</sup> On exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.<sup>5</sup> PPG fee percentage follows the percentage of the GEF Project Grant amount requested.

## **PART II: PROJECT JUSTIFICATION<sup>6</sup>**

### **A. PROJECT OVERVIEW**

**A.1. Project description.** Briefly describe the project, including: 1) the global environmental problems, root causes and barriers that need to be addressed; 2) baseline scenario and any associated baseline projects; 3) the proposed alternative scenario, with a brief description of expected outcomes and components and the project; 4) incremental cost reasoning and expected contributions from the baseline, the GEFTE, LDCF/SCCF and co-financing; 5) global benefits (GEFTE, NPTF) and adaptation benefits (LDCF/SCCF); 6) innovativeness, sustainability and potential for scaling up.

#### **1) Climate vulnerability of smallholder farmers**

Mozambique ranked 184th out of 187 countries in 2011 Human Development Index. Despite its impressive economic growth rates and the encouraging progress made in recent years, poverty continues to be severe and widespread. According to a Food Security and Nutritional (SAN) baseline study performed in 2006, 35 percent of family units are still in a condition of food insecurity and 43 percent of rural children under five years suffer from chronic malnutrition (stunting). The majority of the population still lives with less than one dollar per day and do not have access to clean water and sanitation. Rural population was last reported at 61.6% of the total population of the country in 2010. The agricultural sector in Mozambique is largely dominated by smallholder farmers (3.8 million small farm holdings with an average of 1.4 hectares) who contribute to approximately 95 percent of agriculture GDP and cultivate 85 percent of their land with food crops. Recent gains in agricultural output have mainly been due to increases in cultivated area instead of increases in productivity. Land under production increased by 45 percent in the last ten years, totaling 5.6 million hectares. The growth in area under production has meant only a small increase in the average farm size (from 1.26 ha to 1.47 ha) since the number of farms has increased by almost 25 percent in the same period. Medium- and large-scale farmers represent only about 10,000 farms and cultivate an area of about 200,000 ha. Agricultural production has been growing fast also due to the availability of land; farmers have been able to expand production in order to satisfy household and community needs, as well as address urban and export requirements. The land belongs to the state, but the Land Law recognizes community land management, increasingly by land and natural resource committees and local authorities.

The largest area of Mozambican territory is situated in the inter-tropical zone with four distinct tropical climate of humid tropical, dry tropical, semi-arid tropical and a modified climate due to elevation. The predominant climate is humid tropical, characterized by two seasons, namely a cool and dry climate from April to September and a hot and humid climate between October and March. Rainfall is the most intense between December and February. The average precipitation varies from 400mm in Pafuri in the Gaza province, and up to 2,000mm in Tacuane in the Zambezia province.

Mozambique is particularly vulnerable to climate change due to its geographic location (about 2,700 kilometers of coastline, at the confluence of many international rivers flowing into the Indian Ocean, and land areas that are under sea level), high temperatures, aridness, infertile soils, many endemic diseases, lack of communication infrastructure, high level of illiteracy, high population growth rate, absolute poverty and a high dependence on natural resources that are dependent on precipitation. The geographic location is one of the key factors that contribute to the country's vulnerability to extreme weather events since some of the tropical cyclones and depressions that are formed in the Indian Ocean cross the Mozambique Channel and affect the coastal zone. As global temperatures increase, Mozambique is experiencing increases in the frequency and severity of droughts in the interior and floods in coastal regions.

During the period 1960 to 2006, temperatures have risen across Mozambique (INGC 2009). Average rainfall trends generally indicate a slight drying, particularly in summer, but importantly the proportion of rain falling in heavy events has increased (McSweeney et al. 2008). Associated with this, the duration of dry spells has increased, particularly in spring, signaling a delay in the end of the dry season (INGC 2009). These trends are reflected in global trends (Easterling et al. 2000). A significant increase in the number of disasters in Mozambique (flood, epidemic, tropical cyclone and drought) has been found since the 1980s (INGC 2009).

Global Circulation Models (GCMs) suggest that southern Africa will warm by between 3.1 °C and 3.4 °C, with warming of up to 4.8 °C possible towards the end of the twenty-first century (Christensen et al. 2007). The projections show reduced rainfall for much of the region in winter (May to July). In mid- to late summer (December to April), wetting is indicated in the eastern and northern parts of the region. However, there is still considerable uncertainty over rainfall changes in the regions with a marked summer rainfall pattern. The most recent GCM-based model projections of climate change for Mozambique (INGC 2009) show that rainfall could increase moderately to strongly over most of Mozambique, although this remains uncertain. Coastal areas are likely to experience the strongest wetting in summer/autumn.

Temperatures will continue to rise by 1.5 °C-3.0 °C by mid-century, and rates of warming, and associated increases in evapotranspiration, are expected to be higher towards the interior. Heat stress events will be more frequent in future

This means that the implications for Mozambique's small-scale and subsistence farmers, who rely almost entirely on rainfall for crops, livestock and other production purposes, need to be thoughtfully assessed and used as a basis for supportive actions and strengthening of their adaptive capacity. A high proportion of Mozambique's population remain highly vulnerable and food insecure, with climate variability and destruction caused by extreme climate events being partially responsible and aggravating the underlying drivers of vulnerability. The natural resources base remains very fragile, under threat from over-exploitation and unsustainable practices, existing climate-related risks such as recurring droughts and floods, overlaid with emerging and projected future climate change impacts and rising population pressures. **Nevertheless, threats and opportunities are likely to be heterogeneous across the country, and local environmental and socio-economic contexts must inform site-specific adaptation options.**

Small farmers and pastoralists are especially vulnerable because of their limited knowledge and capacity to adapt to climate variability and change and there is a need to build their capacity in adopting more resilient agropastoral and agroforestry practices to counter the adverse effects of climate variability. The actions taken to address CCA in the agricultural sector are not only specific to CCA, and are therefore equally beneficial in addressing the development objectives of Mozambique. An enhanced portfolio of choices of practices and technical solution from which farmers can experiment and adopt, with the guidance of research and extension services, will lead to overall system diversification (diversified varieties and planting patterns, more synergistic associations of crops, livestock and locally adapted trees, and improved integration of crop/livestock systems).

## **2) Baseline scenario and associated baseline projects**

Non climate-driven problems such as unsuited agricultural management practices (regarding crop and variety selection, water and soil management, the continued practices of uncontrolled burning), increasing population pressures leading to expansion of agriculture into fragile ecosystems, as well as lack of capital investment and positive incentives for sustainable rural development, are likely to be greatly aggravated by climate change. Adaptation of the agricultural sector is therefore not an end in itself but a means to address the development objectives of Mozambique. Mozambique will have to adapt agricultural and animal production systems to a hotter future accompanied by an increased variability in precipitation patterns, and to the risk of decreasing yields and degrading the natural resource-bases (soils, biodiversity). A mix of technical solutions (such as more diverse sets of crop varieties to minimize risks, different planting patterns and a better integration between the crops, livestock and tree elements of small holders productions systems) as well as institutional solutions for effective outreach are necessary to support the rural communities, in an integrated way. In Mozambique, there are traditional and improved sets of varieties of maize, sorghum, and other staple crops that are grown to minimize the risk of crop loss to climate variability. However, without LDCF intervention, their adoption by farmers and pastoralists will remain limited.

NAPA follow-up to date have been focusing on creating basic institutional and awareness conditions for better addressing CCA issues, preparing the National Strategy for Adaptation and Mitigation of Climate Change, and on generating localized field experiences for example through small projects implemented by MICOA, financed on a yearly basis through PES (Plano Económico y Social) in selected communities and through the United Nations Joint Programme (UNJP) for environmental mainstreaming and adaptation to climate change implemented in one district of southern Mozambique (Chicalacuala). However, climate change adaptation strategies have not yet permeated agricultural sector programs. The National Investment Program for the Agricultural Sector (PNISA 2013-2017) lists more than 38 projects over the 2004-2017 period, with a budget totalling around 500 million USD. Those investments have mostly focused on post-crisis recuperation of the agricultural sector, but have not yet addressed CCA challenges in a significant manner.

It is worth noting that Mozambique is starting to move from a "development without adaptation" to a "development with adaptation" scenario, with its inclusion in the WB-sponsored Pilot Programme for Climate Resilience (PPCR). Initial funding has been approved for the preparation of its Strategic Program for Climate Resilience (SPCR). The SPCR would aim to support the current process of incorporating climate resilience into sector-specific development strategies and plans. Coordination with PPCR is presented in B.6.

FAO is currently phasing out its emergency operations in the country, but will continue to support the Government of Mozambique through several projects that aim at reinforcing farmer's capacities and to provide the required capacity building. These projects are based on participatory education and experimental learning developed with the Farmers Field School (FFS) approach. At the core of the FFS approach lies a participatory process involving groups of farmers, actively engaged in testing and experimenting adapted solutions to changing environmental and marketing conditions, allowing for sustainable intensification and land restoration. The FFS are "grass-roots labs" in which farmers build and expand their knowledge basis, evaluate technical options and are better equipped to adapt to changing conditions.

The starting point of Farmers Field School (FFS) in Mozambique was the National Action Plan for Food security (PAN) implemented by the Ministry of Agriculture (MINAG) with assistance from FAO (2004-2009). At the end of the project in 2009, a total of 907 FFS had been established in the three Provinces, with an estimated 26,000 participants. PAN worked through the Extension Department (DNEA), which, after 2009 continued to be involved in various specific externally financed projects, but formed just few new FFS. Unfortunately, at the time, no additional funds were found to be able to finance a consolidation phase at the national level. However, an impact assessment which used a PRA approach (Participatory Rural Appraisal) to estimate benefits showed average increased productivity of crops of around

30%, adoption of new income generating activities such as cash crops (sesame, horticulture, fruit production), improved animal husbandry, some successful experiences in small-scale agro-processing and, in general, improved access to inputs and markets.

FAO is currently supporting the FFS approach the GCP/MOZ/079/BEL project "Protecting and improving household food security and nutrition in HIV/AIDS affected areas in Manica and Sofala provinces" (currently 2011-2014; USD 2 622 222). The project is implemented by DNEA with FAO technical support in Manica (Gondola) and Sofala (Gorongosa and Caia). Most of the FFS groups under this project have been in place for just one to two year; the first batch recently graduated. The themes covered have been broadened beyond agricultural production and include nutrition as well as post-harvest aspects. In total 200 FFS groups have been formed to date through these two projects. The projects have made use of MINAG Master Trainers for the training of district extension staff and leaders of the FFS groups, so called Farmer Facilitators. In addition a number of NGOs are still using, the FFS methodology in their projects. Examples are World Vision in Zambezia, CARE international in Nampula and the Agha Khan foundation in Cabo Delgado province.

Based on the positive results in the country and the experiences from other countries, the Ministry of Agriculture in Mozambique has recognized the potential of the FFS methodology in the increase and modernization of the agricultural production and in the improvement of the livelihood of the rural population, and is in the process of adopting the FFS as their main 'extension' methodology.

FAO will support a new and broader FFS-based project during the 2013-2017 period in the framework of the European Union's contribution to the achievement of the Millenium Development Goals, to be implemented jointly by FAO, IFAD and the WFP. The Overall Objective of the EU support is to accelerate progress towards achieving MDG-1c in Mozambique. The specific objectives are to: (i) Enhance agricultural and fisheries production; (ii) Improve access to food; and (ii) Improve nutritional status of vulnerable groups, in particular women and children.

The FAO-implemented contribution to the "Accelerate Progress towards MDG1c in Mozambique" initiative has a budget of 19,9 million Euros and will support a network of 2400 FFS (by forming approximately 1400 new FFS and strengthening 1000 already established ones). The FAO/EU/MDG project will cover 15 districts (of a total of 128) in 5 of the 10 Mozambican provinces (Nampula, Zambézia, Sofala, Manica, and Tete). The FAO project within the overall EU-MDG initiative has six components: (i) Support to the seed sector; (ii) Increase access to inputs through an electronic voucher scheme; (iii) Support to extension through consolidation and expansion of Farmer Field Schools (FFS); (iv) Post harvest handling and infrastructure at household level; (v) Improving vaccination service of poultry against Newcastle disease; (vi) Home gardens and nutritional education. The specific budget for the FFS-based extension/outreach component is 6,9 million USD.

The FAO/EU/MDG project will work in close coordination with the IFAD-funded PRONEA Support Programme (PSP), which will support the DNEA's National Agrarian Extension Programme – PRONEA in 42 districts in all of Mozambique's provinces, including the 15 districts which will be attended by the FAO/EU/MDG project in 5 provinces of central Mozambique. The PSP will run until 2017 and have a budget of USD 26.5 million.

The overall goal of the National Extension Programme (PRONEA) is to contribute to absolute poverty reduction and to an improvement in the quality of life of the poor men and women, while the purpose of PRONEA is to attain increased returns and improved household food security of subsistence farmers, particularly female-headed and disadvantaged households, through a steady uplift in production efficiency. This will be achieved through: wider access to effective technical support services focused on districts; better organized producer groups influencing supply of services; and delivery of support services in response to requests. The PSP will support PRONEA's three components as follows:

- Component 1: Supply Side Development of agricultural service provision, both public and private sector development

Sub-component 1.1 (Public Sector Reorientation and Support) will support the capacity building of the public extension services at central, provincial and district level in order to improve effectiveness and quality in delivering, as well as the enhancement of management, planning, coordination and monitoring capacity. The Central level (DNEA) team will also develop capacity in the: (i) management and guidance of the FFS field school programme; and (ii) extension and FFS knowledge management. Subcomponent 1.2 (Private sector/NGO Promotion and Support) will focus on: (i) support to the development of Private/NGOs Service Providers (extension services, market information, agro-dealers, business development services, etc.); (ii) promotion of emerging Private/NGOs Service Providers; and (iii) developing farmer promoters.

- Component 2: Demand Side Development for agricultural extension service provision, association capacity to participate in planning, as well as in economic development

Sub-component 2.1 will focus on farmer organization and empowerment, and sub-component 2.2 on group, association and enterprise development, leading to a better capacity of farmers to shape the supply of extension services according to their needs.

- Component 3: Agricultural Extension Service Provision, at provincial and district level

Based on an enhanced demand for services (Component 2) and thus possible by a further developed FFS, extension (Component 1), agricultural services will be provided at provincial and district level. The district level extensionists will be supported by the PSP with additional training on extension methodologies and Farmer Field Schools.

The PSP is a key element of the baseline which will allow for: (i) benefitting from the existing national extension structure; (ii) reaching other farms groups through non-FFS methods, and (iii) facilitating the incorporation of FFS-based CCA principles and methods into broader extension and development initiatives. PSP's strategy is to establish additional partnerships with other PEDSA/PNISA related projects during the 2013-2017 period, which will broaden the range of potential partner projects for mainstreaming FFS-based CCA approaches in the agricultural sector.

The Environmental Education, Communication, and Divulgence Program (PECODA) was introduced in 2008 and it falls under the National Environment Policy approved by MICOA in 1995. It is based on the principles of the Environmental Strategy for Sustainable Development. The broad objective of PECODA is to identify mechanisms for the transmission of information and knowledge for the general society, so that they are able to change attitudes towards a sustainable use of natural resources, waste disposal as well as the correct implementation of the environmental legislation in the country, and thereby contributing to climate change adaptation and reduction of environmental hazards. The implementation of PECODA is phased to allow for monitoring and evaluation and subsequent planning for the following years. The first PECODA operational plan (2010-2014) is ongoing and the total budget of activities is estimated at Meticals 35 852 250 (USD 1 23 6284). The second operation plan is under formulation and it will cover the period 2014-2019.

### 3) Shortcomings / vulnerabilities of the baseline scenario

In December 2012 a FAO technical mission analyzed and identified potential shortcomings in the current "baseline scenario":

1. While the MINAG/FAO-led baseline projects are / will be developing a knowledge management and technology deployment platform through a growing FFS network, they do not yet systematically integrate CCA concerns.
2. No systematic process is under way in order to incorporate CCA concerns and menus into national extension strategies or programmes.
3. While PEDSA-PNISA, as a programme approach for agricultural development, will allow for improved institutional coordination, ensuring that Food Security concerns are mainstreamed into sector-specific programmes and projects, it neither specifically addresses the challenges of CCA at this stage, nor does it contemplate the integration of proven and cost-efficient extension approaches in support adoption of CCA practices and increased food security.
4. Finally, there is a weak coordination between MICOA's related programmes such as PECODA, and PEDSA-inscribed projects or programmes, as well as a lack of the resources at MICOA for reaching a significant number of communities and producers through its own programmes.

Those shortcomings constitute a strong vulnerability of this "baseline scenario" in the face of climate change / increased variability. National programmes aiming at rural development and food security could benefit from the additional value the LDCF financing and FAO could bring by developing a concrete FFS-based CCA approach and related capacities on the basis of its unique experience in the field of participatory learning and extension. New investments will require a proven and tested outreach platform for up-scaling farmer's adoption of CCA practices in the field and would gain from the FFS-approach of the proposed FAO/LDCF project.

### 4) Proposed project alternative and additional cost reasoning

The proposed project alternative will add LDCF financing with cofinancing from the following sources:

- The FAO-implemented and EU-sponsored contribution to the "Accelerate Progress towards MDG1c in Mozambique" initiative – or FAO/EU/MDG project - (EUR 19.9 million budget, 2013-2017) will provide the main source of co-financing. The LDCF project will work in the same provinces, districts and communities as this FAO/EU/MDG project, thus ensuring full additionality. The FAO/EU/MDG project will provide USD 20.0 million in co-financing (including USD 6.9 million from the FFS component) to the achievement of component 1 : « *Up-scaling improved climate-resilient agricultural practices in the framework of PEDSA/PNISA with emphasis on provinces and districts assisted by the EU/MDG/FAO project* », and component 2: « *Capacity building and promotion of improved agricultural practices through Farmer Field Schools (FFS) and other extension approaches in the framework of the EU/MDG/FAO project and other partner initiatives* » of the LDCF project. The project has been approved by the EU and the GoM in December 2012.
- The FAO implemented GCP/MOZ/079/BEL "Protecting and improving household food security and nutrition in HIV/AIDS affected areas in Manica and Sofala provinces" (currently 2011-2014) has a total budget of USD 2,622,222. It is actively engaged in expanding the FFS network in 3 districts of 2 provinces which will also be attended by the FAO/EU/MDG. It will provide USD 2,0 million in co-financing in support to components 1 and 2 of the LDCF project, contributing to expand the FFS-base on which the proposed project will build to incorporate CCA strategies and practices.



- The IFAD-funded “*PRONEA Support Project – PSP*” (2013 – 2017) has a total budget of USD 26.5 million and has a national coverage. It will provide USD 6.5 million in co-financing in support to component 2 and to component 3 “*Climate change adaptation strategies mainstreamed into agricultural sector policies and programs, with emphasis on rural extension / outreach strategies and plans* ».
- MINAG through its own contribution to PRONEA and other PEDSA/PNISA related projects will provide an additional USD 1,0 million in co-financing, while MICOA will provide USD 400,000 through PEDOCA and in-kind contributions.
- Finally, FAO will contribute 100,000 USD in kind through its national office in Mozambique and FAO technical Divisions, bringing a total level of cofinancing by the agency to USD 22.1 million.

The two FAO implemented projects considered as part of the baseline and contributing to cofinancing, will work in the provinces and districts in which the LDCF project will be implemented, thus ensuring full additionality of the LDCF investment. PRONEA Support Project’s collaboration in those provinces and districts is already contemplated in the FAO/EU/MDG implementation strategy, further contributing to LDCF additionality.

The current process of implementation of programme approaches for rural agricultural development in Mozambique and the increasing integration of the FFS approach into the PRONEA both create favourable conditions for mainstreaming CCA considerations into a structured programmatic framework that transcends individual projects. Hence it constitutes a cost-effective opportunity to finance the additional costs of adaptation using the LDCF funds.

The proposed LDCF intervention is needed to boost the adoption of adapted agricultural tools and practices, expand the scope of the FFS approach, increase capacity building, and support policies and programs to shift from a reactive response towards a pro-active preparedness approach to climate events. In particular, the LDCF project will allow for the establishment or strengthening of cost-efficient synergies between FAO-assisted FFS initiatives, PRONEA, PEDSA / PNISA and PECODA. Its additional value relates to its capacity to:

- Facilitate the integration of CCA aspects into FAO-assisted growing network of FFS;
- Provide a proven outreach platform for up-scaling farmers and pastoralists adoption of CCA practices in the framework of PRONEA;
- Enrich the methodological tool-box of PEDSA and PECODA to include FFS-based CCA extension strategies and approaches, thus facilitating the mainstreaming of CCA into the current and new generation of PEDSA/PNISA-related projects.

The additional costs financed by LDCF will allow for this adoption of practices and technologies at farm level to happen since the FFS approach will provide the required capacity building in farmers’ abilities to understand and adapt to climate change impacts. Once verified and tested how this model best works and developed the required human resources and institutional capacities for up-scaling, funding from other PEDSA/PNISA- related projects will insure the up-scaling.

**The adaptation objective** of the LDCF project is to enhance the capacity of Mozambique’s agricultural and pastoral sectors to cope with climate change, by upscaling farmers adoption of CCA technologies and practices through a network of already established Farmers Field Schools, and by mainstreaming Climate Change Adaptation (CCA) concerns and strategies into on-going agricultural development initiatives and mainstreaming CCA issues into agricultural policies and programming.

The proposed project is the first one in Mozambique using LDCF resources to support climate change adaptation in the agricultural sector under NAPA. This LDCF project will work through the establishment of partnerships with on-going initiatives for incorporating the FFS-CCA approach in existing programme frameworks such as PEDSA/PNISA and associated projects, thus contributing to filling the gap in terms of required increased adaptive capacity of the agricultural sector for food security. The adaptation scenario will allow for both the expansion of the FFS approach and the integration of CCA considerations and practices in FFS curricula.

The adaptation scenario will lead to coherent intervention that will include the following key production systems: (i) non-irrigated cereals, legumes and tubercles crops; (ii) vegetable-growing practiced mostly by women groups; and (iii) mixed crop/livestock systems. The project interventions will take place in 15 districts of five central provinces, with precipitations varying from 800 to 2000 mm, presenting a broad range of CCA adaptation challenges, allowing for the generation of a diverse set of site-specific adaptation strategies.

The project is articulated into the following four components: (i) Integrating improved climate-resilient agricultural practices in the framework of PEDSA/PNISA with emphasis on provinces and districts assisted by the EU/MDG/FAO project; (ii) Capacity building and promotion of climate resilient agricultural practices and technologies through Farmer Field Schools (FFS) and other extension approaches in the framework of the EU/MDG/FAO project and other partner initiatives”; (iii) Climate change adaptation strategies mainstreamed into agricultural sector policies and programs, with emphasis on rural extension / outreach strategies and plans; and (iv) Project monitoring and evaluation.

**The project approach** will be based on the participation of local communities and their knowledge and local best practices will be combined with technical and scientific improvements increasing resilience towards CC. The FFS approach is not to be considered as stand-alone capacity building but as training-by-adopting improved practices and

technologies in farmers' fields and pastoral areas. At the core of the FFS approach are groups of farmers, actively engaged in testing and experimenting with adapted solutions to changing environmental and market conditions allowing for sustainable intensification of production and resilience towards CC. Based on wide community participation, the FFS are "grass-roots labs" in which farmers/pastoralists build and expand their knowledge base, evaluate technical options and are better equipped to adapt to changing conditions, and develop their own management and cropping system in their lands and territories, integrating local knowledge with scientific knowledge and improved practices. The FFS will allow for up-scaling of CC adaptation practices to be applied in wide areas by farmers and agro-pastoralists.

By funding the additional costs of interventions, necessary to meet the urgent and immediate adaptation needs of the agricultural sector identified in Mozambique's NAPA, the project will work in selected sites by increasing the resilience of key agricultural and agropastoral systems to CC through enhancing the ability of small farmers and pastoralists to understand how better to adapt and cope with risks associated with increasing climate variability. The present project will further generate adaptation benefits by ensuring that farmers and agropastoralists are involved in the consultative process at community, district and national levels. By its focus on sustainable crop production and use of local available resources (including careful management of agricultural biodiversity and grasslands) in a diverse set of agroecosystems and vulnerable production systems, the project will incorporate the decisive elements needed for both effectiveness and potential for up-scaling.

The project will also play an important role in catalyzing and assisting Mozambique in transferring lessons learned from other GEF and non GEF-funded initiatives in the country as well as from other countries such as Angola, Burkina Faso, Niger and Mali where similar FAO-implemented and FFS-based CCA projects under implementation or are being formulated.

**With the additional financing from the LDCF**, the proposed intervention will expand the scope of the activities carried out in the country by increasing farmers' resilience and diversifying the choices available to farmers and their production systems, hence, decreasing the overall vulnerability of small-farmer systems. The additional financing from LDCF will allow for the implementation of the following activities in each project component:

**Component 1. Integrating improved climate-resilient agricultural practices and technologies in the framework of PEDSA/PNISA which emphasis on provinces and districts assisted by the EU/MDG/FAO project**

Component 1 will contribute to fine-tuning and up-scaling at field level the use of agro-ecosystems-specific strategies for increasing resilience in 15 districts of 5 central provinces, subject to increasing irregularity in precipitations, dry spells and flooding. Activities will include adoption of new varieties and cultivars and sound CCA practices in non-irrigated staple crops, vegetables and mixed tree/crop/animal production systems) contributing to reducing losses of agricultural land and yields. Those activities will be additional to the baseline activities carried out by the two FAO-led baseline projects which lack a comprehensive adaptation strategy outlook and the access to systematic information on optimal use of crop genetic resources for resilience. It will allow for the introduction and piloting of a diverse set of crop varieties chosen from existing climate stress-tolerant cultivars/species of cereals, tubercules and legumes and to the increased availability of specific agricultural inputs required for improved climate resilience. A core group of national, provincial and district-level managers of agricultural and pastoral programs will be made aware of the potential for mainstreaming CCA in rural development through Farmers Field Schools and other extension approaches. At least 12 targeted districts assisted by the EU/MDG/FAO project and other partner programs in 5 selected provinces will have functional and budgeted-for CCA plans which include FFS-based and other extension services. A FFS-based knowledge building strategy for CCA will be formulated involving multiple stakeholders and applied to foster CCA strategies and practices at field level in the targeted provinces and the framework of PRONEA and other PEDSA/PNISA related projects. At least 50,000 smallholder and emergent farmers will benefit from more climate-resilient production systems, having developed the required knowledge and capacities to demand and access specific agricultural inputs provided by the baseline initiatives, specifically suited to support the CCA strategies and practices promoted by the FFS network under component 2. Those activities will be additional to activities carried out by FAO-led baseline projects and the PRONEA/PSP.

**Component 2. Capacity building and promotion of climate resilient agricultural practices and technologies through Farmer Field Schools (FFS) and other extension approaches in the framework of the EU/MDG/FAO project and other partner initiatives**

This component will mainly use the FFS approach promoted by the FAO-led baseline projects and the PSP, as a tool for scaling-up farmers adoption of knowledge demanding climate resilient practices and adaptation technologies including a broader range of crops and varieties and diversification strategies to spread risks and increase system resilience. The community-led facilitation of practices and technologies will strengthen the adoption processes and will be fully additional to baseline investment in more than 2,400 FFS currently without a CCA focus in their curricula. Extensionists supported by the PSP and applying other extension approaches than FFS will also be trained and receive guidance from the project in CCA and agro-ecosystems resilience. MICOA's regional CDS (Centros de Desenvolvimento Sustentavel) officers will be trained to monitor progress towards more sustainable and climate-proof production systems in collaboration with FFS and non-FFS extension agents and facilitators. Finally, weather forecast decision support tools for farmers developed in coordination with Instituto Nacional de Meteorologia, PPCR and other partners will be made

available to and tested with 20% of participating FFS and other beneficiary groups. Those activities will be additional to recurrent PRONEA/PSP and FAO/UE/MDG projects activities.

Component 3. Climate change adaptation strategies mainstreamed into agricultural sector policies and programs, with emphasis on rural extension / outreach strategies and plans

Component 3 will support the mainstreaming of CCA in the agriculture sector development in districts and provinces attended by the FAO-led baseline projects and the PSP and PRONEA partner projects. This mainstreaming process will be based on the findings from the application on the ground of CC-resilient agricultural and soil management practices in Components 1 and 2 supported by the FFS approach. An agricultural policy / capacity assessment will identify gaps and opportunities for mainstreaming climate change adaptation into the rural development sector policies in the framework of PEDSA/PNISA. Joint MINAG/MICOA coordination mechanisms, including an inter-institutional task force, will be strengthened in support to the implementation and monitoring of extension/ outreach strategies for CCA. A comparative assessments of the efficiency and cost-effectiveness of FFS and non FFS-based extension approaches for up-scaling CCA, will be carried out in selected districts and provide valuable insight for CCA policy formulation and programming in the agricultural sector. A draft investment plan will be made available in support to CCA mainstreaming and up-scaling. Those activities will be additional to baseline activities under PRONEA/PSP, PEDSA/PNISA and PECODA.

**5) Adaptation benefits:** The LDCF project is expected to generate the following adaptation benefits: (i) increased knowledge and understanding of site specific CC-induced threats are channeled in an effective and efficient manner through an expanding network of FFS; (ii) a broader choice of species, varieties and cultivars and sound CCA practices are adopted in staple crops, vegetables, and mixed tree/crop/animal production systems, leading to reduced crops losses; (iii) at least 12 targeted districts assisted by the EU/MDG/FAO project and other partner programs in 5 selected provinces have functional and funded CCA plans which include FFS-based and other extension services (iv) at least 50,000 farmers and agropastoralists adopt improved climate resilient practices through FFS training; (v) concrete adaptive capacity of 50,000 small-holders is strengthened through a growing network of at least 2,400 Farmer Field Schools fully integrating CCA strategies and practices; (vi) weather forecast decision support tools for farmers developed and tested with 20% of participating FFS and other beneficiary groups; (vii) Climate change adaptation strategies mainstreamed into agricultural sector policies, programs and planning based on "lessons learned"; (viii) Effective and recurrent mechanisms are in place for cross-sector coordination in the implementation of FFS-based outreach strategies for CCA; and (ix) a draft investment plan available to support CCA mainstreaming and up-scaling in the agricultural sector in complement to the existing agricultural investment plan.

**6) Innovativeness, Sustainability and potentials for scaling up**

The project is **innovative** in the rural development context of Mozambique in expanding the scope of the increasing network of FFS to build farmers experimental learning capacities to adapt to climate variability and change. The FFS approach were originally developed for building farmers experimental learning capacities in integrated pest management which requires understanding of and continuous adaptation to complex changes in pest pressures in production systems. The challenges farmers encounter in adapting to increased climate variability and change have similar characteristics in terms of experimental learning capacity needs and understanding of and continuous adaptation to complex climate variability impacts. Expanding the scope of FFS to cope with climate change and built a resilient pro-active preparedness approach to climate events in agro-ecosystems is therefore innovative.

The sustainability of the expected project outcomes is built into the project approach as follows:

- (i) FAO will initiate field activities by focusing first on those districts covered by its GCP/MOZ/079/BEL project in the provinces of Manica and Sofala, generating CCA experiences by building on already established FFS. This will allow for the development and testing of the FFS-based CCA technical and methodological model, in close collaboration and communication with other partner projects. It will then expand the incorporation of CCA approaches and strategies into the broader FAO/EU/MDG project in five provinces, thus increasing complementarity and ensuring that LDCF' principle of additionality is fully respected.
- (ii) Once the FFS-CCA approach / methods have been fully tested through FAO baseline projects, the fine-tuned FFS-CCA model will be made available for broader adoption by PRONEA and other partner PEDSA/PNISA projects. Lessons-learned will be key for future mainstreaming.
- (iii) In parallel, the LDCF project will work closely with MINAG and MICOA, and in particular with DNEA in ensuring that the FFS-CCA extension model is being mainstreamed into the PEDSA's methods and tool boxes, both at national, provincial and distrital level.
- (iv) Finally, it is expected that the fully-tested model will be fully incorporated into the PEDSA/PNISA programme framework, and adopted for subsequent up-scaling by the new generation of agricultural sector investment programs and projects.

Promoting **scaling up of CCA practices** is at the core of the design of the proposed project by mainstreaming CCA considerations into an already existing structured programmatic framework (PEDSA/PNISA) that transcends individual projects.

**A.2 Stakeholders.** Identify key stakeholders (including civil society organizations, marginalized people, gender groups, and other as relevant) and describe how they will be engaged in project preparation.

Key stakeholders in full project preparation will include the smallholder farmers beneficiaries. The proposed project will improve socio-economic conditions of small-scale farmers, rural families and subsistence economies in vulnerable and key productive areas of 15 selected districts of five central provinces of Mozambique by: (i) ensuring resilient agriculture production and food security, and allowing rural populations to adapt and expand their traditional knowledge base and practices as a buffer against CC impacts; (ii) strengthening social capital among FFS participating groups, empowering them to influence the provision of agricultural / extension services adapted to their needs; (iii) reducing the impacts of climate change on the most vulnerable groups, including rural women. Since poor rural women have both production and reproduction roles - by collecting water and wood, raising small animals, laboring land for family subsistence and cash crops such as vegetable plots, and bearing children - they are the most affected by CC.

Rural population knowing and applying good management practices will help reduce land degradation and prevent competitive pressures on natural resources and the clearing of natural forest cover such as Miombo forest (indirect global environmental benefits). As well, the project will reduce their vulnerability and enhance their adaptive capacity to prevent climate-induced economic losses (direct adaptation benefit).

FAO, MICOA and MINAG will be the main co-partners for project preparation and execution. The project will support MICOA's mandate of mainstreaming climate change adaptation approaches and strategies into the rural development sector. Within MINAG, the project will work closely with the DNEA (*Direcção Nacional de Extensão Agrícola*) and DNSA (*Direcção Nacional de Serviços Agrários*). The LDCF project will be inscribed in the general framework of PEDSA/PNISA, while responding to MICOA's mandate on climate change adaptation. This will allow for effective liaison with other MINAG-associated institutions such as IIAM (*Instituto de Investigação Agrária de Mozambique*); with MICOA's directorates such as *Direcção Nacional de Gestão Ambiental e Direcção Nacional de Promoção Ambiental* (which promotes PECODA), with the *Instituto Nacional de Meteorologia* (Ministry of Transportation), and with projects implemented by those institutions. Special emphasis will be put on developing partnerships with farmers associations and women groups during the preparation of the full project, some of which are already involved in FFS work.

**A.3 Risks.** Indicate risks, including climate change risks, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (Table format acceptable).

The strong interest of key government stakeholders in the project approach has been verified during project identification. In particular, MICOA clearly considers that it cannot address CCA challenges in the agricultural sector without working through agricultural projects and in the framework of agricultural development strategies and plans. PNISA and PRONEA Support Project coordinators have welcomed the project approach based on the development of partnerships with agricultural sector programmes and projects in order to mainstream CCA strategies and practices. However, the limited experience in project coordination between MICOA and MINAG may constitute a challenge and this risk will need to be re-assessed during full project preparation and appropriate mitigation measures will be identified. Partnership-building capacities to ensure mainstreaming into on-going initiatives may also constitute a challenge. Since the LDCF-funded activities and management will be partly blended with FAO/EU/MDG project - which already includes a key partnership with PRONEA/PSP - this risk is considered to be limited. The LDCF is also expected to benefit from PSP's expressed strategy to build additional partnerships with other agricultural development and agricultural services provision projects country-wide. The risk of limited national ownership of the project needs to be considered since the LDCF's main baseline projects are FAO-implemented. This risk will be mitigated by establishing Letters of Agreement between FAO and DNEA and other key national partners for project implementation. Component 3 of the LDCF project will strengthen coordination between MICOA and MINAG and focus on mainstreaming CCA in existing programme frameworks such as PEDSA/PNISA, further contributing to the reduction of this ownership risk. Finally, climate change shocks and/or pest and diseases outbreaks may cause seeds shortages that may negatively influence new varieties distribution. The project will address this risk by fostering community-level field observation capacities to reduce seed multiplication failures, and by closely linking with the FAO/EU/MDG project and other initiatives working on seed production and inputs distribution schemes.

**A.4 Coordination.** Outline the coordination with other relevant GEF financed and other initiatives.

The project draws on lessons learned, tools, and predictions from a number of FAO-led projects and initiatives in Mozambique. It builds on the technical capacities and growing experience of FAO in the Farmers Field School Approach through the GCP/MOZ/079/BEL "Protecting and improving household food security and nutrition in HIV/AIDS affected areas in Manica and Sofala provinces" and former FAO-implemented FFS support projects. It will also directly benefit from the forthcoming FAO/EU/MDG project.

The project will also benefit from FAO's broader experience in the application and mainstreaming of the FFS approach in West African countries which are or will be supported by a similar LDCF projects such as Burkina Faso, Niger and in particular Mali where a strong FFS institutionalization process is underway.

The inscription of the LDCF project within the broader framework of PEDSA/PNISA's programme approach will facilitate the build-up of synergies and partnerships between the LDCF project and a broad range of projects under supervision of the MINAG and MICOA in the fields of agriculture, food security and land management/restoration.

Particular attention will be paid to ensuring consistency between the LDCF project and MICOA-implemented resilience / disaster risk management micro projects financed by PES in the districts of intervention. Coordination will also be established with other national investment programmes such as the *Fundo de Desenvolvimento Distrital* (FDD), with a view to incorporate CCA agendas into programming at district level.

The proposed LDCF project will be coordinated with various projects and initiatives addressing climate resilience in the rural development sector, such as:

Strategic Programme for Climate Resilience (SPCR): the proposed LDCF will establish coordination mechanisms and exchanges with various investment projects contemplated in Mozambique's SPCR under its Pillar 1 "Pilot Investments", such as: (i) "*Climate-resilient water-enabled growth: transforming the hydro-meteorological services*", which aims at developing national capacity for weather and climate prediction; "Sustainable Land & Water Resources Management", and "Enhancing Climate Resilience Agricultural Production and Food Security". On one hand, the LDCF project will gain from an improved capacity of climate and weather prediction which will directly benefit FFS-groups involved in CCA processes; on the other hand, it will contribute to SPCR's efforts to promote climate resilient agricultural production and food security through its experience generated on FFS-based climate change adaptation approaches. Additionally, the LDCF project's CCA mainstreaming process (component 3) will benefit from SPCR's Pillar 3 "Institutional and Policy Reform", which aims at: (i) improving institutional frameworks for addressing climate change (with support from climate change development policy operation i.e. sector budget support); and (ii) Strengthen capacity for climate resilient planning at national, sector and local levels.

IFAD's ASAP/PROSUL: IFAD's Adaptation for Smallholders Agriculture Programme is currently formulating the "Resilient Value Chains in Mozambique" project in the drier province of Gaza. The LDCF and ASAP projects will be complementary both in terms of approach (with IFAD's focus on resilient value chains and FAO's focus on FFS-based extension for CCA) and geographical and agro-ecological focus, and will allow for exchanges of experiences and lessons-learned.

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

**B.1 National strategies and plans or reports and assessments under the relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NCSAs, NIPs, PRSPs, Biennial Update Reports, etc.**

The Project is fully consistent with Mozambique's NAPA. All NAPA adaptation measures are in synergy with the dispositions of post-Rio conventions ratified by Mozambique: "United Nations Framework Convention on Climate Change" (UNFCCC), "United Nations Convention to Combat Desertification" (UNCCD), and the "United Nations Convention on Biological Diversity" (UNCBD). The project will support the Ministry for the Coordination of Environmental Affairs (MICOA)'s mandate as the institution in charge of coordinating and monitoring all activities related to post-Rio Conventions, including climate change. It will strengthen MICOA's capacities to ensure the integration of the dimensions of climate change and adaptation into the rural development sector's policies, strategies and programmes, and the mobilization of financial resources required for the implementation of climate change adaptation activities. The project is also consistent with the recently approved (November 2012) National Strategy for Adaptation and Mitigation of Climate Change (2013-2025); the Environmental Strategy for Sustainable Development (2007-2017); the Strategy on Gender, Environment and Climate Change (2010-2014); the Action Plan for the Prevention and Control of Soil Erosion (2008-2018), and the Action Plan for the Prevention and Control of wildfires (2008-2018).

Mozambique's NAPA has identified four broad priority areas: (i) Strengthening an early warning system; (ii) Strengthening capacities of agricultural producers to cope with climate change; (iii) Reduction of climate change impacts in coastal zones and; (iv) Management of water resources under climate change.

The GoM has requested FAO to focus on NAPA's second priority area, in conformity with FAO's mandate and comparative advantages in agriculture and rural development. Under this priority area, the proposed project will contribute directly to the three long term results defined in the NAPA: (i) reduced losses in crop production and livestock in regions prone to drought, floods, cyclones, tropical storms and other climatic events; (ii) reduced degradation of soils due to inappropriate agricultural practices; and (iii) established alternative forms of subsistence.

Mozambique is in the process of formulating a Strategic Programme for Climate Resilience – SPCR, in the framework of the World Bank – sponsored Pilot Programme for Climate Resilience (PPCR). Mozambique's SPCR prioritizes investments to be financed by the PPCR. Mozambique is using the PPCR process to integrate climate resilience into mainstream development investment in agriculture, natural resource management (including water), coastal infrastructure development, roads, and private sector investment; and improve the national capacity for weather and climate forecasting and for integrating this forecasting in planning of economic sectors.

Various national plans relate directly to the achievement of Millennium Development Goal objective 1c (reduce by half the proportion of people suffering from hunger from 1990 to 2015): (i) the Food Security and Nutrition Strategy II 2008-2015 (ESAN II); (ii) the Strategic Plan for the Development of the Agricultural Sector (PEDSA 2011-2020); (iii) the Fisheries Master Plan (PDP 2010-2019); (iv) the Small Scale Aquaculture Development Plan (SSADP, 2009-2013); and (v) the Action Plan for the Reduction of Chronic Malnutrition (2011-2015). The proposed LDCF project will contribute directly to the achievement of PEDSA. In particular, it will support the following of PEDSA's five strategic objectives: 1 - Agricultural

production and productivity and its competitiveness increased; 3 - Land, water, forest and marine resources used sustainably; 4 - Legal framework and policies conducive to agricultural investment in place; 5 - Agricultural institutions strengthened.

The adaptation activities to be carried out under the LCDF project will be undertaken in close synergy with the PEDSA and the related PNISA (National Investment Program for the Agricultural Sector). The project will also be instrumental in supporting forthcoming processes of up-dating of the PEDSA, PNISA and other related programs, in order to allow for Climate Change Adaptation issues to be incorporated transversally.

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

Mozambique's NAPA was approved by GoM's Council of Ministers in December 2007 and submitted to UNFCCC in July 2008. Consistent with guidance for the LDCF (GEF/C.28/18, May 12, 2006), the present proposal is a NAPA follow up project aiming to address adaptation priorities of the agriculture sector. The project will implement an integrated strategy of adaptation-focused interventions with emphasis on the enhancement of rural smallholders' food security. The project will thereby contribute towards the attainment of the Millennium Development Goal (i.e., eradication of extreme poverty and hunger).

The project will directly contribute to the implementation of the SCCF/LDCF adaptation strategy through the integration of climate resilience into agricultural and pastoral production for food security in vulnerable rural areas of Mozambique through the Farmers Field School approach. The proposed project will support the objectives CCA-1, CCA-2 and CCA-3, with a particular focus on CCA-3 in accordance with FAO's comparative advantages.

CCA-1, output 1.1.1 Adaptation measures and necessary budget allocations included in relevant frameworks:

This FA output will be specifically supported through the following project outputs: (i) Component 1 – Output 1.1.3 (*At least 12 targeted districts assisted by the EU/MDG/FAO project and other partner programs in 5 selected provinces have functional and budgeted-for CCA plans which include FFS-based and other extension services for promoting adoption of CCA practices*); and (ii) Component 3 – Output 3.1.6 (*Draft investment proposals formulated for the financing of more effective extension strategies for mainstreaming and up-scaling CCA in the agricultural and pastoral sectors*).

CCA-2, output 2.1.2: Systems in place to disseminate timely risk information

This FA output will be specifically supported through Component 2 Output 2.1.5 (*Weather forecast decision support tools for farmers developed in coordination with Instituto Nacional de Meteorologia, PPCR and other partners are tested with 20% of participating FFS and other beneficiary groups*), though it should be stated that most of FFS-CCA process under project components 1 and 2 will also contribute to this FA output.

CCA-2, output 2.2.1: Adaptive capacity of national and regional centers and networks strengthened to respond rapidly to extreme weather events

A strengthened network of Farmers Field Schools actively involved in CCA (project component 2) will contribute to this FA output by increasing adaptive capacity at local level.

CCA-2, output 2.2.2: Targeted population groups covered by adequate risk reduction measures

The LDCF project's component 1 and 2 will directly contribute to this FA Output. Key Component 1 outputs are: (i) Output 1.1.4 (*At least 50,000 smallholder and emergent farmers have increased access to agricultural inputs important for CCA practices and have improved knowledge of their cost-effectiveness and climate resilience*); (ii) Output 1.1.5 (*Improved soil, water and crop management practices piloted in selected areas of the targeted districts*), and (iii) Output 1.1.6 (*Seeds of a more diverse set of crop / pastures varieties chosen from existing climate stress tolerant cultivars/ varieties made available in local seed systems and piloted in different ecosystems and production systems in the targeted districts*). Key Component 2 outputs are: (i) Output 2.1.2 (*800 FFS facilitators trained in climate change adaptation and ecosystem resilience strategies and practices support CCA in 2,400 FFS reaching at least 50,000 farmers*), and (ii) Output 2.1.3 (*At least 200 non-FFS extensionists (Government, NGOs, private providers, etc) are trained in climate change adaptation and ecosystem resilience strategies and practices, and support 10,000 additional farmers*).

Output 3.1.1: Relevant adaptation technology transferred to targeted groups

Most project outcomes under components 1 and 2 will directly contribute to this FA Outcome in the 15 selected districts in 5 selected provinces, while component 3 will allow for mainstreaming and reaching more targeted groups through other projects and programmes

## **B.3 The GEF Agency's comparative advantage for implementing the project**

The proposed project is aligned with FAO's comparative advantage in the area of capacity building, providing technical analysis and assessments in relevant areas such as sustainable crop production and land management, policy support, use of biodiversity. FAO has considerable technical experience and many field projects in a number of areas covered under this project (agriculture production and food security, climate change, agro-biodiversity, capacity building, development of community based capabilities and rural development, forage production and grassland management). The proposed project is also supporting the up-scaling of the FFS approach that has been endorsed at national level by various

governments in the continent and that will be used for capacity building activities. FAO has been supporting Mozambique's efforts both to develop a National Food Security Strategy, to develop FFS-based extension, and to react to drought- and flood-driven food crisis episodes. FAO currently has a significant project portfolio in Mozambique with a major focus on food security and sustainable rural development, while phasing out post-emergency operations.

FAO might provide USD 100 000 in grant / in-kind resources for project preparation and USD 100 000 in-kind for project implementation, in addition to an estimated USD 22 million in grant resources from two donor-funded projects (see Part I, Table C and Part II, section B2).

The project addresses FAO's strategic objective A (Sustainable Intensification of Crop production), B (Increased Sustainable Livestock production) and F (Sustainable management of land, water and genetic resources and improved response to global environmental challenges affecting food and agriculture). In particular, Components 1 and 2 fit into SOA Organisational Result (OR) A1 (Policies and strategies on sustainable crop production intensification and diversification at national and regional levels); and into SOB OR B1 (The livestock sector effectively and efficiently contributes to food security, poverty alleviation and economic development) and B3 (Better management of natural resources, including animal genetic resources, in livestock production). Components 2 and 3, in addition to SOA, address SOF OR F5 (Countries have strengthened capacities to address emerging environmental challenges, such as climate change and bioenergy).

Furthermore, under UNDAF 2012-2015 for Mozambique, FAO has been assigned USD 48,8 million, mostly related to Outcome 1 "Vulnerable groups (with a particular focus on women) demand and ensure production and productivity in the primary sector in order to increase their own food security", which has been assigned USD 72.1 million under UNDAF . Under outcome 1 of the economic pillar of UNDAF, the UN aims at increasing agricultural productivity and production, decreasing post-harvest losses, sustainable management of small scale fisheries, and capacity development of farmers and farmers' associations by promoting agricultural intensification and diversification techniques with the overall objective of contributing to better food security of the poorest populations in Mozambique. The design of the proposed LDCF fits precisely within FAO's UNDAF-defined mandate in Mozambique, mainly in support to Outcome 1.

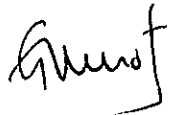
The FAO Representation in Mozambique is staffed with technical and operational staff and can mobilize complementary national and international technical expertise within the pool of projects it manages and provide in-country support for the execution of the proposed project. Project execution will also be supported by FAO's Department of Agriculture and Consumers Protection and the FAO-GEF Coordination Unit in FAO Headquarters.

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

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Marilia Telma Antonio Manjate	Director of Cooperation and UNFCCC and GEF national Focal Point	Ministry of the Coordination of Environmental Affairs (MICOA)	03/11/2013

**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 project identification and preparation.**

Agency Coordinator, Agency name	Signature	Date (MM/DD/YYYY)	Project Contact Person	Telephone	Email Address
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