

# **United Nations Development Programme**

# Country: Sao Tomé and Principe PROJECT DOCUMENT<sup>1</sup>

**Project Title:** "Enhancing capacities of rural communities to pursue climate resilient livelihood options in the Sao Tome and Principe districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL)"

#### **UNDAF Outcome(s):**

By 2016, local communities and government bodies at the district and national levels will adopt techniques and behaviours conducive to a sustainable environment, and to improving the prevention and management of risks and natural disasters.

#### **UNDP Strategic Plan Primary Outcomes**

Outcome 1

Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded.

Outcome 5

Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change.

# **UNDP Strategic Plan Secondary Outcomes**

Outcome 4

Faster progress is achieved in reducing gender inequality and promoting women's empowerment.

#### **Expected CP Outcome(s):**

By 2016, national and local institutions incorporate and adopt aspects of Climate Change and Disaster Risk Reduction into their planning instruments, and demonstrate behaviours and practices that support the preservation of environmental heritage.

# **Expected CPAP Output(s)**

- Government, private sector, communities and regional CSOs develop and implement participatory projects that increase environmental protections, resilience to climate change, and preservation of environmental heritage.
- The Government and local authorities adopt and implement a master plan for land use that protects the environment and facilitates rural development.
- Integration of environmental, disaster risk management, and climate change sustainable management policies into development strategies and national development plans and interventions.
- Local governments and communities are familiar with and efficiently use Disaster Risk Management and Climate Change Adaptation tools.
- Strengthened disaster response and risk management.

<sup>&</sup>lt;sup>1</sup> For UNDP supported GEF funded projects as this includes GEF-specific requirements

#### **Implementing Entity/Responsible Partners:**

The Ministry of Public Works, Infrastructure, Natural Resources and Environment The Ministry of Education

# **Brief Description (1/2 page)**

São Tomé and Príncipe (STP) is vulnerable to climate-related hazards such as storm-induced flash flooding in rivers and coastal areas. Despite abundant average rainfall, STP has also been experiencing longer episodes of drought, which constitutes a new constraint on food production, particularly in the northern regions. This situation contributes to increased vulnerability of farming communities.. Of particular concern are the vulnerable villages of São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL), where rural community livelihoods are most affected by increased climate variability. To date, relief and rehabilitation (reactive actions) have been the focus of disaster management practices in the CMPLCL districts. A sustainable solution to this worsening problem will require a multi-pronged solution including i) developing capacities of the key institutions of relevance to rural development and livelihoods; ii) developing key community-based decision making structures to enhance farming communities' livelihoods; iii) dissemination of climate resilient livelihoods farming methods in the most vulnerable communities; and iv) promotion of investments to boost communities' livelihoods against climate risks. Key barriers that need to be overcome include: a) limitations in developing capacities of the key institutions of relevance to rural community livelihoods; b) scarcity of relevant information for planning climate resilient agricultural activities; c) low institutional capacity and coordination both in the private and public sectors; d) high levels of poverty, weak financial capacity of farmers and poor access to credit.

In response, this LDCF financed project, implemented by the Ministry of Agriculture, Fisheries and Rural Development (MoAFRD), will: i) strengthen the capacity of the CATAP, CIAT, district governments and assemblies, district councils, CSOs and CBOs to support the enhancement of climate resilience of rural community livelihoods; ii) reduce the vulnerability of rural livelihoods to climate risks through climate risks management infrastructures and mechanisms; and iii) design and transfer adaptation strategies to strengthen communities' climate resilience in the 30 most vulnerable villages of the 6 districts of CMPLCL of São Tomé and Principe. The project is expected to be completed by 2018.

Programme Period:	2014-2017
Atlas Business Unit:	STP10
Atlas Award #:	0083410
Atlas Output Project #:	00091898
PIMS # (UNDP-GEF):	4645
Start date:	Upon Signature
End Date:	
Management Arrangements:	NIM
LPAC date:	

Total resources required (total project funds) [A + B]	\$ 20,276,281
[A] Total allocated resources in this award	\$ 4,350,000
UNDP (Trac)	\$ 350,000
GEF Grant	\$ 4,000,000
[B] Other (partner managed resources and in-kind):	
	\$ 7,576,28 <i>1</i>
kind):	\$ 7,576,281 \$ 350,000

Agreed by (Government):
Day/Month/Year
Agreed by (Executing Entity/Implementing Partner):
Day/Month/Year

# TABLE OF CONTENTS

Table of Contents	4
List of Annexes	5
List of Acronyms	6
1. Situation analysis	9
Climate change induced problem      Long-term solution and barriers to achieving the solution	
STRATEGY	13
2.1. Project rationale and policy conformity	16 19
2.3. Design principles and strategic considerations 2.3.3 Linkages with Ongoing national initiatives (co-financing the LDCF project) 2.3.4. National and local benefits 2.3.5. Brief Introduction to Project Pilot Sites	21 24
2.3.6. UNDP Comparative advantage	
2.10 Compliance with UNDP Safeguards Policies.  3. Project Results Framework	59 61
5. Management Arrangements	73
6. Monitoring Framework and Evaluation	77
7. Legal Context	82

# LIST OF ANNEXES

Annex 1. Risk Analysis

Annex 2. Stakeholder Consultations

Annex 3. Inception Report

Annex 4. PPG Field Consultation Report

Annex 5. Co-Financing Letters

Annex 6. UNDP Environmental and Social Screening (Applied in May 2013)

Annex 7. Terms of Reference For Key Project Groups, Staff and Specialists

 $Annex\ 8.\ Letter\ of\ Agreement\ between\ Sao\ Tome\ and\ Principe\ Government\ and\ UNDP\ Country\ Office\ in\ Sao\ Tome\ and\ Principe$ 

Annex 9. References

# LIST OF ACRONYMS

AAP	Africa Adaptation Programme
ADAPPA	Association for Agro-pastoral Development and Environmental Protection
AFD	French Development Agency
AfDB	Africa Development Bank
AGRHYMET	Regional Centre for Training and Application of Agrometeorology and Operational Hydrology
ALM	Adaptation Learning Mechanism
AMAT	Adaptation Monitoring and Assessment Tool
APR	Annual Project Review
CADR	Centre for the Support of Rural Development
CART	Centre for Agriculture Resources Transformation
CATAP	Technical Training Centre for Agriculture and Livestock
CBA	Questionnaire based appraisal
CC	Climate Change
CCA	Climate Change Adaptation
CC-DAVIP	Districts and villages CC Platforms
CC-DC	CC District Committee
CC-FFS's	Climate Change Farmers Field Schools
CC FOOD-COOPs	Climate Change food Cooperatives
CCTAM	Climate Change Training and Adaptation Modules
CC-VAAP	Climate Change Annual Adaptation Plans
CES	Centre for Environmental Surveillance
CIAT	Centre for Agronomic and Technological Investigation
СВО	Community Based Organisation
CLUSA	Cooperative League of United States of America
CMPLCL	Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata
CONPREC	Council for the Prevention and Response to Disasters
CPAP	Country Programme Action Plan
CPLP	Community of Portuguese Language Countries
CRM	Climate Risk Management
CSO	Civil Society Organisation
CTA	Chief Technical Adviser
CTP	Project Technical Committee
DGA	Directorate General of Environment
DGE	Directorate General of Environment
DGRNE	Directorate General of Natural Resources and Energy
DLUM	Department of Land Use and Management
DNRE	Department of Natural Resources and Energy
DRR	Disaster Risk Reduction
EA	Environmental Assessment
EC	European Community
ERC	Evaluation Resource Centre
EU	European Union
EWS	Early Warning System
FAO	Food and Agriculture Organization
FENAPA-STP	National Federation of Small Farmers-São Tomé and Príncipe
FONG	Federation of NGOs

FSP	Full-Size Project
GCCA	Global Climate Change Alliance
GDP	Gross Domestic Product
GEF	Global Environment Facility
GoSTP	Government of São Tomé and Príncipe
HACT	Harmonized Approach to Cash Transfer
HDI	Human Development Index
IAM	Integrated Adaptation Measures
IFAD	International Fund for Agricultural Development
IMAP	Maritime and Port Institute
INAE	National Institute of Road Works
INC	Initial National Communication
INM	National Institute of Meteorology
IPCC	Intergovernmental Panel on Climate Change
IW	Inception Workshop
LDC	Least Developed Country
LDCF	Least Developed Countries Fund
LDRMC	Local Disaster Risk Management Committees
LDSP	Livestock Development Support Project
LMMs	Leading and Management Members
LPAC	Local Project Appraisal Committee
M&E	Monitoring and Evaluation
MAPDR	Ministry of Agriculture, Fisheries and Rural Development
MARAPA	Sea, Environment and Artisanal Fisheries
MDG	Millennium Development Goal
MFIs	Micro-Finance Institutions
MoAFRD	Ministry of Agriculture, Fisheries and Rural Development
MoPD	Ministry of Planning and Development
NAPA	National Adaptation Programme of Action
NCC	National Climate Committee
NGO's	Non-Governmental Organisations
NIM	National Institute of Meteorology
NIM	National Implementation
NPC	National Project Coordinator
PAC	Project Appraisal Committee
PADE	Livestock Development Project
PANAPAF	National Smallholder Agriculture Support Programme
PAPAFPA	Participatory Smallholder Agriculture and Artisanal Fisheries Development Programme
PIF	Project Identification Form
PIMS	GEF Project Management Information System
PIR	Project Implementation Report
PNUD	United Nations Development Programme
PPADPP	Draft Agricultural Privatization and Development of Smallholder Property
PPG	Project Preparation Grant
PPR	Project Progress Report
PRIASA	Infrastructure Rehabilitation for Food Security Support Project
PRODOC	Project Document
PRSP	Poverty Reduction Strategy Paper
PVW	Project Validation Workshop
QPR	Quarterly Project Report
RBM	Results Based Management

RTA	Regional Technical Adviser
SIDS	Small Islands Developing States
SLFWM	Sustainable Land, Forest and Water Management
SMS	Short Message Service
SOP	Standard Operating Procedures
STP	São Tomé and Príncipe
UNCDF	United Nations Capital Development Fund
UNDP	United Nations Development Programme
UNDP CO	United Nations Development Programme Country Office
UNICEF	United Nations International Children's Emergency Fund
UNFCCC	United Nations Framework Convention on Climate Change
VCA	Vulnerability Capacity Assessment
VRA	Perception Based Survey
WB	World Bank
ZATONA ADIL	São Tomean Organization for the Restructuring of the Rural Community

#### 1. SITUATION ANALYSIS



Figure 1. Map - Location of São Tomé and Príncipe

- 1. Like many other small and island countries in the developing world, São Tomé and Principe is constrainted by small internal markets, dependence on one or two exports (cacao in this case), high rates of imports of goods that cannot be produced internally, and vulnerability to external factors including climatic risks. This situation contributes to increased vulnerability of farming communities that rely upon the erratic international market of cocoa as their main source of revenue, while other consumer goods have high prices they cannot afford.
- 2. In São Tomé and Principe agriculture remains the main economic activity in the country. Cocoa production is the primary source of incomes for rural families, generating 70% of rural employment and about 80% of export revenues². Despite the economic and social importance of cocoa, STP agriculture is characterized by a very low productivity mainly due to limitations in good farming practices, the old age of the cocoa plants, the poor state of agricultural support infrastructures (irrigation schemes, rural markets, rural roads,), the absence of efficient advisory support, and the failure of the agricultural input and output markets (lack of strategies to supply the farmers with good quality inputs, and to channel the agricultural product from the farms to the market as well as for their commercialization). This weak agricultural productivity baseline is made worse by the stringent climatic conditions under which the farmers are operating.

#### 1.1. Climate change induced problem

3. The NAPA of São Tomé and Principe has undeniably shown that in recent decades there has been significant variability from the normal climatic pattern, with rainfall decreasing at rate of 1.7 mm/year between 1951 and 2010. This reduction in rainfall is expected to disturb the hydrological pattern by altering the rainfall/runoff ratio. Due to reduced recharge, groundwater supply and quality will be reduced by the reduction of rainwater infiltration, thus reducing the groundwater table and the dilution effect to salt water intrusion. On the other hand, recent data show<sup>3</sup> that São Tomé and

 $<sup>{}^2\</sup>underline{\text{UNDP-ALM - UNDP's Adaptation Learning Mechanism.}} \underline{\text{http://www.undp-alm.org/level-of-intervention/district}}$ 

<sup>&</sup>lt;sup>3</sup>http://country-profiles.geog.ox.ac.uk/

Príncipe annual temperatures have risen by approximately 0.4°C between 1960 and 2006, and are expected to increase by between 0.8 and 2.4°C by 2060. Indeed, Sao Tomé & Principe has recorded an increase of average temperatures of 0.1°C per decade from 1960s to now with a concurrent significant decrease in rainfall (5.2% per decade) from March to May as well as from October to December. This fact, combined with the continuous increase in the length of the dry season "gravana" which now lasts 6 months (from April to September) in clear contrast with the historic 3 month pattern (June to August), is giving rise to serious drought episodes. It was reported indeed that, despite abundant average rainfall, STP has been experiencing longer and longer periods of drought, which constitutes a new constraint to food production, particularly in the northern part of São Tomé Island.

- 4. Projected climate variability and change will have an impact on the primary sectors of the economy (agriculture, fisheries and forestry). This is likely to: i) aggravate food insecurity; ii) increase the level of poverty; and iii) increase the dependency on food imports and increase the chronic deficit of the balance of trade. Climate change impacts and their knock-off effects are likely to impact the livelihoods of São Tomé and Principe populations by, in particular, reducing access to basic services such as food and water and consequently affecting human health. This will contribute to further reversing any achievements to date in terms of MDGs.
- 5. Therefore, climate change and variability pose high risks for the agriculture production and undermines the possibilities for increasing productivity and income, as well as the food security of the smallholders who form the overwhelming majority of STP's rural poor and whose livelihoods depend heavily upon natural resources and on such rudimentary and undiversified agriculture. By contrast, it is widely accepted in São Tomé and Principe that the institutional and technical capacity within the local and decentralized institutions, CSOs and CBOs are low and hinders their capacity to be the driving force of the economic growth and their ability to provide the required support for fighting against poverty and food insecurity in STP. Indeed, the required capacities for the development and implementation of policies, strategies and regulations to strengthen communities' livelihoods do not exist at the local level. Furthermore, the structural adjustment policies and the withdrawal of the state from the rural sector have severely affected the agricultural extension and research capacities.

# 1.2. Long-term solution and barriers to achieving the solution

#### **Long-term solution**

- 6. The long term solution to addressing the underlying causes of climate change vulnerability in the Districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL) is for decision makers at all levels and rural communities to understand the impacts of current and anticipated climate risks to rural livelihoods, including farming activities. They must also have the capacity to identify, develop, plan and implement adaptation measures that could efficiently reduce the vulnerability of rural communities in particular, in the most vulnerable areas of the country the São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL).
- 7. The District governments and assemblies as well as the other local authorities should have the capacity to identify, develop, plan and implement measures that could efficiently reduce the

<sup>&</sup>lt;sup>4</sup>National Action Plan for Adaptation to Climate Changes (NAPA). República Democrática de S. Tomé e Príncipe. Ministério dos Recursos Naturais e Ambiente. Dezembro 2006. 77pp

vulnerability of rural communities and support them to face any negative impacts of climate change. Currently, in the CMPLCL districts there is a low technical capacity of farmers' communities to identify, develop and implement strategies for long-term adaptation to climate change. There should be capacity both at the national and local levels to translate communities' adaptation needs into appropriate climate resilient agro-sylvo-pastoral strategies and also to provide communities with required advisory support to implement these strategies to help farming communities to cope with the climate risks that can affect the sustainable improvement of their livelihood options. Rural communities, including households, relying on subsistence level food production should have the capacity to identify, develop, plan and implement measures that could efficiently reduce their vulnerability. These Community based decision making structures should be the basis for a full institutional development, providing quality services to community planning, not only related to climate change matters, across all GoSTP institutions and Ministry of Agriculture, Fisheries and Rural Development (MAPDR) entities, especially in the CMPLCL districts of São Tomé. In the preferred solution this developmental step should be coupled with a framework that can make available climate resilient agriculture advisory support that can in turn engage farmers in discussions of current climate hazards, risks, and vulnerabilities including on how best to present and package information for decision support, and develop appropriate advisories given current technology, forecasts and information.

- 8. Also, the key national institutions supporting rural development in STP should be able to identify, design, develop and support the implementation of appropriate policies, strategies, and technologies that will help communities to cope with the climate risks. The research and extension services in São Tomé and Principe, which once were only directed to export crops, especially cocoa, are now required to address other food crops as well as farming systems, including research and development in the area of food and nutrition security. Therefore, there is the need for increasing the capacity of relevant public and private institutions and rural households to understand and plan for climate-related impacts, including available risk management options. It is of utmost necessity for the country to reactivate agronomic experimental research (Agricultural research institute CIAT), training and capacity building (Center for Agro-Pastoral Development CATAP), and extension support services (Center for the Support of Rural Development CADR) structures and provide service-oriented support to promote resilient production, and processing techniques and technologies.
- 9. Furthermore, vulnerable communities should also be aware of the available climate resilient strategies, technologies and tools as well as have the technical and financial capacity and required incentives to use alternative approaches that can strengthen their resilience to climate risks. At present, farmers in the CMPLCL districts are not aware of efficient production techniques, nor have access to appropriate agricultural extension services through the extension technicians of the rural MAPDR delegations that could enable them to address current climate variability and later climate change. Compounded by baseline development challenges such as lack of rural credit for enhancing output as well as for stimulating commercialization, there is a vicious cycle in which vulnerability of the poor rural and farming communities is increasingly aggravated. This means that it is very difficult to engage rural farmers in climate change adaptation activities unless the supporting infrastructures such as irrigation schemes, organized rural markets, rural roads, rural credit facilities, good extension services, dissemination of crop cultivars, and incentive policies and strategies for investing additional energy and financial resources are also put in place.

#### **Key Barriers to overcome**

10. The planning and consultation process during the project preparation phase identified four critical barriers that need to be addressed in order to the achieve the preferred solution. These include:

# **Barrier #1.** Limitations in climate change handling capacities of the key institutions of relevance to rural community livelihoods

11. The capacities of the main national institutions supporting rural development, notably CIAT, CATAP and CADR's need to be strengthened in order to reduce risks associated with climate-induced socioeconomic and environmental losses and enhance climate resilience of rural community livelihoods in CMPLCL Districts. Indeed, the CATAP (Technical Training Centre for Agriculture and Livestock) is responsible for the training of rural extension workers. The CADR (Center for the Support of Rural Development (Centro de Apoio ao Desenvolvimento Rural) is responsible for the rural extension assistance to vulnerable communities. CIAT has the mandate to bring to bear its scientific expertise to assist the farming communities with introduction of new farming techniques and technologies. However, the lack of the required technical and functional capacities within these institutions to identify climate risks, adequate solutions to these risks and integrate them in the research and rural extension activities of the agricultural sector and the rural development strategies and plans is a significant barrier to any sustainable solution. In addition, to revive the rural economy, in the particular case of agriculture (agricultural, livestock and forestry), the qualifications of rural extension for human resources and the increase of farmers' knowledge in climate change adaptation technologies is a key factor for a successful and climate resilient agricultural and rural development. Currently the major constraint is the absence of climate change modules in national program of continuous training of technical agricultural and livestock staff. Finally, cooperation in knowledge exchange, training, etc. with neighboring countries in the sub-region of Central Africa who share similar challenges as with the CMPLCL district is weak or non-existent.

# **Barrier #2.** Weak access to relevant information on climate risks and their impacts on the key economic sectors and the vulnerability communities for planning climate resilient agricultural activities

12. In the majority of GoSTP institutions, climate forecasts, where they are available, are not used to efficiently plan ahead for expected cropping seasons, or to warn of expected heavy rains or dry spells that will affect farm management decisons such as when to plant and what crop to plant. Although an initiative to strengthen the climate information and early warning system is currently in place, the current situation is such that rainfall, soil moisture conditions, temperature and evaporation, wind, etc, are not being monitored effectively. In part, this is due to the absence of a dense enough weather station network that lends itself to credible information being generated and the local difficulties os accessing and utilizing relevant satellite imagery. This information, moreover, is not yet used with suitable crop and economic models to explore effective and benefit-maximising farm management decisons. Furthermore, this information is not combined with other relevant information for farm management decisions, including current and future fertiliser and seed prices, or the current and expected market price of crops (both domestically and internationally). It is expected that the ongoing climate information and EWS project can effectively assist the vulnearble farming community with agromet advisory service to support agricultural extension officers to adopt the best farm-level decision-making options to overcome the deleterious impact of both drought and torrential rain extreme events.

#### Barrier #3. Weak technical and financial capacity of farmers and poor access to credit

13. Wide-spread rural poverty limits the adaptive capacity and capability of individuals, farmers and villagers to undertake required investments that will help them to respond better to natural disasters, flooding, and droughts. Poor farmers in STP have limited opportunities to improve yields, increase income, and/or to develop alternative, appropriate farming systems with greater in-built resilience to climate hazards. Presently agriculture in the rural areas of STP are characterized by low levels of productivity which leads to low economic income which, in turn triggers a low capacity to invest, which leads to low levels of production, and so the cycle keep repeating itself. Absence of rural credit facilities for enhancing output as well as for stimulating commercialization, is a significant challenge. In addition, there are other severe limitations in supporting infrastructures such as irrigation schemes, organized rural markets, rural roads; extension services, etc. The lack of access to agricultural production inputs and technology limits farmers' abilities to increase crop productivity. The absence of finance mechanisms in the rural areas and especially the resources available for agricultural producers constrains options for building resilience to current and future climate related risks. The potential productivity of current farming practices makes capitalization very risky, particularly the use of machinery and advance technology. Rural areas of São Tomé and Principe are poor, and even relatively low-cost new approaches require an investment which is financially not viable to most farmers. It is then a vicious circle in which these associated financial risks preclude many rural farming communities from being able or willing to attempt new practices. It also needs to be borne in mind that all new measures or practices need to be adapted to local conditions and that for each new measure farmers require new skills. To change this dynamic requires the development of more viable and sustainable farming systems, supporting services (such as extension and research) and a national strategy for educating and training farmers and extension workers alike. These programs also need to be accompanied by the building of market structures that facilitate both local consumption as well as the integration of a national market and associated infrastructure.

# **STRATEGY**

# 2.1. Project rationale and policy conformity

- 14. STP is classified as a Least Developed Country (LDC) and a Small Island Developing State (SIDS). It also is a signatory to the Kyoto Protocol, thus pledging political and practical commitment in the direction of sustainable development, while creating conditions to benefit from opportunities in this framework. The country ratified the UNFCCC on September 1999 and submitted its NAPA to the UNFCCC Secretariat in December 2006.
- 15. The Government of São Tomé and Principe (GoSTP) has requested the Least Developed Countries Fund (LDCF) to finance São Tomé and Principe's NAPA priority interventions in accordance with the requirements outlined in the UNFCCC COP 7, which listed 22 urgent and immediate adaptation needs. From this list of priorities, this project will implement priorities 6, 8 and 10 as outlined below (Table 1):

NAPA Priority Rank	Activity			
6	Reinforcement and diversification of agricultural production			
8	Sustainable management of forest resources			
10	Construction of infrastructure for protection of vulnerable communities			

- 16. At the national level the project is designed to strengthen and support the further roll-out of GoSTP and donor activities under the Second Poverty Reduction Strategy Paper (PRSP II) 2012-20165. This project is well aligned with the following three pillars of the National Poverty Reduction Strategy (NPRS): (i) "Reform of public institutions, capacity-building, and promotion of a good governance policy"; (ii) "Accelerated Redistributive Growth"; and (iii) "Creation of opportunities to increase and diversify the incomes of the poor". Indeed, this project aims to increase STP communities' resilience to climate change by i) strengthening central and local institutional, CSO and CBO capacity to support community resilience to climate change and variability, ii) developing and disseminating improved climate risk information and adaptation knowledge; and (iii) by protecting rural livelihoods from the impacts of climate change and reducing poverty through economic diversification. It's worth mentioning that this proposal was prepared with the full involvement of relevant stakeholders including NGOs and CBOs. Furthermore, this project will be nationally executed to ensure that the country ownership and accountability prevails in line with Aid Effectiveness principle.
- 17. The project is aligned with LDCF goals since it is aimed at funding the additional costs associated with addressing the most immediate and urgent adaptation needs and gaps in STP through ensuring climate-resilience of vulnerable communities and Services and the development policies of vulnerable sectors. This fits with the strategic objective of the LDCF which is to promote climate change resilient development in LDCs and secure attainment of MDGs, in line with guidance for the LDCF (GEF/C.28/18, May 12, 2006).
- 18. This project is fully in line with LDCF/SCCF focal area objective 1, "Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level," and objective 2, "Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level." It is specifically aligned with outcomes linked to these objectives, including the outcome 1.3, "targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability" and the Output 1.3.1: "Targeted individual and community livelihood strategies strengthened in relation to climate change impacts, including variability." It is also aligned with Outcome 2.2, "Strengthened adaptive capacity to reduce risks to climate-induced economic losses," including Output 2.2.1, "Adaptive capacity of national and regional institutions and networks strengthened to rapidly respond to extreme weather events," and Output 2.2.2, "Targeted population groups covered by adequate risk reduction measures."
- 19. The project conforms to the LDCF's eligibility criteria, namely: i) undertaking a country driven and participatory approach; ii) implementing the NAPA priorities; iii) supporting a "learning-by-doing" approach; iv) undertaking a multidisciplinary approach; v) promoting gender equality; and vi) undertaking a complementary approach, as described below.

<sup>&</sup>lt;sup>5</sup>Republica Democrática de São Tomé. Segunda Estratégia Nacional de Redução da Pobreza. 2012-2016. Versão Final.Março 2012.134p

# i) Country driven-ness and undertaking a participatory approach:

20. Activities to be undertaken by the project were selected through numerous stakeholder consultations of the PPG (see Section 1.6 Stakeholder baseline analysis for details) and thus are in line with country priorities. See Section 2.1.2 for information on country driven-ness. Additionally the project is in line with GEF/LDCF (2006), this project was identified and conceived through the participatory NAPA process in São Tomé and Principe. Moreover, it was designed to be consistent with, and supportive of, national development strategies, as expressed in the 1st and 2nd Poverty Reduction Strategy Paper for STP and related documents.

# ii) Supporting a "learning-by-doing" approach:

21. The project will use the applied interventions to demonstrate how systematic training and capacity building of extension workers and the farmers alike coupled with development of small scale adaptive measures to lessen drought and extreme rainfall impacts can allow the rural farming communities to better prepare for and adapt to climate change events. Experimental design principles will be used in impact evaluation methods adopted by the project. In addition the project will use synthesized lessons learned for replication elsewhere with the ultimate goal of improving agriculture performance in rural areas. It will also generate evidence on the cost effectiveness of building institutional adaptive capacity in order to develop a case for policy and budgetary adjustment to ensure greater sustainability. The project is designed to complement other ongoing and planned projects and programmes without duplicating them and to build on the existing systems in place.

#### iii) Gender equality:

22. Building on the vulnerability assessment completed during the project preparation phase, the project strives to address gender based vulnerability through the following actions: i) a detailed gender-based vulnerability analysis will be done during the project inception phase in order to identify the key actions to support and promote gender equality; ii) the findings of this analysis will be integrated in the development and implementation of the Climate Change Annual Adaptation Plans (CC-VAAP) of the villages and districts of CMPLCL by translating these findings in concrete actions aiming to address the gender based vulnerabilities. These actions will include (but will not be limited to) dispositions to guarantee: i) full and easy access of vulnerable women to the small-scale community managed infrastructures to fight climate induced flooding, erosion and droughts and the community based safety nets mechanisms for managing risks associated with climate variability the project will support; ii) a gender balanced participation in the Village Centres for Agriculture Resources Transformation and access to micro-credit finance; iii) development and support for the adoption of specific adaptation strategies to address women's vulnerabilities. These actions will be enhance the technical and financial empowerment of women by supporting the development of women's associations and cooperatives as well as by ensuring a gender balanced participation in trainings on agro-sylvo-pastoral adaptation technologies, on how to develop financial credit request, on business management, and on identification and assessment of climate risks and vulnerability. This will allow women to better participate in decision making processes within districts and villages' platforms, district governments' assemblies and community management committees and make sure that the gender based vulnerabilities and appropriate solutions are integrated in the development initiatives intervening in particular in the regions of CMPLCL and in general in Sao Tome and Principe.

# vi. Complementary approach:

23. In order to build upon existing plans and avoid the duplication of efforts, the project will be working in conjunction with relevant ongoing projects in São Tomé and Principe (see Section 2.3 for details).

#### Overall GEF Conformity

- 24. The Project has been designed to meet overall GEF requirements in terms of design and implementation. For example:
  - <u>Sustainability:</u> the project has been designed to have a sustainable impact, at village and national levels. See section on sustainability below for more details;
  - <u>Monitoring and evaluation</u>: the project is accompanied by an effective and resourced M&E framework, which will enable ongoing adaptive management of the project, ensuring that lessons are learnt, management decisions are taken based on relevant and up-to-date information, and regular progress reports are available for concerned parties;
  - Replicability: The pilot approach to establishing CC Platforms (CC-DAVIP) in most the vulnerable community villages in all 6 districts (CMPLCL) will generate approaches, tools and methods that can be addressed elsewhere in STP and finally lead to the establishment of a fully functional national approach. See section on replicability below for more details;
  - <u>Stakeholder involvement:</u> The project was designed in a participatory manner to ensure significant stakeholder input, and will be implemented in a way that ensures their full participation in all implementation aspects including monitoring and evaluation (see section 1.4 for more details).

# 2.2. Country ownership: country eligibility and country driven-ness

#### Linkages with CP/GCF/RCF, CCA and UNDAF

The project is in line with three of the four priority areas of cooperation between the UN system and the Government within the UNDAF (2011 – 2015), which are: i) Sustainable economic growth and the fight against poverty; ii) Democratic governance and social cohesion, and iii) Environment and Sustainable Development. Activities and results that will be developed under this project are also fully consistent with UNDAF outcome 1: "By 2014, revenues, jobs, decent work and security food of the poor and vulnerable people are improved;" and UNDAF outcome 4: "By 2014, ecosystem integrity is preserved and ecoservices they provide are valued for the benefit of the population and vulnerability to natural and climate hazards is significantly reduced in a sustainable development perspective." In addition, this programme is in line with the Country Cooperation Framework, as well as its action plan (CPAP) and focuses on three priority areas: (i) poverty reduction strategy, especially in the field of the result area A1: promoting inclusive growth, gender equality and the MDGs; (ii) Democratic governance, particularly the result areas B1: encourage inclusive participation, and B2: promoting governance institutions that are more responsive and accountable, and (iii) environment and sustainable development, through its result areas D1: integration of environmental and energy concerns in the development and implementation of policies, strategies and programmes, and D3: adapt to climate change and take systematic account of the management of risks associated with climate change and extreme weather hazards into national development strategies. In addition, the project is in line with the UNDP Country Programme (CP) and aims at strengthening national capacity to develop and coordinate a multi-sectoral response to the impacts of climate change within São Tomé and Principe. Furthermore, the project is in line with Outcome 1 (output 1.4), Outcome 4 (output 4.5) and Outcome 5 (output 5.2) of the new UNDP Strategic Plan (2014-2017). These outcomes and outputs are the following: i) Outcome 1: "Growth and development are

inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded," and its Output 1.4, "Scaled up action on climate change adaptation and mitigation across sectors which is funded and implemented; ii) Outcome 4: "Faster progress is achieved in reducing gender inequality and promoting women's empowerment" and its Output 4.5, "Measures in place to increase women's access to environmental goods and services (including climate finance);" iii)Outcome 5: "Countries are able to reduce the likelihood of conflict and lower the risk of natural disasters, including from climate change," and its Output 5.2: "Effective institutional, legislative and policy frameworks in place to enhance the implementation of disaster and climate risk management measures at national and sub-national levels."

25. By attempting to develop the capacities of communities to adapt to climate changes and variability, this LDCF financed project will also help to reduce the impact of likely exogenous shocks that otherwise will undermine the achievement of NPRS pillars 2, 3 and 4. Indeed, pillars 2, 3 and 4 of NPRS depend highly, among other things, on: (i) the re-energizing of the STP productive sectors, particularly the primary sector, expected to be the main driver of the national production in the NPRS; (ii) production diversification; (iii) strengthening of the capacity of communities with a specific focus on women and youth; and (iv) resilient economic growth. Furthermore, this project will be well coordinated with pillar 1 of the PRSP, "Reform of public institutions, capacity-building, and promotion of a good governance policy," which targets the acceleration of the decentralization process, the strengthening of the local administration and the involvement of CSOs in the decision making process. Indeed, this project is also aims to build the capacity of national and local institutions (mainly District assemblies and governments), as well as CBOs and other CSOs, through policy and institutional frameworks to support community based adaptation initiatives.

# ${\it Linkages with National/International\ Institutional\ Legal\ and\ Policy\ Framework}$

- 26. São Tomé and Principe has acknowledged that future economic growth continues to rely on the sustainable use of natural resources and on the capacity to reduce the risk of disaster by enhancing the resilience capacity of communities and economic agents to adapt to climate change challenges. The Government of STP has drafted and implemented a wide range of policies that directly or indirectly relate to climate change and community adaptation to climate change. The environmental policy and environmental assessment (EA) legislation and procedures of São Tomé and Principe relevant to the project are outlined below:
  - Decree-Law No. 10/2012. The law adopts a new Statute for the National Meteorological Institute, considering that this institution contains elements for the organization of employees of the Ministry of Public Works and Natural Resources. The activity of the National Institute of Meteorology, works to meet the main objectives, namely the protection of lives, support national economic activities in the fields of agriculture, forestry, livestock, fisheries, transport, communications industries, environmental protection, participation in water resource management, and development of international relations in the field of meteorology, intensifying the relationship with other countries.
  - Decree-Law No. 12/2012. The law establishes the Ministry of Public Works and Natural Resources, with the mission to design, implementation, coordination and evaluation of government policies in the areas of public works and natural resources. For the sector of water and sanitation the main responsible are the Directorate General for Natural Resources and Energy and the Directorate General for the Environment.

- Law No. 10/1999. The law that defines the basis of environmental policy for sustainable
  development of the Republic of São Tomé and Principe and sets out the principles that guide it,
  under the Constitution and the Declaration of Rio de Janeiro on Environment and Development.
- **Decree No. 37/1999.** This decree re-evaluates the regulation on the process of environmental impact. The precautionary principle adopted at various international conventions, particularly the Convention signed in Rio de Janeiro in 1992, states that when the potential risk of an enterprise is at the outset alarming, the State should ensure that its implementation is not carried out at the expense of the quality of life of citizens, communities and the environment. The Law of the Environment establishes the environmental licensing process based on the assessment of the impact on the environment by referring to its regulations to specific regulation.
- **Decree No. 11/99.** The law aims to conserve ecosystems, and the flora and fauna existing in them, to safeguard biological diversity as a national and human heritage. It also promotes their sustainable social and economic use through the establishment of lists of species to be conserved and graded areas of the country aimed to conserve their habitats and biological diversity.
- Decree No. 5/2001. Forest Act: rearrange the forest administration in the country to grant it
  control mechanisms and supervision of the production, extraction, transportation and
  consumption of wood for various purposes proceedings; prevent the devastating effects of using
  unsustainable harvested forest resources and aim to reduce the exaggeration seen in the process of
  exploration and exploitation of wood in S. Tomé and Príncipe, in accordance with Article 11
  which provides resources. Law of Decree No. 77/93.
- Decree No. 6/2006. Law of Natural Park of Ôbo in São Tomé. The protection of the environment in São Tomé and Príncipe is an indispensable harmonious and integrated factor for the development of the country; The forest areas of the island of São Tomé, around the Pico de São Tomé, are largely representative of the flora and fauna characteristics of tropical forest ecosystem, where it hosts a number of endemic species, rare and endangered both nationally and internationally. This law guarantees the exceptional nature of the interaction of people with the environment, the conservation of ecosystems represented, economic development and social progress, which fully justifies the creation of the Ôbo Natural Park of São Tomé.
- Decree No. 7/2006. Law of Natural Park of Ôbo in Príncipe. The protection of the environment in São Tomé and Príncipe is an indispensable harmonious and integrated factor for the development of the country and that is why it was approved the Law of Conservation of Fauna, Flora and Protected Areas, which provides the assignment of different categories in the areas of conservation interest whose classification will be justified. The area designated for conservation on the island of Príncipe clearly constitute a set that has a high biological diversity, in terms of both the fauna and the flora of outstanding cultural, aesthetic and scientific value to the country.
- Decree No. 3/91. Law on property and land ownership. Establishes the system of land ownership, identifying the land of public and private domain of the State and establishing arrangements for the allocation and use of land. In light of this law, the lands of the public domain of the State are those corresponding to the riverbed and around maritime waters and the islets, those occupied by roads, public roads, ports and airports. However, the private domain of the State are those with public buildings, state farms that have been the subject of nationalization, vacant or unoccupied land and all others whose owners are not private entities. This law appears at the base of the Draft Agricultural Privatization and Development of Smallholder Property-PPADPP, commonly known as the land distribution project whose purpose was to legally define and standardize the process

that for the first time involved a large mass of land and employed migrants in the context of land reform.

- **Decree No. 51/91.** Decree-law establishing the general principles and criteria for land distribution. This law defines the terms of use and lays down the general principles and criteria for the distribution of land that comprise the private domain of the State and for agricultural uses. In practice, this decree is enacted to clarify some aspects of Law No. 3/91.
- Convention on fighting desertification. Published in the Official Gazette No 17/1998 on 30
  May. Adherence to this Convention is intended primarily for prevention, taking into account that
  desertification is an issue that does not directly affect land nationwide. However, the phenomenon
  of indiscriminate logging has begun to endanger some species and some northern areas of the
  country.
- Framework Convention on Climate Change. Rio de Janeiro, 1992. Published in the Official
  Gazette No 17/1998 on 30 May. This Convention aims to control the level of greenhouse gas
  emissions to the atmosphere so as to prevent severe climate change impacts which endanger
  sustainable economic development or may undermine the future of humanity.

#### 2.2.1 Stakeholder baseline analysis

- 27. Stakeholder consultation has been a key feature in the design of this LDCF financed project. Key stakeholders have been involved in identifying and prioritizing the proposed intervention activities during a lengthy project preparation (PPG) phase. Details of the stakeholder engagement are provided in Section 2.9 and Annex 2. In order to foster ownership of the project, this consultation was guided by a comprehensive and extensive participatory process involving all stakeholders, including local communities, a multidisciplinary approach (professionals from different sectors participated); and a complementary approach, building upon existing plans and programmes, including national action plans and national sectoral policies. Primary and secondary stakeholders engaged during the consultation process and their roles in the project is shown in Annex 2 (Table 8).
- 28. During the consultation process from October 2013 to May 2014, over 100 professionals were engaged at national, district and community level. The stakeholder consultation process was conducted through workshops, some of which took place during the inception phase of the project design (between 21 and 29 November 2013) and another round of consultations during the design validation period (held between 25 April and 2 May 2014). Furthermore, a series of bilateral meetings with GoSTP and international institutions, site visits and interviews of community members and representative of NGO's and CBO's also took place.
- i) Stakeholders Consultation Workshops/Meetings conducted:
  - Technical Meeting at UNDP CO with main stakeholders of the project including the Implementing Partner and potential responsible partners.
  - Inception Workshop (IW) Information and consultation session, Project Validation Workshop (PVW).
  - Technical Meeting at UNDP CO with representatives of main banks in São Tomé and Principe.
  - Technical Meeting at the Centre for Support of Rural Development of the Ministry of Fisheries and Development (CADR).
  - Technical Meeting at the Centre for Agronomic and Technological Investigation (CIAT).

#### ii) Community Consultations and site visits (CC-SV):

- Field visit to Technical Training Center for Agriculture and Livestock (CATAP)
- Field visit to SATOCAO, Lda.

#### iii) Bilateral consultation throughout the PPG process

- São Tomé and Principe Government Institutions
- Non-governmental organizations
- International agencies and donor community in São Tomé and Principe
- Private sector
- 29. Interestingly, the local banks have expressed their willingness partner with project stakeholders to launch a call for proposals for MFIs to offer at least three micro-finance financial products. However, they have also expressed serious reservations about the method of ensuring individual funding to communities that do not own assets that can be used as collateral. In addition, the bankers have also raised the issue of interest rates to be applied, since current rates are extremely high (24% or greater). These issues are expected to be taken into account during project establishment and implementation.

#### 2.3. Design principles and strategic considerations

- 2.3.1 Coordination with Ongoing relevant national and regional initiatives (not considered as co-financing to the LDCF project)
- 30. To ensure that the LDCF funds are used in a strategic manner, the project aims to build upon existing livelihoods-related activities implemented by both the government and NGOs. This includes coordinating with community-based livelihoods and rural development efforts. An assessment conducted during the PPG phase has identified relevant GEF and non-GEF interventions to the LDCF-funded project. Therefore the project builds on an existing development baseline, which though not contributing any co-financing will provide information and experiences in relation to the use of climate information and planning/development of climate change adaptation measures. Of particular importance are the following baseline projects upon which this LDCF-funded project will build:

# The IFAD "Participatory Smallholder Agriculture and Artisanal Fisheries Development Programme (PAPAFPA)".

31. This programme coordinated by the DGA started in 2002 with the intention of strengthening production channels and incomes of farming communities in targeted communities. More recently support has taken the form of a US\$16.6 million Participatory Smallholder Agriculture and Artisanal Fisheries Development Programme. The planned LDCF interventions will benefit from the ongoing work under the PAPAFPA project on capacity development, awareness campaigns, and community based organizations developed with the Agricultural communities. In addition, it is worth mentioning that the PAPAFPA programme is not covering the whole of the national territory. The LDCF project will coordinate its activities with the PAPAFPA project and focus on the empowerment of CBOs, the promotion of alternative income generating activities for local communities (by supporting CATAP's work designing and implementing training programmes for representatives of the district and community level platforms, including other decentralized institutions' staff and CBOs leaders), and

working with the land monitoring teams of the APRDC (approximately up to 300 in total) on how to develop, implement and monitor annual and multiyear adaptation plans and related budgets.

# The World Bank led GEF-LDCF project: "São Tomé and Principe Adaptation to Climate Change focusing on Coastal Adaptation for Vulnerable Communities" (2011-2016; \$4.1 million).

32. This project is divided into two major investment components aimed at assisting fisherpeople and coastal communities to manage the impacts of the two major causes of climate change vulnerability in coastal zones. This project will build on some of the activities developed so far, in particular the work undertaken by CONPREC towards the mobilization of coastal communities into Local Disaster Risk Management Committees (LDRMC), which this LDCF will benefit from and which will be part of the Early Warning System (EWS) strategy in dissemination and response to flash floods and other climate related hazards. The LDCF will benefit from the already established LDRMC at district level and it will be the embryo of the process of establishment of districts and villages CC Platforms (CC-DAVIP). This will be carried out by widening their mandates in accruing the role of facilitators of dialogue on climate change, for a greater awareness and understanding amongst stakeholders of climate change issues and their linkages with rural livelihood options; and for the coordination, discussion and synchronization of strategies among partners in the design, implementation and monitoring of districts' and villages' annual and multiyear adaptation plans.

# The UNDP led GEF-LDCF project: "Strengthening climate information and early warning systems in São Tomé and Principe for climate resilient development and adaptation to climate change" " (2013-2017; \$4 million).

33. This project will make available relevant climate and weather information and support the development of agrometeorological tools to enhance the climate resilience of STP's agriculture. The Agricultural Division will coordinate with the NIM to ensure that the EWS provides the required climate and weather information that the communities will need to successfully implement their CCA annual and multi-year plans in order to strengthen their livelihood climate resilience. Additionally, it will support the NIM to develop a strategy for efficient dissemination of climate and weather warning information among rural communities, enabling them to better face to climate and weather events.

# 2.3.3 Linkages with Ongoing national initiatives (co-financing the LDCF project)

34. Another strategic principle that governs the design of this project is the use of LDCF funding to provide value added to nationally-led baseline programming. This provides long-term anchoring for LDCF interventions, ensures that the conditions for long-term sustainability continue to be present even after the end of the intervention, and encourages stronger ownership. This project is therefore building on ongoing programming delivered by the line ministries of the GoSTP and on existing development baseline by supporting additional adaptation measures designed to enhance the resilience of the most vulnerable communities of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). Of particular importance are the following baseline projects upon which this LDCF will build:

# i) The European Union "Global Climate Change Alliance (GCCA)" project for STP (2013 - 2016) (co-financing \$ 4.0 millions)

35. The GCCA in STP, with \$6.8 million in funding, aims to enhance the capacity of national key institutions in charge of supporting the strengthening of communities' livelihoods and the reduction of rural poverty, and to support sustainable development pilot activities in the District of Mezochi and Lemba. This project is a relevant baseline initiative for strengthening communities' livelihood resilience to climate change. It also aims to strengthen community livelihoods and advance rural poverty reduction by: supporting the installation of community livelihood development related infrastructures (water storage facilities, hydropower and solar energy for supporting economic development activities); creating national capacities for the design, building, operation and maintenance of community development infrastructures including housing; improving access of rural communities to clean energy for improved livelihoods and rural economic activities; and supporting reforestation activities in degraded areas; improving agricultural productivity by facilitating farming communities' access to improved inputs, efficient irrigation systems, agricultural advisory support, efficient technologies and technical agricultural itineraries. However, notwithstanding the broad approach of this project in support of poverty reduction at the community level, there are noticeable gaps in this baseline project in terms of addressing community resilience to climate change. This LDCF will complement the programmatic actions of this baseline project by strengthening the technical and scientific capacity of CIAT, CATAP and CADR experts and technicians to develop agro-sylvo-pastoral adaptation technologies and to support the implementation of adaptation technologies for the promotion of the sustainability of the adaptation advisory system to rural communities in all six CMPLCL.

# ii) Food Crops Development Project (Co-financing \$3,576,281)

36. This project, financed to an amount of US\$4,824,000 and supported by the Government of Taiwan, will be implemented over the period of January 2012 to December 2017. It aims at improving food security and safety in São Tomé and Príncipe. For this purpose, the project objectives are to: 1) assist the CIAT and the Agriculture Division to breed and produce high-quality specimens of maize, cassava, sweet potato, taro and soybean seeds and seedlings (12 tons of maize seed per year, 390,000 cassava seedlings, 1.65 million sweet potato seedlings, 435,000 taro seedlings and 3 tons of soybean seeds by 2014; 2) increase annual yields and crop production to reach 1,280 tons of maize, 1,300 tons of cassava, 300 tons of sweet potato, 500 tons of taro and 180 tons of soybean of annual production. The achievement of these objectives will involve i) capacity building and assist personnel at the Centre for Agronomic and Technological Investigation (CIAT) and the Agriculture Division at the Ministry of Planning and Development to establish agricultural standard operating procedures (SOPs); ii) support the Agriculture Division to establish agricultural extension zones in which to promote the production of a range of crops under the principle that crops should be cultivated in the most suitable locations and by providing guidance on good management and cultivation on farms; iii) support the protection of São Tomé and Príncipe's natural environment by providing guidance to community farmers to manufacture organic compost from livestock manure, fishmeal and off-cuts from crops; iv) disseminate efficient production techniques through CATAP and the extension technicians of the rural delegation, and assist local farmers to better organize themselves. However, there is a major gap in this baseline project as it does not take into account climate change concerns. This LDCF project will therefore complement the above actions by developing/strengthening the capacity of CIAT and CATAP to integrate the climate change risks into the SOPs underpinning improved agricultural production as well as natural resource management. LDCF funds will also be used to strengthen the capacities of beneficiary farming communities to manage expected climate risks related to crops.

<u>Project for the rehabilitation of the infrastructures supporting food security - PRIASA II (2015 – 2019)(Co-financing: \$8 million)</u>

- 37. The 4-years PRIASA II project, which will cost \$8 million, will be implemented in the islands of São Tomé and Principe. PRIASA II is designed to:
  - i) Contribute to the improvement of the food security and reduce poverty and vulnerability of poor communities in STP;
  - ii) Enhance availability and access to land and sea productivity; and
  - iii) Rehabilitate rural infrastructures and improve livelihoods of farmers, fishmongers, youth, and fishermen.
- 38. However, the PRIASA II project interventions do not cover all the six districts and therefore a significant number of vulnerable communities will not be beneficiaries of these initiatives. Furthermore, the interventions do not include climate change concerns with actions for the communities to cope with extreme climate and weather events that may negatively impact foods resources. Therefore, this LDCF will not only complement the actions of this baseline project as it will also cover all six districts by providing the PRIASA II beneficiary communities with: i) climate change advisory support for additional adaptation responses such as land and soil fertility management, ii) use of other resilient technologies in water storage and crop irrigation, as well as iii) climate change proof crop storage infrastructure to cope with the dominant climatic events and impacts in STP, in particular torrential rain and drought episodes.
- 39. A strategic partnership will be developed with the above projects in order to complement their activities with those planned with LDCF funding. The LDCF financed project will establish demonstration sites which will be used to collaborate with above projects to test the effectiveness of community based climate change adaptation platforms that help communities to enhance their resilience against severe and extreme weather events. Table 2 below indicates each of the specific associated baseline projects and the indicative co-financing amounts upon which this LDCF project will build. This is further elaborated in Section 2.4 for each of the LDCF project's outcomes and the co-financing letters of support given in Annex 7.

Table 2. Associated baseline projects and the indicative co-financing amounts

Funding source	Name of Co-financier (source)	Institutions	Co-financing Amount (US\$)
Co-financing sources/Projects			
The European Union Global climate change Alliance (GCCA) project for STP (2013 - 2016) (Co-financing \$4 million)	European Union (EU)	Ministry of Public Works, Infrastructure, Natural Resources and Environment (MoPWINRE)	4,000,000
Food Crops Development Project (Co-financing \$3.5 million)	Taiwan International Cooperation and Development Fund	Ministry of Agriculture, Fisheries and Rural Development (MoAFRD)	3,576,281
The Project for the rehabilitation of the infrastructures supporting food security-PRIASA II (Co-financing \$8 million)	African Development Bank Group (AfDB)	Ministry of Agriculture, Fisheries and Rural Development (MoAFRD)	8,000,000
GEF Agency	UNDP	UNDP Sao Tomé	350,000

GEF Agency	UNDP	UNDP Sao Tomé	350,000
Total			16,276,281

#### 2.3.4. National and local benefits

## Benefits at National Level

- 40. By strengthening the resilience of rural community livelihood options against climate change impacts in the São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL), the LDCF financed project will benefit: i) the poorer segments of society, who do not necessarily benefit directly from large protective infrastructure projects<sup>6</sup>; and ii) Agricultural and extension services and other user-agencies who will have increased capacity to take climate change into account in the context of long-term planning.
- 41. Households engaged in the agriculture sector for their livelihoods in all regions (and particularly the six São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata [CMPLCL]), will benefit from the implementation of the planned activities. By contributing to the increase of the agricultural productivity and production, the project will support an increase in the food availability in São Tomé and Principe (STP) and in the coverage of the national diet by the local production. The current STP level of food crop production cannot cover the country needs and the gap is met through imports. By securing and improving the agricultural production, STP will be able to realize improvements in food availability within the country, reduce dependence on imports and consequently improve the national food security. This will help to reduce the deficit of foreign exchange reserves of the country.
- 42. The LDCF project will introduce new infrastructure and build capacity largely through improving capabilities of the key institutions and by transferring appropriate technology and skills to agriculture training, research and extension services (CATAP, CIAT and CADR), user-agencies (DGA and MFI's) and end-users (local farming communities) in the country. As a result of the Outcome 1 activities of the project, up to 300 targeted stakeholder groups (CATAP trainers, rural delegation staffs, district council members, NGOs and CBOs technicians) will have developed skills and capacity on how to design, implement and monitor climate resilient agriculture measures and strategies, how to develop and implement community adaptation plans and how to mainstream climate change into district-level development processes. This will allow them to support and facilitate the implementation of appropriate community based adaptation measures that will contribute to make the livelihood options of the most vulnerable communities of STP more climate resilient.
- 43. The project will also demonstrate how the management of the rural communities' economic activities can be adapted to climate change. To ensure the sustainability of these capacities, the project will support the documentation and the codification of the knowledge and lessons drawn from the mainstreaming of climate changes and the implementation of agriculture adaptation measures. These knowledge materials will be accessible to the technical staff of relevant line ministries, as well as the NGOs involved in rural development and poverty alleviation. This improved knowledge base will also benefit future initiatives and training related to the mainstreaming of climate change in the key sectors.

<sup>&</sup>lt;sup>6</sup>World Bank. 2010. Natural hazards, Unnatural disasters: Effective prevention through an economic lens. World Bank and United Nations. 231 pp.

- 44. This project also supports national development goals and plans to achieve Millennium Development Goals (MDGs) 1, 3, 6 and 7 in São Tomé and Principe.
  - MDG 1: Eradicate extreme poverty and hunger This project aims to strengthen the resilience of
    rural community livelihood options against climate change impacts in the São Tomé districts of
    Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). The project will
    contribute to improving food security and will support two-thirds of the population who are
    dependent on the agricultural value chain (NAPA, 2006);
  - MDG 3: Promote gender equality and empower women Support and assist 63,000 STP's rural farming community (of which 52% are women). The project will make it possible for microfinance products to be tailored to end-user needs, in particular the needs of women who have little access to farming assistance and support. NGOs focused on women's issues have been implicated in the project (Sea, Environment and Craft Fishing NGO-MARAPPA, Federation of Small Farmers FENAPA-STP, Cocoa Production Company SATOCAO and FONG-STP (Federation of all NGO's) and the majority of the "cash-for-work" labor scheme beneficiaries are women and youth.
  - MDG 6: Combat HIV/AIDS, malaria and other diseases Malaria and other vector-borne
    diseases are heavily linked with climate variables such as temperature and excess humidity
    resulting from extreme rainfall events. This project will make possible drainage and erosion
    control measures as well as rain harvesting structures which will increase water for sanitation
    and reduce uncontrolled water collection points, which will reduce the spread of vector borne
    diseases:
  - MDG 7: Ensure environmental sustainability Deforestation poses a serious threat to environmental sustainability and is jeopardizing progress towards poverty and hunger eradication in São Tomé and Principe. Similarly, deforestation and the occurrence of extreme rainfall events have enhanced erosion phenomena in STP, worsening productivity. The foundation of this project is to ensure environmental sustainability by integrating reforestation and erosion control initiatives into the planning of districts and villages CC Platforms (CC-DAVIP) and integration in Climate Change Annual Adaptation Plans (CC-VAAP) for development and implementation of adaptative practices.

# Benefits at Local Level

- 45. The project, in collaboration with the Ministry of Agriculture, Fisheries and Rural Development (MoAPDR) and related institutions, will promote rainwater harvesting technologies and techniques at village level and these on-the-ground activities are likely to provide benefits such as: i) improving access to water for sanitation and drinking purposes; ii) preventing the decline of the water table; iii) reducing pumping costs; and iv) improving agricultural productivity by increasing the availability of water for irrigation purposes (with positive consequences for food security and income streams). These initiatives will directly benefit more than 2,000 rural households (with a special emphasis on female headed households).
- 46. This LDCF financed project will benefit both vulnerable cocoa growers and small farmers in Outcome 2 through the financing of small scale community managed infrastructures to manage climate induced floods, erosion and droughts. It will add safety net mechanisms for managing risks associated with the impacts of climate variability on foods resources and livelihoods. The financed infrastructures under this outcome will include terracing of sloped land, the strengthening of drainage systems, rainwater control, landscaping, wind breaks and other forms of erosion control, as well as dykes and bunds to protect fields against flooding. The safety net mechanisms to be financed will

include cereal banks, food cooperatives, and other custom based mechanisms for managing risks associated with climate variability impacts on foods resources, natural and economic assets, and livelihoods of local communities. In addition, Outcome 3 of this LDCF will support small-scale priority community adaptation projects and technologies to complement CC-VAAP and for the creation of art crafts workshops. These projects and technologies will include water-saving irrigation techniques and climate resilient land, forest and soil fertility management strategies. All of these LDCF initiatives will benefit more than 2,000 rural households in the six districts of CMPLCL of São Tome and Principe.

47. Finally, the financing options brought about by the project will benefit existing governmental financing structures, by increasing financial sustainability and reducing current financial pressures. The largest economic benefits are potentially associated with enhanced capacity of CATAP, the research capability of CIAT and the operational capacity of CADR. At the community level small-scale rural infrastructure will be developed/built that will benefit farming activities of more vulnerable communities in the long run. In this way, communities will be better equipped to manage their environment and make it more resilient to climate change. They will correspondingly be able to apply improved practices with respect to agriculture management and other livelihoods supporting activities that will be particularly useful in the context of a changing climate and will benefit from the low-cost community infrastructure the project will support. These activities, combined with the capacity building and climate change mainstreaming activities that will be implemented, will benefit people beyond those targeted in this outcome, notably a big share of the 63,000 STP's rural population (in which 52 % are women in 2010).

#### 2.3.5. Brief Introduction to Project Pilot Sites

- 48. Component 1 of the project will be comprised of pilot and demonstration investments in the São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). During consultations carried out during the PPG phase, a literature review of key vulnerabilities to climate change including these locations and, supported by site visits, informed the final selection of project areas. Given that interventions on adaptation are needed in all areas of the country, certain criteria were developed to choose priority locations through discussion with all concerned stakeholders at the national validation workshop in April 2014.
- 49. First, successful pilot interventions needed to benefit a large proportion of the population either directly or indirectly. Therefore a District representative of issues common to a significant portion of the population was deemed necessary. Second, interventions needed to be sited in an area where existing work on climate change is not being undertaken. This was deemed necessary to provide maximum benefit to populations that have not received any significant support on adaptation to climate change to date. Third, the areas supported through this LDCF project needed to be those that were deemed to be under severe threat from impacts of climate variability and/or climate change, based on scientific consensus. Fourth, although stakeholders initially discussed the need for the project to support 30 of the most vulnerable villages from the six major geographic/socio-economic regions of the country, this was not considered be financially and operationally feasible. For practical reasons, there was stakeholder consensus that the adaptation measures to be implemented in the six pilot sites should be as consistent as possible between sites and should respond to common climate change impacts to ensure focused management, efficient resource allocation and maximum success for the project.

- 50. According to the above criteria, 30 villages within each of the six districts (Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata) that were identified during the PIF process will be the direct beneficiaries of this project. A strategic framework for site-level activity prioritisation in these areas is provided in Annex 4. A village-level consultation process was undertaken in the first half of 2014 to identify current and expected climate change impacts, existing capacity gaps at community level and to assess corresponding adaptation measures and define pilot activities on the ground. The raw results of this mission are described in the Field Work Technical Annex to the project document (available in Portuguese only).
- 51. The results of this village-level consultation process indicated the following:
  - At the village level, communities are already food insecure with, threats including reduced rainfall, extended periods of drought, and extreme rainfall events resulting in widespread erosion phenomena;
  - Flooding, sea intrusion and reduced fishing catch are also a common events in all coastal villages;
  - Uncontrolled logging for charcoal production appears as a major environmental issue in all selected villages enhancing deforestation and erosion phenomena;
  - Scarcity of water for household consumption and for irrigation to minimize the impact of recurrent droughts has been claimed by all villages;
  - Lack of agriculture inputs, seeds and extension support was reported by all villagers that were interviewed;
  - Lack of animal housing structures, particularly poultry and pig farming;
  - · Lack of sanitation conditions and communal laundry sheds with water supply;
  - The community members interviewed, particularly those representing women's groups, acknowledged that lack of financial support undermines their capacity to adapt to climate variability impacts.
- 52. The risk and vulnerability assessment that was carried out during the project preparation put a special emphasis on gender disparities and related vulnerability and the special needs in term of financial and technical capacities, support and organization faced by women active in agricultural sector. On the basis of these findings, this project aims to ensure that women are involved in all decision-making processes governing the activities to be implemented at the local level. Women and youth groups in the targeted villages will be provided support to fully participate in the selection and implementation of climate change adaptation measures at village level. Field assessments carried out in the six Districts and the 30 vulnerable villages during the preparatory phase also highlighted the positive role of women in the development of anticipated activities, particularly those related to crop farming, small livestock and microfinance some of the important activities which may increase livelihood security. This project will therefore mainstream gender concerns within the context of promoting adaptation to climate change. Alternative income generating activities supported by this project will give a special emphasis to women of the 63,000 STP's rural community workers (52% of whom were women in 2010), above all the women head of family who are one of the groups suffering the most from poverty and food insecurity.

53. Past records indicate that besides the fact that almost 2/3 of the total population live in the central region (Água Grande and Mé Zochi districts) of the country, great disparities are also found in the distribution of average per capita consumption expenditure with 1/3 less in rural areas than in urban areas<sup>7</sup>. The most pronounced incidence of poverty is in the northern region (Lemba and Lobata districts) – 70.6% of the population in the region, followed by the southern region (Cantagalo and Caué districts)–65.1% of the population of the region then the autonomous region of Príncipe — (60% of the regional population), and next the central region, with 46.4% of the population.

# The Project Pilot Sites

54. This project targets assistance to the most vulnerable populations of the districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). These six districts (see Figure 2 below) together with Água Grande district (where the capital town of São Tomé is located) are representative of the territory of São Tomé and Principe.

Figure 2. Map of São Tomé and Principe Islands showing the six target districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL) where the project will be implemented.



55. More than 60% of the population of São Tomé and Principe is concentrated in two of the seven administrative areas of the country, which account for 13.8% of the national territory. These are the districts of Me-Zochi and Água Grande, where the two largest cities (the city of São Tomé, which is the capital and the city of Trinidad) are located. By contrast, the district Caué, which accounts for 26.7% of the national area, only has 4.0% of the total population. Population density ranges from 3,145 inhabitants per km² in Água Grande to only 20.6 inhabitants per km² in Caué. Apart from the Água Grande District, which corresponds to the main town and surrounding São Tomé, the other districts also have a strong concentration of urban population in one single population center. The

<sup>&</sup>lt;sup>7</sup> Democratic Republic of São Tomé and Príncipe: Poverty Reduction Strategy Paper. The study "Profile of Poverty in São Tomé and Príncipe" (November 2000-February 2001). IMF Country Report No. 05/332. 2005 International Monetary Fund. 2005 International Monetary Fund. 150p.

most obvious case is the Lembá district, with 60% of its population residing in the city of Neves. In contrast, in the districts of Lobata and Me-Zochi, and the Island of Principe, over 80% of the population live in rural areas.

56. The total area covered by the project is located all over the country and comprises a total of 984.5 km², with a total population of 109,285 inhabitants. The area is primarily dominated by high volcanic mountains with a peak of 2,024 metres above sea level (Me-Zochi) falling precipitously to the sea particularly in the southern (Caué) and western (Lembá) Districts. The mountains descend gradually to small plains in the eastern (Cantagalo) northeast (Lobata) districts. The sixth district of Pagué is located in the Principe Island. Details relevant to each district are briefly outlined below.

#### Caué District:

This is one of the smallest in terms of population with approximately 6,031 residents but is the largest in area, covering approximately 267 square kilometers. The district capital is São João dos Angolares. Half of the population live in the community of Santa Cruz. Much of the area is characterized by rainforests and farmlands within the valley areas. The coastal areas of this district have been affected by storm surge waves and strong river run-off leading to floods, a major hazard. The municipalities include the small islet of Rólas. Caué holds one of the best-known sights of the islands, the Cao Grande or Big Dog. This is a huge phallic-looking rock formation that sticks out of the rainforest 800 meters. This district has been impacted by climate change through sea level rise with sea water intrusion in locations such as Malanza, Praia Pesqueira, Praia de Yô Grande where communities live mainly out of artisanal fishing, and locations such as Ponta Baleia and Soledad where drought episodes have been frequently affecting small scale farming practiced by the local communities.

#### Mé-Zóchi District:

This is the second-largest district in terms of population size, with approximately 44,752 people, and covers approximately 122 square kilometers. It is covered by extensive rainforest and small-scale farms producing significant amounts of horticulture crops particularly tomatoes. The district capital is Trinidade (pop: 6,636 in 2005). It is home of one of the famous walks from Bom Sucesso leading to Lagoa Amélia and the Cascada São Nicolau waterfall. Climate variability has been impacting several communities in Rio Lima, Bom Sucesso and Saudade villages. Drought episodes have severely affected small scale farming and in Água das Belas and Bemposta villages where yields from small scale agriculture have been declining, with soil erosion and landslide phenomena occurring frequently due to extreme rainfall events.

# Lembá District:

The population in this district is relatively small, with approximately 14,652 inhabitants. However, it is the second largest in terms of area, covering approximately 230 square kilometers. The district capital is Neves. The district is covered by cocoa plantation and small scale farms. Pig farming is also practiced. This district has been hit by flooding and drought chiefly. The primary river is the Provaz, a watercourse running westward crossing the city of Neves and discharging between the Furnas and Rosema beaches after receiving the waters of its tributary the "Little Water River". It is prone to flooding. Drought episodes during the "gravana" season and erosion phenomena due to indiscriminate logging have also been occurring particularly in Lembá, Paga Fogo, Generosa where communities live off of small scale agriculture.

#### **Cantagalo District:**

This is the eastern district, third-largest in terms of population with 17,161 inhabitants, and covers approximately 119 square kilometers. The district is dominated by cocoa farms, some of which are well-known, such as Roça Agua Izé plantation. It is self-sufficient in terms of water resources with the well-known Cascada Blublu waterfall located in the village by the same name. The most famous sight in the district is the Boca do Inferno. However, this district has been hit by frequent landslides caused by torrential rains particularly in Colonia Açoriana Sede village. By contrast other communities living in Mendes da Silva, Monte Belo, Quimpo, Uba Budo Sede villages have been suffering from drought episodes during the gravana which severely affects yields of small scale agriculture.

# **Lobata District:**

This district is located on the northern side of the island territory and is second-largest in terms of population, with approximately 19,365 residents. The land mass covers approximately 105 square kilometers. The district capital is Guadalupe. The municipality includes an islet called the Ilhéu das Cabras. This is the most impacted district in terms of climate variability with extended gravana season and water scarcity. The comunities of Plancas I, Canavial, Fernão Dias villages practicing small scale agriculture and artisanal fishing are the most impacted by drought episodes during the gravana. The district is also dominated by cocoa including the well-known Rio de Ouro plantation (Roça Rio de Ouro - Agostinho Neto plantation). Deforestation is also a major environmental issue and locations such as Plancas II, Santa Luzia where communities live off of small-scale agriculture are being impacted not only by drought episodes but also by erosion phenomena due to indiscriminate logging and more intensive rainfall.

#### Pagué District:

Located in the Principe Island, its population is the smallest in the country with approximately 7,324 residents. The district is characterized by tropical rainforest and cocoa plantations. With little regular paid work on the island, most people live outside the cash economy, farming and fishing to supply their families' needs. This site is frequently hit by strong squall line thunderstorms and storm surge waves. Communities living along the coastline have been frequently hit by sea level rise and increased storm events exacerbating coastal erosion and affecting their livelihoods.

57. A summary of consultations on climate change adaptation measures conducted with local communities that took place during the preparatory phase as well as a summary of Consultations on Main Livelihoods/Main Concerns/Needs on Climate Change impacts at community level is described in Annex 4.

Table 3. Details of the six districts where will be located the project site demonstrations

District	Mé Zochi	Lobata	Cantagalo	Lembá	Caué	Pagué
Main Towns	Trindade	Guadalupe	Santana	Neves	São João dos Angolares	Santo António
Area (km²)	122,0	105,0	119,0	229,5	267,0	142,0
Population	44,752	19,365	17,161	14,652	6,031	7,324
Population Density (people/km²)	366,8	184,4	144,2	63,8	22,6	51,6

	Droughts	Recurrent	Increase in	Frequent	Reduction in	Increase in
	and excess	droughts of	Storms	and long	rainfall/	Storms/
Climate	rainfall	5 months in	/Recurrent	lasting	Increase in	Landslides/
Change	chiefly/Landslid	the past 5	droughts of	recurrent	Storms/ sea	Severe Coastal
induced	es/Erosion	years	5 months in	droughts of	invasion/	Erosion
Issues		-	the past 5	5 months in	Flooding	
			years	the past 5		
				years		

#### 2.3.6. UNDP Comparative advantage

- 58. UNDP's comparative advantage in implementing this project is underpinned by its Country Programme Document for the current cycle (2012-2016). Specifically Outcome 1.2 is focused on improving access of vulnerable populations, notably youth and women, to productive resources and decentralized basic social services. Outcome 1.3 focuses on the adoption by the STP central and district governments as well as the general population of techniques and behaviors that are more favorable to a sustainable environment and are conducive to better management of risks and natural disasters, including those that are induced by climate change factors. In addition, the proposed capacity development programme indicated under Component 1 of the LDCF project will benefit from UNDP STP's experience and overarching and strategic role in this area, helping to ensure that related outcomes are sustainable in the long-term. Institutional capacity building and reform is one of UNDP STP's flagship programming areas. UNDP has already conducted several programmes for assessment of capacity building needs and formulation of related action plans, including the implementation of the UN Framework Conventions on Biodiversity and Climate Change, respectively, as well as for environment and natural resources management.
- 59. The development of national capacities for the successful implementation of priority areas of the strategy for agricultural and rural development has also been supported. It is worth noting that since 2007, UNDP has been helping to finance the advancement of decentralization in STP through the strengthening of the capacity of Districts and the Autonomous region of Principe as well as the elaboration of the development plan of the district of Caué and of the autonomous region of Principe. This project is providing a starting point for the proposed capacity building of district governments and assembly members under the Component 1 of the LDCF project.
- 60. UNDP has a rich history of experience with community livelihood strengthening programmes through its poverty reduction and MDGs programmes. Under these programmes, UNDP STP has been supporting the Government of STP in areas like: a) strategic planning, including the design of planning tools and strengthening of national capacity in term of monitoring and evaluation of national and district development policies and strategies; b) production and analysis of decision making support information; c) coordination of development support from other development partners; d) trade integration and strengthening the business environment. This experience will support the implementation of Component 2 of the LDCF project that aims to strengthen the resilience of rural livelihoods from the likely impacts of climate change.
- 61. The programme will engage the Poverty and Environment and Energy practices, as well Democratic Governance practice area and will be fully supported by Senior Management of UNDP-STP. The Poverty and Environment and Energy practices in the country office has currently a Programme Specialist (with a strong community/rural development background), Programme Analyst (with a strong environment and rural development background) and a Programme Associate who work as a team to coordinate and support a number of poverty—environment initiatives including one focused on

infrastructure development. The Democratic Governance practice area has three Programme Specialists and one Programme Associate with strong experience in policy mainstreaming, institutional capacity building and gender equality. Additionally, the CO has built strong partnerships with the National Climate Committee (NCC), the District Government and Assembly members, and rural communities as the main stakeholders for this project. The existing partnership has facilitated the implementation of several activities aiming to strengthen rural communities' livelihoods in STP.

62. Furthermore, UNDP has supported STP's government since the early 2000s in the areas of: a) mainstreaming sustainable management of the environment in the country development agenda through the strengthening of national capacity and the development of national and sectoral planning tools, and the national emergency plan; b) climate change adaptation through financing from the Africa Adaptation programme as well as several LDCF financed projects; and (c) preparation of the Initial and 2nd National Communication to the UNFCCC. Finally, at the national level, UNDP's comparative advantage for the proposed project lies in its strong track record of 38 years working with GoSTP on complex projects and an extensive history of working at the community based level, including on adaptation and climate resilient agriculture. UNDP is already supporting a number of initiatives on community based adaptation and climate resilient agriculture in many countries including the islands and other countries like Comoros and Rwanda that are tackling similar challenges to those seen in STP (eg. slash and burn and hilly agriculture) and other cocoa producing countries like Ivory Coast and Liberia.

#### 2.4. Project Objective, Outcomes and Outputs/activities

- 63. The overall objective of the project is to strengthen the resilience of rural community livelihood options against climate change impacts in the São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL).
- 64. This LDCF intervention will be articulated around three components:

**Component 1:** Developing capacities of the key institutions of relevance to rural development

and livelihoods including CBOs and other CSOs to effectively support

communities' resilience and adaptation to climate change.

**Component 2:** Investments for the protection of communities' livelihoods against climate risks.

**Component 3:** Diffusion of climate resilient livelihoods strategies in the most vulnerable

communities.

The expected **outcome** of Component 1 is to have the Center for Agro Pastoral Development (CATAP), the Centre for Agronomic and Technological Investigation (CIAT), the Center for Ecological surveillance (CES) the district governments and assemblies, CSOs and CBOs strengthened to support the enhancement of climate resilience of rural community livelihoods in the São Tomé & Principe districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). The activities to be implemented under Outcome 1 will enable 300 targeted stakeholders (CATAP trainers, rural delegation staffs, district council members, NGOs and CBOs technicians) to develop skills and capacity on how to design, implement and monitor climate resilient agriculture measures and strategies, how to develop and implement community adaptation plans and how to mainstream climate change into district development planning and budgeting process. In Outcomes 2 and 3 the implementing partner, with UNDP support, will leverage many years of experience to support the implementation, monitoring and evaluation of district level, annual and multi-annual adaptation plans,

including the realization of low cost community infrastructures. Assistance will be provided towards the development of an enabling environment for innovative microfinance products that will enable community access to financing for investments that strengthen the resilience of livelihoods to climate change. From the activities developed through these two Outcomes more than 2,000 people (of whom at least 1,000 will be women) and their families in rural communities will be better placed to becoming more resilient to the emerging long-term risks of climate change.

**OUTCOME 1.** The capacity of the CATAP, CIAT, DGE, district governments and assemblies, district councils, CSOs and CBOs strengthened to support the enhancement of climate resilience of rural community livelihoods.

#### Baseline - without LDCF intervention

65. In the framework of the implementation of its Poverty Reduction Strategy Paper, the Government of São Tomé and Principe, with the support of its partners including UNDP, is implementing a number of initiatives to strengthen the institutional and human capacities within the sectors directly linked to the rural development. However, Climate change adaptation capacity of national institutions supporting agriculture and rural development in São Tomé and Principe, such as the Technical Training Center for Agriculture and Livestock (CATAP) and the Agricultural Research and Technology Centre (CIAT) are limited with insufficient trained human resources, inadequate logistics and equipment, infrastructure, etc. These institutions cannot therefore provide the vulnerable communities with the required support they need to cope with the impacts of climate variability and change. Nevertheless, these activities are not being undertaken in all districts and do not include the establishment and organization of mechanisms for identifying and addressig the underlying causes of vulnerability and developing adaptative practices in the rural communities. To revive agricultural, livestock and forestry, the qualification of rural extension human resources in terms of managing the current and forecasted climate risks is a key factor for successful agricultural and rural development. As identified before, the major constraint is the absence of a climate change adaptation national training program for technical agricultural and livestock staff, combined with a lack of training programs (which are not provided by the baseline activities). Furthermore, the district government and assemblies, whose primary task is to execute and support central government projects do not have the capacity to identify and address the climate risks and therefore cannot fully perform their role. Consequently, the overall ambition of these capacity building programmes to be developed by the LDCF is to have rural areas support structures in place to provide advice close to the communities to facilitate the dissemination of appropriate climate resilient technologies and coping strategies which are essential to improving climate resilience of agriculture and food production.

#### Associated baseline projects

# **Baseline Project #1:**

# The European Union "Global climate change Alliance (GCCA)" project for STP (2013 - 2016) (cofinancing \$ 4.0 million)

66. The objective of this programme is to contribute to the consolidation of development efforts by the Government of São Tomé and Príncipe, with a specific focus on poverty reduction and food security further engaging the country in an effective and sustainable process of adaptation to climate variability and change. The GCCA in STP (with \$6.8 million of funding) aims to enhance capacity of national key institutions in charge of supporting the strengthening of communities' livelihoods and

the reduction of rural poverty and support sustainable development pilot activities in the Districts of Mezochi and Lemba. The project has two main components complementing and strengthening each other:

- The productive systems of the Lembà and Mé Zochi districts (two districts particularly vulnerable to climate risks) are better able to sustainably meet the needs of the local population, taking account of the whole range of likely climate scenarios and events. The project will support the development of new agricultural and sustainable natural resource management practices that reduce sensitivity to the inter-annual variation in climate parameters, and reduce the propensity to over-exploit natural resources in years of poor harvests. Among other issues, the project will support rehabilitation of irrigation networks, anti-erosion infrastructure development and agroforestry;
- The capacities of national institutions to respond to climate-related challenges are strengthened. Based on a preliminary needs analysis, the skills and knowledge of human resources (civil servants, autonomous region of Príncipe, local administration, and civil society) will be reinforced with regard to adaptation; support will also be given to the development of a networking, experience sharing, communication and advocacy strategy.
- 67. This project is a relevant baseline initiative for strengthening communities' livelihood resilience to climate change. Indeed it is supporting the development of the capacity of national institutions and policy framework for sustainably addressing rural poverty which is one of the drivers of STP communities' vulnerability. Furthermore, the sustainable development policy framework it will create will be a relevant framework for supporting the development and the sustainable adoption of the adaptation strategies necessary for farming communities to cope with expected climate risks. At present, however, this baseline project does not address some of the capacity related barriers for strengthening community resilience to climate changes. Among these barriers, one can note the absence of mechanism and technical capacity at the local level to facilitate the identification by the communities themselves of their adaptation needs to respond to climate concerns that can hinder the efficiency of the livelihoods supportive infrastructures and strategies supported by the EU GCCA project to sustainably improve community livelihoods.

# Baseline Project #2: Food Crops Development Project (2012-2017) (Co-financing \$3,576,281)

68. This project, with US \$4,824,000 in financing and supported by the Government of Taiwan, will be implemented over between January 2012 and December 2017. It aims to improve food security and safety in São Tomé and Príncipe. For this purpose, the project objectives are to: 1) assist the CIAT and the Agriculture Division to breed and produce high-quality specimens of maize, cassava, sweet potato, taro and soybean seeds and seedlings (12 tons of maize seed per year, 390,000 cassava seedlings, 1.65 million sweet potato seedlings, 435,000 taro seedlings and 3 tons of soybean seeds by 2014); and 2) increase annual yields and crop production to reach 1,280 tons of maize, 1,300 tons of cassava, 300 tons of sweet potato, 500 tons of taro and 180 tons of soybean of annual production. The project will: i) support capacity building and assist personnel at the Centre for Agricultural Research and Technology Centre (CIAT) and the Agriculture Division at the Ministry of Planning and Development to establish agricultural standard operating procedures (SOPs), and a nursery to breed and produce high-quality specimens for the following five main crops (taro, cassava, sweet potato, soybean, and maize); ii) assist the Agriculture Division to establish agricultural extension zones in which to promote the production of a range of crops under the principle that crops should be cultivated in the most suitable locations and by providing guidance on good management and cultivation on farms; iii) support the protection of São Tomé and Príncipe's natural environment by

providing guidance to community farmers to manufacture organic compost from livestock manure, fishmeal and off-cuts from crops; and iv) disseminate efficient production techniques through the CATAP and the extension technicians of the rural delegation and assist local farmers to better organize themselves. These food crops are sensitive to climate changes.

# Adaptation alternative - with LDCF Intervention

- 69. Under this component of the project, the Government of São Tomé and Principe will be able to build on the European Union GCCA project and the Taiwan food crops development project and use LDCF resources to implement climate change adaptation and capacity development related activities at the national and local levels for the management of climate risks in STP agro-sylvo-pastoral ecosystems. These capacity development activities will support the following objectives: i) facilitation of the climate change consultation at the district and villages levels; ii) creation within the country of the capacity to design and support the implementation and sustainable adoption of adaptation options able to increase communities' livelihood resilience to climate change, particularly those outlined in Outcome 2; and iii) creation of the capacity to support the mainstreaming of climate change concerns in districts' development planning process.
- 70. The capacity developed under this outcome will be critical for the successful implementation of the outputs of Outcome 2, which aim to strengthen the resilience of rural livelihoods to the impacts of climate change. Furthermore, this capacity will benefit future initiatives aiming to strengthen livelihood resilience in rural areas of CMPLCL districts.

Costs component 1	
Co-financing: LDCF:	US\$ 7,576,281 US\$ 1,175,900

#### **Outputs and activities**

**Output 1.1.** An institutional capacity building programme to strengthen technical and scientific capacity of CIAT experts and technicians to develop agro-sylvo-pastoral adaptation technologies to enhance climate resilience of rural community livelihoods in CMPLCL Districts is developed and implemented.

71. LDCF resources will be used for supporting the design and implementation of a training programme for CIAT experts and technicians to be able to develop appropriate agro-sylvo-pastoral adaptation technologies and produce resilient seeds and seedlings. This output will finance the cost of the integration of climate change adaptation in the CIAT and Agricultural Division capacity building programme, supported by the Taiwan foods crop development project, in order for them to include climate change concerns in the development of agricultural standard operating procedures (SOPs), breeding of the main food crops and identification of food crops extension areas. This training programme for CIAT will be implemented in partnership with an international climate change adaptation training center. This output will also support the development of a strategy for the sustainability of CIAT climate change adaptation research programme.

- **Activity 1.1.1** Identify, prioritize and support CIAT-specific needs in human resources, hard and soft infrastructure to enhance their technical performance in climate change impact reduction activities in the CMPLCL Districts communities;
- Activity 1.1.2 Identify, prioritize and support CIAT needs for capacity building and training to strengthen their ability to develop agro-sylvo-pastoral adaptation technologies and climate resilient seeds and crops, in the process of assistance and guidance to a village climate change platform and vulnerable communities in CMPLCL;
- **Activity 1.1.3** Establish partnership with an international climate change adaptation training centre for the development and delivery of an in-house training programme for CIAT, aimed at the development of a strategy for the sustainability of CIAT climate change adaptation research programme in STP;
- **Activity 1.1.4** Support integration of climate change concerns in the CIAT Agricultural Division standard operating procedures (SOPs) for breeding programme of main food crops and the identification of extension needs in cropping techniques;
- Activity 1.1.5 Support the development of a CIAT Mobile Advisory Service (CIAT-MAS) to support the CC Platforms implementation Plans in soil fertilization, crop husbandry, weed and pesticide control techniques.
- **Output 1.2.** Up to 50 Trainers (technical staff members of CATAP) are trained in climate change impacts on agricultural production, resilient farming, and climate change adaptation agricultural technologies to strengthen its institutional capacity as national agro-sylvo-pastoral climate change adaptation training centre.
- 72. LDCF resources will support the design and implementation of human and technical capacity development programme for the CATAP to strengthen the number and technical capacity of its staff to become an agro-sylvo-pastoral climate change adaptation training center. Several initiatives such as the PRIASA II are supporting the renovation, equipping and improvement of the CATAP curriculum and capacity to support the STP's Government objective to make this centre the agrosylvo-pastoral training center of reference for STP and neighbouring countries. In this framework, the EU GCCA project, to facilitate farming communities access to appropriate agricultural advisory support, is also supporting the improving of CATAP curriculum and capacity to strengthen capacity of existing extension services and also create new agricultural technicians. The LDCF will therefore support the integration of climate change in the EU GCCA CATAP curriculum development and support the creation within CATAP of human and technical capacity able to design and carry out tailored agricultural adaptation capacity development programmes for agricultural extension staffs and other agricultural officers at the national and regional levels. This will allow the CATAP to undertake the capacity building activities planned in the other outputs of the Outcome 1 needed for the successful implementation of the Outcome 2 and all the other climate change adaptation training initiatives in the future. To this end, this output will support the training of up to 50 CATAP trainers in the climate change adaptation technologies that are effective in the agriculture sector that will be identified by CIAT in Component 2 and the integration of climate change adaptation modules (developed in collaboration with CIAT) into the CATAP curriculum. This output will also support the development of a partnership between CATAP and a southern hemisphere international agricultural and climate change training center to facilitate the capacity building of CATAP technical staff and the development of a strategy for the sustainability of the CATAP adaptation training programme.

- **Activity 1.2.1** Identify, prioritize and support CATAP specific needs in human resources, hard and soft infrastructure to enhance their capability in developing capacity and training programmes in climate change resilience for rural extension service providers;
- **Activity 1.2.2** Identify, prioritize and support CATAP needs for human resources and technical and training skills to strengthen their capacity to deliver technical assistance on climate change resilience within existing rural extension programmes;
- Activity 1.2.3 Establish partnership between CATAP and a PALOP international agricultural and climate change training centre to facilitate creation within CATAP of human and technical capacity that will be able to design and carry out tailored CC adaptation based agricultural programmes for agricultural extension officers and other agricultural officers at the national and regional levels.
- **Output 1.3.** Climate Risk Management (CRM) and adaptation capacity of Centre for Support of Rural Development (Centro de Apoio ao Desenvolvimento Rural CADR) is developed to support the implementation of adaptation technologies and promote an adaptation advisory system to rural communities in CMPLCL.
- 73. LDCF funds will be used to support the design and the implementation by CATAP of a training programme for at least 90 extension staff, including those used by SATOCAO, PRIASA II and other relevant projects (with priority given to extension staff who will support the implementation of Outcomes 2 & 3 activities). The training programme will focus on the necessity of CADR staff to be skilled in resilient agricultural techniques through adoption of new farming practices and/or be capacitated to introduce new technology that has clearly demonstrated good results through practices applied elsewhere in the PALOP or sub region. These skills will allow the extension service providers to provide the farmers targeted by these 2 projects and any other project with climate change advisory support to prevent and manage the negative impacts of extreme weather related disasters like cyclones and floods, and help them to cope with climate change and variability impacts. In this output, additional help will be provided to the agriculture sector decision makers and technical staffs with the experience and skills to negotiate the contribution of any other future private company that will operate in the STP agricultural sector in the adoption of agricultural adaptation strategies and also in the functioning of the CATAP center. Furthermore, the training materials that will be developed under this output will be designed in a way to facilitate their update when it will be deemed necessary and facilitate its use by other projects and programmes beyond the scope and the life of this project. For this purpose, this output will support the CATAP, to document the lessons learnt and experience from the training activities during the project implementation in order to be integrated into the revised training module at project end.
- Activity 1.3.1 Under the leadership of DAGric and support of CATAP, develop and implement a training program to strengthen the technical capacity of CADR agricultural technical staffs to provide advisory support for strengthening climate resilience of rural livelihood options and monitoring of districts' and villages' annual and multi-year climate change adaptation plans;
- Activity 1.3.2 Provide to CADR specific logistics support to enhance their operational capacity to provide advisory support on climate change adaptation to farmers. This support will include the provision of mobility and working equipment, working material such as laptops (including access to internet), technical guidelines, notebooks, and other required materials

**Activity 1.3.3** Establish an institutional partnership between AGRHYMET African and Sahel observatory for farmers and CATAP-CIAT and CADR to train at least 90 Agricultural extension staff (including onthe-job trainings schemes) on adaptation strategies to support village climate change platforms and vulnerable communities in CMPLCL transition to climate-resilient livelihoods;

Activity 1.3.4 Support the expansion of a Public-Private Partnership between SATOCAO (private cocoa production enterprise founded in December 2010 by Swiss investors and registered as Sao Tomean Company) and CADR for the participation of SATOCAO in the financing of the climate change advisory support the CADR will provide to the cocoa farmers after the project life. It will be about supporting the CADR to negotiate with SATOCAO with the goal of having this company take charge (all or part) of the CADR costs for providing the required advisory support for climate resilient cocoa farming to the farmers supplying SATOCAO with cocoa. This activity is therefore meant to additionally help provide the agriculture sector decision makers and technical staff with the experience and skills to negotiate the contribution of any other future private company that will operate in the STP agricultural sector in the adoption of agricultural adaptation strategies and also in the functioning of the CATAP center.

Activity1.3.5 In close collaboration with CIAT, the National Institute of Meteorology, AGRHYMET, ClimDevAfrica programme, and the UNDP/GEF-LDCF/GoSTP project "Strengthening climate information and early warning systems in São Tomé and Principe for climate resilient development and adaptation to climate change" develop agromet warnings and advisories to support farming practices in the face of drought onsets.

**Output 1.4.** 6 districts of CMPLCL and 30 villages have created climate change platforms (CC-DAVIP) to facilitate dialogue and coordination for the elaboration, implementation and monitoring of village and district-level annual adaptation plans and related budgets.

74. The Government of São Tomé and Principe will use the LDCF funds to create Districts and Village levels platforms (climate change committees- CC-DAVIP) in the 6 districts of CMPLCL and up to 30 villages of these districts. These platforms will be used to facilitate dialogue on climate change, a greater awareness and understanding amongst stakeholders of climate change issues and their linkages with rural livelihood options and the coordination for the design, implementation and monitoring of districts and villages annual and multiyear adaptation plan. The platforms will be made up of the staff of the decentralized institutions, representatives of the districts government and assemblies (for autonomous district of Principe) and districts councils (for the other STP districts), representative of NGOs and CBOs of the districts and the technical monitoring teams for the agricultural lands set up under the APRDC. They will be the mechanism for identifying and addressig the underlying causes of vulnerability and developing adaptative practices in concert with relevant institutions including the CATAP. This will be done through the development of annual adaptation plans that will encompass all the measures that must be implemented by the government, the local authorities and the communities themselves to make their livelihoods options more resilient to climate change. The districts' and villages' CC platforms (CC-DAVIP) will be also responsible for the implementation of the climate resilient plans for the use of the natural resources.

Activity 1.4.1 In close partnership with CIAT, CATAP, CADR, District Councils and local NGO's and CBO's establish a CC district Committees (CC-DC's) coordinated under DAGric to oversee, support and guide the process of establishing districts' and villages' CC Platforms (CC-DAVIP);

- Activity 1.4.2 Under the leadership of CADR Extension delegations and the guidance of CC-DC's and the Unidade de Gestão e Avalição do Ministério da Agricultura, use GIS tools to carry out identification, selection and prioritization of 30 most vulnerable community villages in all 6 districts (CMPLCL) for the establishment of districts and villages CC Platforms (CC-DAVIP);
- Activity 1.4.3 Under the leadership of CADR Extension delegations and guidance of CC-DC's and in close collaboration with District Authorities and NGO's/CBO's apply a climate "lens" to livelihoods analysis through a climate vulnerability capacity assessment (VCA);
- Activity 1.4.4 Under the leadership of CATAP and the guidance of CC-DC's and the Agriculture & Planning Division of MAPDR, develop and deliver capacity building and training programmes for the Leading and Management Members (LMMs) of all 30 villages CC Platforms (CC-DAVIP) in CC planning, resilience and adaptation methods and techniques
- Activity 1.4.5 Under the leadership of CADR Extension delegations and the guidance of CC-DC's, Agriculture & Planning Division of MAPDR, and the LMMs carry out analysis of VCA to identify resilient elements and potential alternative livelihood options for each of the 30 villages;
- **Output 1.5.** Up to 300 representatives of the districts and villages platforms' district government assemblies are trained in ways to strengthen the resilience of current livelihoods options and to integrate priority actions into Climate Change Annual Adaptation Plans (CC-VAAP).
- 75. The GoSTP will, under Output 1.5, use LDCF funds to support CATAP's design and implementation of training programmes for how to develop, implement and monitor annual and multi-year adaptation plans and related budgets (targeted under Output 2.1). The trainings will include climate risk and vulnerability assessment; land use monitoring; how to use the vulnerability maps and other information produced by the Center for Ecology Surveillance; climate and hydro-meteorological information; EWS advisories in water, land and agricultural activities management; and adaptation measure planning; as well as CC-VAAP budgeting and the management and maintenance of the climate resilient infrastructures supported by Output 2.1. The target audience include representatives of the district and community level platforms, including other decentralized institution staff, local government and district assembly members, as well as CBO leaders, NGO staff (particularly from NGOs supporting the implementation of certain projects like PRIASA II and PAPAFPA, including MARAPA, ADAPPA, ALISEI, and ZATONA ADIL) and the land monitoring teams of the APRDC (up to 300 in total).
- Activity 1.5.1 In close cooperation with CC-DC's, CATAP & CADR Extension delegations, conduct training for up to 300 representatives of the district and village platforms (CC-DAVIP) and the district government assemblies on how to develop, implement and monitor Annual Adaptation Plans (CC-VAAP) and related budgets using the results of Output 1.6;
- Activity 1.5.2 In close cooperation with CC-DC's, CATAP, CIAT & CADR Extension delegations, and based upon the climate risks information and capacity developed through Output 1.6, develop awareness raising, organizational & leadership training campaign for Community Based Organizations (farmers association, women based groups and other local stakeholders) in each of the rural communities of the 6

districts of CMPLCL to efficiently contribute in the processes of identifying and addressing the underlying causes of vulnerability and developing adaptative practices;

Activity 1.5.3 On an annual basis and under the leadership of the CADR Extension delegations, work with local NGOs and CBOs to organize Climate Change Farmers Field Schools (CC-FFS's) demonstration plots, train and enlighten CBOs and community farmers on the safety and efficient use of agriculture inputs (equipment, seeds, other agriculture inputs);

Activity 1.5.4 On an annual basis and under the leadership of the CADR Extension delegations, establish demonstration field plots and Farmers Field Schools and use Extension officers as facilitators for greater awareness and understanding amongst stakeholders of climate change issues and their linkages to drought and irrigation practice in the implementation process of districts' and villages' annual and multi-year adaptation plans.

**Output 1.6.** Up to 10 members of the Center of Ecology Surveillance (CES) and Directorate General for the Environment (DGE) will be trained in GIS to increase their capacity in the integration of climate risks in the monitoring of the evolution of the STP ecosystems and the identification of the climate risks in 6 districts of CMPLCL and 30 most vulnerable villages.

76. LDCF funds will be spent to finance trainings for the members of the Center of Ecology Surveillance (CES) to allow them to increase their capacity in the integration of climate risks into the monitoring of the evolution of the STP ecosystems, the identification of the climate risks for these ecosystems, and the development of activities specific to these ecosystems. This capacity will then allow the CES to develop a dynamic agro-climatic zoning of STP ecosystems, highlighting the climatic vulnerabilities and risks for each zone, and to inform the decision makers and communities on the activities and practices that could decrease these climate risks. Furthermore, this capacity will allow the CES to regularly update the vulnerability maps that have been already developed with UNDP support. This output will also support, in conjunction with the capacity development of the CES, the capacity development of the line ministries to monitor climate change projects and to capture, document and codify the lessons and best practices from these projects in decision-making supporting tools. This will allow the line institutions to integrate the lessons learnt and best practices from the AAP and this LDCF initiative into the climate change dialogue and policy-making process supported by the EU GCCA project. The project endeavours to ensure a full and efficient participation of the communities in the design and implementation of the climate change adaptation annual plans.

Activity 1.6.1 Under the leadership of Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and with collaboration of the Center for Ecological Surveillance (CES), Directorate General for the Environment (DGE), train up to 10 staff members to use GIS tools to develop climate change vulnerability maps for the target districts including features such as land use practices (farming/housing; commercial/food crop; irrigation methods, farming technologies) and the access to forest resources (grazing areas, charcoal production areas and tree species);

Activity 1.6.2 Under the leadership of Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and with collaboration of the Center for Ecological surveillance (CES) and the Directorate General for the Environment (DGE), use the results from Activity 1.6.1 to mainstream climate change risks into national policies and plans relating to agriculture and forest ecosystems;

Activity 1.6.3 Under the leadership of Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and in collaboration with of the Center for Ecological surveillance (CES), Directorate General for the Environment (DGE), use the results from Activity 1.6.1 to mainstream climate change risks into biodiversity conservation strategies at the community level to achieve 3 of the 5 strategic objectives of the NRSAP:

Activity 1.6.4 Under the leadership of Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and in collaboration with the Center for Ecological surveillance (CES) and the Directorate General for the Environment (DGE), develop a project website for dissemination of community-based adaptation approaches, lessons learnt and communities' traditional knowledge to be shared widely with local partners, international agencies, and the scientific community;

Activity 1.6.5 Under the leadership of the Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and in collaboration with the Center for Ecological surveillance (CES) and the Directorate General for the Environment (DGE), assess the existing various toolkits for assessing climate change risks and vulnerability, identify the most appropriate tools for the STP context, translate them into Portuguese and the local languages, disseminate them and train the targeted audience in how to use them in order to guide adaptation planning and implementation, cost effectiveness analysis and a replication plan for all six district CC Platforms;

Activity 1.6.6 Under the leadership of the Ministry of Agriculture, Fisheries and Rural Development (MAPDR) and in collaboration with the Center for Ecological surveillance (CES) and the Directorate General for the Environment (DGE), develop Climate Change Training and Adaptation Modules (CCTAM) with relevant organizations (CIAT, CATAP, CADR) and district and village Platforms that will be used in the trainings planned in the outputs 1.1, 1.2, 1.3, 1.5. The modules will focus on:

- Crop/Agro-Forestry;
- Small Livestock;
- Fisheries/Aquaculture;
- Fruit/Vegetables;
- Rain water harvesting and Irrigation;
- Climate Change and erosion control, etc.

**OUTCOME 2.** Vulnerability of rural livelihoods reduced through climate risk management supportive infrastructures and practices.

### Baseline - without LDCF intervention

The goal of local agriculture development and food security is primarily achieved by investing in the productive infrastructure (e.g. feeder roads and rural trails, irrigation systems, agricultural land reclamation, slaughter houses, fishery facilities, and water catchments for livestock use, erosion control structures, food storage structures, etc.). The Government of São Tomé has worked with bilateral partners to construct and rehabilitate infrastructure to support agriculture production. However, these baseline, ongoing efforts to strengthen the sustainable management and productive capacity of small scale rural farming system, in the districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL), have benefited only a few vulnerable villages. Furthermore, they

have been designed and are implemented through a business-as-usual approach, with key environmental and climate changes related issues ignored.

# Associated baseline projects

### **Baseline Project #3:**

The Project for the rehabilitation of the infrastructures supporting food security – PRIASA II (2015 – 2019) (Co-financing: \$4 million).

77. The goal of this programme is to contribute to the improvement of the food security and poverty reduction in STP. The project financing of \$10,000,000 will be implemented in the 2 islands of São Tomé and of Principe. It order to achieve its objective, the project will dedicate \$4,000,000 out of \$10,000,000 to the construction, rehabilitation, and modernization of the main fish unloading points (São Paolo, Néves, Sto Antonio de Principe, Santana) and the São Tomé fish market; the rehabilitation of 27 km of rural roads improve access of rural communities and agricultural products to markets and revitalize trade; the rehabilitation and extension of 10 irrigation systems; the construction of 6 storehouses, 12 plant nursery shelters, 11 solar dryers, and 6 transformation units of agricultural products. Notwithstanding these interventions to be carried out by PRIASA II project, they fall short of covering all the six districts where a significant number of vulnerable communities will not be affected by these initiatives. In addition, the interventions do not cover extreme climate and weather disaster safety net mechanisms such as cereal banks, food cooperatives, and other custom based mechanisms for managing risks associated with the impacts of climate variability on foods resources. The programmes also do not support measures to address the widespread erosion that is depleting the top productive soil layer affecting crop yield. Nor does the PRIASA II programme address the development of water-saving irrigation systems in the most vulnerable communities to counter periods of water shortage due to extreme drought conditions caused by the climate variability.

### Adaptation alternative - with LDCF Intervention

- 78. In the alternative scenario to be supported by the LDCF, the project will strengthen the ability of local communities and district administrations to cope with an increasing variable climate. The Government of São Tomé and Principe will build on the Infrastructure Rehabilitation for Food Security Support Project (PRIASA II) and, with the support of LDCF efforts, pilot new and easy replicable technologies and strategies (e.g. replacing open water irrigation canals with piping systems, rehabilitating the existing water storage structures (*Tanquões*) at Old Cocoa Farms (Roças)) and climate-proof other infrastructure systems. These interventions will significantly reduce downstream maintenance costs and offer more enduring solutions to cope with the dominant climatic events and impacts in STP, in particular erosion and drought episodes.
- 79. In addition, relevant institutions will use the LDCF funds to carry out concrete interventions to reduce climate variability impacts on farmers' fields. The interventions will be duly monitored with the involvement of local stakeholders and farming communities themselves. In particular, the project will focus on piloting a suite of cost-effective techniques relating to: i) small scale terracing structures complemented by tree/grass planting to protect cropping land from erosion phenomena in sloppy and vulnerable areas; ii) a rehabilitation programme for rural roads (caminhos rurais) based on a "Cashfor-Work" scheme to support improved access to rural markets; iii) develop small scale irrigation networks including installation of water conduction and delivery networks to support community resilient farming systems in drought prone areas; iv) development of small scale and innovative customized cereal banks structures for community grain surplus storage; and in coastal communities

Page | 42

v) the setting up of robust fish market stands and communal solar freezers and mobile solar freezers for fishmongers to enhance resilience of fishing communities against climate variability impacts.

In the first adaptation alternative, systematic local level adaptation strategies will be piloted in the selected vulnerable villages of the six São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). It will be critical that the local farmers and community members, as the key drivers of the adaptation strategy, identify their own local solutions. The LDCF funds will support the development of small-scale adaptation initiatives and structures that have the potential to support the improved resilience of livelihood options for rural communities. Instead of promoting single 'adaptation technologies', adaptation interventions will be will be promoted as part of a holistic 'livelihoods strategy'. This will include the promotion of community Climate Change Food Cooperatives (CC FOOD-COOPs) as well as long term produce storage and small scale processing of excess production to enhance the resilience of highly productive communities. In activities related to this outcome, the role of women will be central in developing and implementing the proposed climate change adaptation measures. Particular attention (including reporting) will be paid on how women have been engaged in the decision-making process related to outputs outlined below.

Costs component 2	
Co-financing:	US\$ 4,000,000
LDCF allocation:	<u>US\$ 1,275,800</u>
Total	US\$ 5,275,800

#### **Outputs and activities**

**Output 2.1.** Small scale community-managed approaches to manage climate induced flood, erosion and droughts are implemented to enhance the resilient elements in existing farming systems and support implementation of Districts and village level climate change platform plans in the 6 districts of CMPLCL and 30 villages.

80. The GoSTP will use the LDCF funds to support the design, the implementation and the maintenance of low-cost community based approaches to counter climate-induced soil erosion and flooding of crop fields. Potential activities to be implemented based on a participatory and transparent selection process with the local communities' involvement include: terracing, strengthening drainage systems, rain water control, landscaping, wind breaks and other forms of erosion control, as well as dykes and bunds to protect fields against flooding. Additionally, low-cost infrastructure to collect and distribute rain waters to counter periods of water shortage, and develop water saving irrigation systems in the most vulnerable communities will be built. Furthermore, this output will support the integration of climate and weather information (rain forecast, evapotranspiration, humidity, cyclones) in the design, use and management of irrigation systems (quantities of water to be used, when to use the irrigation systems, etc.) that will be built by with LDCF financing, and will leverage PRIASA II ongoing activities to promote efficient use of water resources. Additionally, the LDCF resources will support communities to make the community infrastructure supported by the PRIASA II project and other initiatives more resilient to climate risks and extreme events. This output will also support the design of the management scheme of the low infrastructure which will organize the use and mobilization of resources for the operation and maintenance of the infrastructure. The empowerment of communities targeted under Output 1.5 will include training on infrastructure management and maintenance.

Activity 2.1.1 Under the leadership of the CADR make an inventory of communities' water needs, and the most appropriate irrigation systems.

**Comment [CM1]:** What is the first part of this activity?

- Activity 2.1.2 Based on the results of activity 2.1.1 and under the leadership of CADR and the collaboration of District Authorities and NGO's/CBO's, support the building of small scale rainfall capture and water storage structures (with a maintenance and management plan) through a "Cash-for-Work" scheme in the areas prone to flooding and drought;
- Activity 2.1.3 In cooperation with PRIASA II, develop small scale irrigation networks linked to the rainfall capture and water storage facilities (with a maintenance and management plans) to support community resilient farming systems in drought prone areas of 30 villages of CMPLCL;
- Activity 2.1.4 Develop small scale terracing structures complemented by tree/grass planting (with a maintenance and management plan) to protect cropping land in sloped and vulnerable locations from erosion phenomena through a "Cash-for-Work" scheme throughout CMPLCL;
- Activity 2.1.5 In close cooperation with the Directorate for Forest (Direcção de Florestas,), the DAGric, the Districts and village level climate change platforms support youth and women's associations to establish small scale nurseries for the production of tree seedlings that will be used for erosion control measures supported by activity 2.1.5;
- **Output 2.2.** Community based safety net mechanisms for managing risks associated with climate variability impacts on foods resources and livelihoods are developed in each of the 30 most vulnerable villages of the districts of CMPLCL.
- 81. Under Output 2.2 of the proposed project, LDCF resources will be used to support the development of coping mechanisms such as cereal banks, food cooperatives, and other custom based mechanisms for managing risks associated with climate impacts on foods resources, natural and economic assets, and livelihoods in each of the 30 most vulnerable villages of the districts of CMPLCL. Communities and district officials at project sites will be supported to pilot adaptation measures applicable to food cooperatives (CC FOOD-COOPs) in each of the six districts, to plan and develop strategies for food crops and for the long term storage and small scale processing of excess produce; such is the case of tomatoes in Me-Zochi district. A suite of other cost-effective techniques for reducing rural vulnerabilities such as community managed grain surplus storage facilities will be developed. There are also varied techniques for building such facilities, with different costs and benefits according to the model of choice and their appropriateness in different contexts. The project will ensure that improved and cost-effective customized facilities are built in a demonstrative manner as an additional measure of adaptation to climate change. The preliminary livelihoods analysis carried out in the communities to understand how people access and control various resources has shown that coastal communities of some districts have been affected by climate variability in that the daily fishing catch has become so variable that there is now a need for infrastructure to conserve and process fish in times of excess catch. Likewise, rural markets to facilitate exchange of goods are lacking. The LDCF will endeavor to support the piloting of cost-effective measures that can help communities' livelihoods to become more resilient to climate variability and change.

- Activity 2.2.1 Under the Leadership of CATAP, guidance from CADR and support from the District Authorities and local NGO's/CBO's promote the setting up of community CC food Cooperatives (CC FOOD-COOPs) in each of the six districts, to Plan and develop strategies for food crop surplus management, conservation and/or commercialization;
- Activity 2.2.2 Under the Leadership of CATAP and in partnership with PRIASA II, CADR and CC Districts Platforms, support organization of community tomato producers and facilitate long term storage and small scale processing to enhance resilience of highly productive communities against climate variability impacts;
- Activity 2.2.3 Under the Leadership of CATAP and in partnership with PRIASA II, CADR and CC Districts Platforms, support organization of community fruit (banana/pineapple/mango) producers and facilitate long term storage and small scale processing to enhance resilience of highly productive communities against climate variability impacts;
- Activity 2.2.4 Under the leadership of CADR, collaboration from CIAT and CATAP and support from the District Authorities and CC Districts Platforms promote the development at district level of small scale and innovative customized cereal banks structures for community grain surplus storage;
- Activity 2.2.5 Under the guidance of CADR extension delegations support women fishmonger associations in the coastal districts of CMPLCL's 30 villages through a "Cash-for-Work" scheme to set up robust fish market stands and communal solar freezers to enhance resilience of the fishing community against climate variability impacts;
- Activity 2.2.6 Under the leadership of CADR and the guidance of CADR extension delegations support CC Districts and Village Platforms to strengthen the association of producers in general so as to organize, restore, and rebuild a network of rural markets to facilitate the exchange of goods and to strengthen community resilience against CC impacts.

**OUTCOME 3.** Adaptation strategies are designed and transferred to strengthen communities' climate resilience in the 30 most vulnerable villages of the 6 districts of CMPLCL of São Tome and Principe.

# Baseline - without LDCF intervention

82. The government of STP and its development partners have, through different projects and strategies, undertaken a set of actions aiming to increase smallholders' technical capacities and access to improved agricultural inputs, and to build support infrastructures for the agricultural production, processing, storage and marketing with the view of increasing food security and smallholders' incomes

### Associated baseline projects

# **Baseline Project #3:**

The Project for the rehabilitation of the infrastructures supporting food security – PRIASA II (2015 – 2019) (Co-financing: \$4 million).

In addition to supporting the rehabilitation of rural infrastructures this project has earmarked a budget of \$4,000,000 out of the \$10,000,000 total financing for supporting the improvement of farmer productivity and food security through the training of farmers in best agricultural practices and technologies, the improvement of farmer access to quality inputs and the provision of advisory support activities.

83. Unfortunately, this project did not integrate consideration of climate change risks in its design. This will hinder the achievement of its objectives. It is therefore an opportunity for the funds made available by this LDCF to complement the ongoing baseline activities to provide the vulnerable communities and small scale cocoa producers with adaptation strategies, technologies and skills in order to make current and future crops more resilient to climate change. This LDCF financed project therefore aims to strengthen capacity of the PRIASA II beneficiary communities with climate change related advisory support that will allow them to develop additional adaptation responses such as land and soil fertility management, efficient water use, use of resilient input and other resilient technologies.

# Adaptation alternative - with LDCF Intervention

- 84. Under Outcome 3 of this project, the Government of São Tomé and Principe will be able to use LDCF resources to effectively support the integration of climate change adaptation in STP local development projects, above all the initiatives targeting the increase of food and cash crop productivity, the development of the livestock farming, and forest exploitation and management – in short, the livelihoods of rural communities. The integration of climate change and variability in rural livelihood development initiatives will allow communities to practice sustainable and climate change resilient agriculture using climate resilient agriculture and livestock inputs, best agriculture technologies including sustainable land, forest and water management (SLFWM) strategies and integrating climate information into farming decisions. Also, the support needed for advancing the diversification of the rural economy (including saving and credit systems, management advice, and development of new commercial channels), must be secured in order to enable communities to pursue alternative income generating alternative activities. It is in fact about putting in place the conditions which will enable the sustainable increase of communities' resilience and capacities to adapt to climate change through a set of integrated actions including: the demonstration in selected areas of the Integrated Adaptation Measures (IAM) identified by the communities themselves through the climate change district and villages platforms and designed in the annual and multiyear adaptation plans (CC-VAAP); the setting up of Village Centers for Agriculture Resources Transformation (Village CART's) to enhance Communities livelihoods; the design and development of investment plans for communities' selected community-level adaptation measures; and the development of at least three micro-finance products tailored to the identified adaptation needs of the local communities to support alternative income generating activities. All these initiatives and strategies must be identified and planned by the communities themselves, with the support of the CATAP, CIAT and the district assemblies and governments, in the framework of the village and district adaptation annual plans. These initiatives and strategies are also intended to complement and enhance the past and ongoing baseline efforts developed by PRIASA II project resilience.
- 85. Following feasibility assessments and stakeholder consultations conducted between September 2012 and April 2013, LDCF resources will be used to produce the following outputs:

Costs component 3		
Co-financing: LDCF allocation: Total	US\$ 4,000,000 <u>US\$ 1,358,300</u> US\$ 5,358,300	Page   46

### Outputs and activities

**Output 3.1.** District and village annual and multiyear adaptation plans CC-VAAP for resilient livelihood options of 6 districts and 30 villages (CMPLCL) in STP are developed to identify, prioritize, coordinate and implement adaptation actions resulting from climate change platforms (CC-DAVIP).

- 86. Through Output 3.1, the LDCF funds will be used to provide technical support for the development of the District and Village Annual and multiyear Adaptation Plans (CC-VAAP). The CC-VAAP will provide the communities with the means to identify their own adaptation needs, prioritize, coordinate, plan and take ownership of the necessary actions to increase their adaptive capacity and livelihood resilience. The CC-VAAP will compile and plan on an annual and multiyear basis all the actions that need to be implemented by the supporting institutions and the communities themselves to increase the climate resilience of their livelihoods. They will include all the activities planned under Outcome 2 for making more resilient livelihoods options, and will go beyond by being the systematic tools for planning adaptation initiatives and by strengthening the climate resilience of future development activities. Upon project completion these District and Village Annual and multiyear Adaptation Plans will be submitted to the central government and the other private institutions members of the climate change platforms for implementation support.
- Activity 3.1.1 Under the leadership of CADR extension delegations and District Councils and the guidance of CC-DC's, and in close collaboration with CIAT & CATAP: establish SOPs for each of the 30 districts and villages CC Platforms to allow timely and systematic analysis of climate change constraints of existing farming systems and identification of resilient elements;
- Activity 3.1.2 Under the leadership of CADR extension delegations and District Councils and the guidance of CC-DC's, and in close collaboration with CIAT & CATAP: map the underlying causes of vulnerability against agromet seasonal forecasting products on an annual basis based on the results of Activity 3.1.1 and;
- Activity 3.1.3 Under the leadership of CADR extension delegations and District Councils and the guidance of CC-DC's, and in close collaboration with CIAT, CATAP: on annual basis carry out development of Integrated Adaptation Measures (IAMs) to be included in the annual and multiyear adaptation plans (CC-VAAP) for each of the 6 districts and 30 villages (CMPLCL), based on the results of Activity 3.1.2;
- Activity 3.1.4 On annual basis and under the leadership of CADR extension delegations and District Councils and the guidance of CC-DC's, and in close collaboration with CIAT, CATAP, carry out demonstration in selected areas of 6 districts and 30 villages (CMPLCL), of Integrated Adaptation Measures (IAM) designed in the annual and multiyear adaptation plans (CC-VAAP), to generate knowledge for reducing CC risk through resilient cropping methods;
- Activity 3.1.5 On annual basis and under the leadership of CADR extension delegations and District Councils and the guidance of CC-DC's, and in close collaboration with CIAT, CATAP: carry out monitoring and impact evaluation of identified interventions in 6 districts and 30 villages (CMPLCL) to enhance knowledge for scaling up through comprehensive action in the country.

**Output 3.2.** Long-term agro-sylvo-pastoral adaptation technologies, tools and mechanisms to strengthen communities' climate resilience in the 30 most vulnerable villages of the 6 districts of CMPLCL are developed by CIAT, CATAP and CADR.

Under Output 3.2, the Government of São Tomé and Principe will be able to use the LDCF funds to support the development of agro-sylvo-pastoral adaptation technologies<sup>8</sup> and climate resilient seeds and seedlings for cocoa growing to support the enhancement of PRIASA II project resilience by the CIAT. It will also support the Taiwan food crop project to include climate change concerns in the food crops seeds and seedling production and the elaboration of agricultural standard operating procedures (SOPs). The identification of the adaptation technologies will take into account the adaptation technologies successfully piloted by the earlier UNDP-supported AAP programme and also the adaptation needs identified by the communities themselves through the climate change district and villages platforms. Certainly strategies for production of resilient inputs supply, soil fertility management and reduction of herbicide and pesticide utilization and mishandling are the priority.

Activity 3.2.1 Under the leadership of CIAT and CATAP with in collaboration with CADR conduct consultations with farmer community and extension officers to identify the required adaptation technologies, tools and mechanisms for improving farming and livestock management operations under the context of Climate Change;

Activity 3.2.2 Under the leadership of CIAT and in collaboration with CADR develop adaptation technologies, tools and mechanism identified under Activity 3.2.1, including composting technology, fertilizers and pesticides management, weed control and production of climate resilient seeds and seedlings for alternative crops (cocoa, maize, cassava, sweet potato, taro and soybean);

**Activity 3.2.3** Under the leadership of CATAP and in collaboration with CADR develop livestock management adaptation technologies, tools and mechanisms identified under Output 3.2.1 to improve livestock farming in the context of climate change;

**Activity 3.2.6** Under the leadership of CIAT and CATAP with collaboration of CADR district delegations support local smallholders to adopt and implement newly chosen adaptation technologies, tools and mechanisms through capacity building.

**Output 3.3.** Village Centres for Agriculture Products Transformation (Village CAPTs) are established to support 2,000 rural households in the 30 most vulnerable villages of the 6 districts of CMPLCL.

87. LDCF resources will be used to finance the design by the communities themselves and the implementation of priority community adaptation interventions, focusing on resilience of current livelihood options in cocoa production and livelihood diversification (beekeeping, ecotourism, NPFL exploitation, small ruminant and poultry breeding, artisanal activities, resilient inputs supply, etc.) for the benefit of 2,000 rural households around the 30 most vulnerable villages (with a special emphasis on households of which women are head of family) to be developed through Village Centers for

<sup>&</sup>lt;sup>8</sup> These technologies will include water-saving irrigation techniques, climate resilient land, forest and soil fertility management strategies and the use of relevant climate information and agrometeorological products like meteorological bulletins, disaster warnings (that will be produced thanks to the LDCF/EWS project), and other strategies.

Agriculture Products Transformation (Village CAPTs) in one site of each of the 6 districts of CMPLCL. The adaptation interventions will promote diffusion and sustainable adoption of climate resilient agro-sylvo-pastoral technologies identified by the CIAT in Output 3.3 through the implementation of training packages. These technologies will include water-saving irrigation techniques; climate resilient land, forest and soil fertility management strategies; the use of relevant climate information and agro-meteorological products like meteorological bulletins, disaster warnings (that will be produced thanks to the LDCF/EWS project); and other strategies to support both farmers targeted by the PRIASA II projects and others to be more resilient to climate changes. The climate resilient alternative livelihoods options will also include support for the creation of artisanal and craft workshops and SME for the construction and maintenance of the low cost community infrastructures (under Output 2.1).

Activity 3.3.1 Under the leadership of CADR, the guidance of CC-DC's and in collaboration with PRIASA II and CATAP: technically and financially support local women and youth CBO's/Associations to set up Village Centres for Agriculture Products Transformation (Village CAPTs) to enhance Communities livelihood potential in one pilot site in each of the 6 districts (CMPLCL). These V-CAPs will support the following activity and any other relevant activity that will be identified by the Government of STP:

- creation of artisan and craft workshops;
- construction and maintenance of low-cost community infrastructures including facilities and equipment for production of native fruit jam;
- support for the establishment of beekeeping and honey production facilities;
- support for the establishment of native fruits liquor production facilities;
- construction and maintenance of low-cost community infrastructures for small ruminant and poultry breeding;

**Activity 3.3.2** Support the development and implementation of a marketing strategy to improve the access to the market of the products developed by the Village CAPTs. This strategy will include the organization of product fairs, improvement of processing quality, identification of markets niches and link-up of the Village CAPTs with potential buyers;

Activity 3.3.3 Identify capacity development needs for Village CART's and provide support to fill the identified capacity gaps;

**Output 3.4.** At least 3 new Micro-credit products to finance the required investments for improving the cliamte resilience of current livelihoods and for supporting alternatives income generating activities are designed, tested and promoted in the 30 most vulnerable villages of the 6 districts of CMPLCL,

88. Under Output 3.4, the GoSTP will be able to use the LDCF funds to work with local NGOs such as MARAPA and some banks (micro-finance institutions) and help adjust their schemes to deploy adaptation finance. At least three micro-credit products will be designed and offered through financial service providers to increase resilience of current livelihoods (e.g. resilient seeds and animal breeds; efficient water harvesting, irrigation and storage technologies, improved fishing techniques and capacity; or DPC) and support alternative income generating activities (under Output 2.3). Micro-finance institutions will be supported to adopt a wholesale approach and include adaptation services to the communities. Flexible repayment installments, yearly or seasonal will be tested to consider the seasonal or inter-annual climate variability as well as the seasonality of the alternative income generating activities. This will be done without undermining an overall repayment schedule and

financial discipline of all parties. The project will help the Microfinance Institutions (MFIs) to identify the community members willing to participate in the scheme and to accept the terms and conditions of the project, as well as identify demonstrated interest to innovate on current livelihoods options (assessment may be obtained from the resident extension officers and NGOs) and provide incentives (e.g. through flexible repayment) for adoption of adaptive practices, including training and technical service package from the partner extension providers.

- Activity 3.4.1 Facilitate consultations with the MFIs to determine the conditions in which MFIs can develop and offer at least three micro-finance financial products (i.e. micro-credit, savings, micro-insurance) tailored to the identified adaptation needs of the local communities;
- Activity 3.4.2 With the help of micro finance specialist expertise: give support to MFIs to develop guidelines to undertake financial risk and benefits assessments of priority short-listed climate change adaptation options;
- Activity 3.4.3 Provide training to MFI staffs on how to integrate climate risks information in the financial assessment (Activity 3.4.2) of agro-sylvo-pastoral related finance request and train the staff of the MFI partners to carry out financial, organizational, and institutional assessment of bidders received.
- Activity 3.4.4 Under the leadership of CADR, local NGO's and MFIs, identify community members and MFIs that are willing to participate in testing of the new microfinance products;
- **Activity 3.4.5** Under the leadership of CADR district delegations, local NGO's and MFIs: provide trainings and technical assistance to the local communities to acquire the skills and tools for developing, assessing, pricing and implementing adaptation investment plan.

# 2.5. Key indicators, risks and assumptions

- 89. The proposed project indicator framework follows the GEF-5 Adaptation Monitoring and Assessment Tool (AMAT) and is aligned with the UNDP M&E Framework for Adaptation. Objective level indicators and outcome level indicators are specified according to the UNDP nomenclature of Results Based Management (RBM). The project design anticipates the development of more specific M&E tools, especially at the local implementation level. Participatory local level M&E can be a powerful management and communication tool, especially tracking and demonstrating project results at the demonstration sites. It is anticipated that a more detailed M&E project framework is developed during the project inception phase for national management purposes.
- 90. An overall project M&E plan has been devised and is included in the respective section of the project document below. It outlines regular progress reporting, as well as audits, a mid-term evaluation and an end of project evaluation.
- 91. The indicators are designed to measure change in the coverage, impact, sustainability and replicability of the LDCF project. These indicators track progress in achieving project objectives and outcomes. The baseline, target, source of verification, risks and assumption per indicator are detailed in the Project Results Framework (see Section 4). Baseline values and targets per indicator are expected to be verified within the first six months of project implementation.
- 92. The project results framework indicators are as follows (Table 4):

**Table 4. Outcome indicators** 

Indicator	Time scale and Measurement
Outcome 1. The capacity of the CATAP, CIAT, district governments and assemblies, district councils, CSOs and CBOs strengthened to support the enhancement of climate resilience of rural community livelihoods.	
Indicator 1	Time Frame: By year 4 of the project.
1.1 Capacity perception index in CATAP, CIAT, CSE, CSOs, CBOs and districts councils disaggregated by gender.	Measured by: VRA Field survey and APRs/PIR.
(Baseline: 0; Target: ≥ 3 (Substantial training in practical application (e.g. vocational training))	
Indicator 2	Time Frame: By the end of Project
1.2 Number of Agricultural Extension staff trained on adaptation strategies to support village climate change platforms and selected community farmers.	Measured by: Project monitoring and APRs/PIR.
(Baseline: 12; Target: ≥ 60)	
Outcome 2. Vulnerability of rural livelihoods reduced through climate risk management supportive infrastructures and practices.	
Indicator 1	Time Frame: By the end of Project
2.1 Number of small scale rainfall harvesting, number of water storage structures and/or small sale irrigation networks established at community level.	Measured by: Project monitoring and technical assessment reports APRs/PIR.
(Baseline: 0; Target: ≥1 per target village )	
Indicator 2	Time Frame: By end of Project
2.2 Number of ha that have benefited from any form of erosion control as well as dykes and bunds to protect fields against flooding.	Measured by: Project monitoring and technical assessment reports (PIR).
(Baseline: 0; Target: ≥ 10 ha)	
Outcome 3. Adaptation strategies are designed and transferred to strengthen communities' climate resilience in the 30 most vulnerable villages of the 6 districts of CMPLCL of São Tomé and Principe.	
Indicator 1	Time Frame: By end of Project
3.1 Number of climate risk management measures successfully implemented by community members as a result of a microfinance loan.	Measured by: Project evaluation reports (PIR) and technical assessment reports APRs/PIR.
(Baseline: 0; Target: ≥2)	
Indicator 2	Time Frame: By end of Project
3.2 Number of Integrated Adaptation Measures (IAMs) included in the annual and multiyear adaptation plans (CCVAAP) that were successfully demonstrated and scaled up at community level.	Measured by: Project evaluation reports (PIR). Integrated Adaptation Measures & Annual and Multiyear Adaptation Plans developed.

(Baseline: 0; Target: ≥5

93. A complete Risk Log is included in Annex 1 of the project document. It includes risks identified in the PIF as well as newly identified risks and recommended countermeasures. Barriers are included in the Barrier section (1.3.1) above and are generally represented by the risks specified below (Table 5). Most risks are organizational or strategic in nature, and mainly relate to relatively low current institutional and individual capacities of the public service structure in terms of adaptation. Risks that could potentially affect the success of the project are included in Annex 1.

Table 5. Main Risks and Assumptions

RISKS	ASSUMPTIONS
Insufficient institutional support and political commitments, and lack of coordination of key stakeholders.	Government is committed to support the implementation of the adaptation measures in the selected vulnerable villages of the Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL) districts;  Stakeholders and local communities are committed to implementing the project interventions and provide the necessary support and collaboration.
Lack of capacity of communities to develop Integrated Adaptation Measures (IAMs) included in the annual and multiyear adaptation plans (CC-VAAP) and not enough Extension Workers able to support rural areas and implementation of village annual and multiyear adaptation plans (CC-VAAP).  Weak institutional capacity at District level to oversee, support and guide the process of establishment of districts and villages CC Platforms (CC-DAVIP)	The project will train at least 90 Agricultural Extension staff (including on-the job trainings scheme) on adaptation strategies to support village climate change platform and vulnerable communities. Communities will be trained and provided with the means to identify their own adaptation needs, prioritize, coordinate and plan.  The Ministry of Agriculture, Fisheries and Rural Development (MAPDR) has only the CADR Extension delegations at district and village level which can be of reduced capacity in oversight, technical and fiduciary implementation of projects.  However, the project activities in Output 1.4 in close partnership with CIAT, CATAP and CADR will develop capacity building to help mitigate the risk associated with the weakness of institutional capacities.
Microfinance Institutions (MFIs) aversion to risks can keep them from developing innovative products to finance adaptation, as they can be deterred from incurring upfront expenses even when the overall balance of costs and benefits is positive.	Micro-finance institutions will be sensitized on financial interests of adaptation supported to develop guidelines for integrating climate risks information on assessing financial request and train on these guidelines. This will be completed by consultations with the governments to identify the incentives for the MFI to integrate the area of climate change adaptation. This will alleviate their fear of developing the financial products.

Continued decrease of commercial crop (cocoa, coffee, etc.) prices:	Studies have revealed that when cocoa prices are low, STP cocoa producers complement the decrease of agricultural incomes with charcoal production and selling, and this has contributed to the depletion of forest resources STP. Then, if the commercial crops prices experience a continue drop, this may lead to disinterest among farmers for the project activities related to these crops, negatively affect the achievement of project objectives to preserve forest ecosystem integrity and the project success at whole. The project emphasis in climate change resilient alternative income generating activities will help to mitigate this risk by giving to the farmers more secure revenues sources less vulnerable to the international market context.
Poor coordination, weak capacity of relevant stakeholders and lack of willingness of community villagers to support implementation of climate change adaptation measures in target selected vulnerable village.	The climate change adaptation measures correspond to the urgent needs expressed by the primary proponents, particularly the community villagers, which will reduce the risk of lack of support from the communities.  There will be clear project management arrangements
Climate risk reduction and alternative income generation activities' financing mechanisms increase indebtedness and vulnerability	and regular interactions between the stakeholders.  Capacity building and technical support programmes will be designed and implemented for any innovative financial product intended to finance climate risk reduction that will be introduced. The capacity building will target improvement of the capacity of MFI to assess applicant's suitability for any climate risks reduction credit facilities and the economic profitability of the climate risks reduction strategies seeking financing.
Communities may not adopt eco-system protection and enhancement measures	Raising the community awareness of the benefits associated with reforestation is central to the reforestation activities piloted by the project.  The project team will build on experience from other projects undertaking similar activities to promote good practice, and reduce this risk.

# 2.6. Cost-effectiveness

- 94. Strengthening the adaptive capability of the country to climate change impacts was identified in the NAPA as an urgent and immediate adaptation priority, with the highest immediate cost-benefit ratio. The project will be implementing three out of twenty two identified urgent and immediate priority adaptation options as per the NAPA. Additionally, the project has been designed to complement and build on the on-going work of line agencies including other major donor-assisted projects as described in detail in Section 2.3, thereby increasing its efficiency, cost-effectiveness and sustainability.
- 95. The project will, among other things, inform and complement baseline investments amounting to more than US\$60 million in strengthening communities' livelihood resilience to climate change

within São Tomé (i.e. the PRIASA II, SATOCAO, Taiwan Project and the "Global climate change Alliance (GCCA)" project). The success of these projects is likely to be hindered by anticipated climate change impacts due to the fact that climate change considerations are presently not integrated into these projects. The economic impact of the project's activities related to these baseline projects is, therefore, potentially much higher than its initial investment and thus very likely to be cost-effective.

- 96. Furthermore, LDCF project activities will build on existing ongoing work in the baseline, achievements and planned actions by other initiatives such as the PRIASA II and SATOCAO projects. This will allow institutional capacity to be built cost-effectively, ultimately assisting in developing the Village annual and multiyear adaptation plans (CC-VAAP) as well as planning and implementation of Integrated Adaptation Measures (IAM). This approach of complementing existing, related projects will be more cost-effective than the implementation of a separate initiative, as it will allow the LDCF project to be managed within the existing institutional and management frameworks.
- 97. All costs for inputs, human resources, and supplies are meant to be competitive, both in national and international context. Through the implementation of Integrated Adaptation Measures (IAM) identified by the communities themselves via the Climate Change District and Villages Platforms and designed in the Village annual and multiyear adaptation plans (CC-VAAP) and further the demonstration in selected areas of vulnerable communities as well as the setting up of Village Centers for Agriculture Resources Transformation (Village CART's) to enhance Communities livelihoods, the project aims to reach a total of approximately 9,070 people with an average investment of US\$440 per each member of vulnerable community directly affected by the project (total LCDF budget, including management cost). The tangible benefits coming from this investment per household will far outweigh the cost.
- 98. Where actual techniques, infrastructures and small-scale adaptation measures are to be identified by community members and stakeholders in the inception phase (following research into various options), cost-effectiveness will be a key factor taken into consideration. In addition, the effectiveness of these activities in increasing communities' livelihoods resilience to climate change will be tested and measured during the course of the project. This will be achieved through an economic analysis and cost-benefit analysis to ascertain whether each activity is an economically viable option given climate change conditions. The most successful activities will be prioritised for scaling up to neighbouring communities and details regarding their implementation will be disseminated widely at the workshops/training events undertaken by the project.
- 99. The adaptation measures to be piloted by the project, particularly the reforestation and restoration activities with the design, implementation and maintenance of low-cost community infrastructures to counter climate-induced soil erosion and flooding of crop fields (see paragraph 128), will have multiple benefits for a wide-range of beneficiaries. Measures such as the introduction of rainwater harvesting techniques, water-saving irrigation techniques, and climate resilient land, forest and soil fertility management strategies will allow communities to capitalize on episodes of increased rainfall as a result of climate change using relatively low-cost equipment. Additionally, the development of extreme climate and weather disaster safety net mechanisms such as cereal banks, food cooperatives, and other custom based mechanisms for managing risks associated with climate variability impacts on foods resources, natural and economic assets, and livelihoods (see paragraph 129), will improve the adaptive capacity of community members. Such measures are also relatively inexpensive and are likely to be readily adopted by community members, which will catalyze adaptation in areas neighboring the project's demonstration areas.

- 100. Lessons learned from on-the-ground interventions will be captured and disseminated through inter alia: i) Climate Change Farmers Field Schools (CC-FFS's) demonstration plots, to train and enlighten Community Based Organizations and community farmers on the safety and efficient use of agriculture inputs (equipment, seeds, other agriculture inputs, etc.); ii) website for dissemination of community-based adaptation approaches, lessons learnt and communities' traditional knowledge to be widely shared with local partners, international agencies, scientific community; iii) a toolkit outlining methodologies used to assess climate change risks, adaptation planning and implementation, cost effectiveness analysis and a replication plan for all six district CC Platforms; and iv) Climate Change Training and Adaptation Modules (CCTAM), a toolbox that will include courses, handbooks and manuals. This integrated approach provides a cost-effective manner of informing an extensive range of stakeholders, which include government technical staff, policy-makers, restoration practitioners, scientists, university students, school children and the general public.
- 101. Finally with regard to procurement of project inputs, standard procedures of the GoSTP and UNDP will be carefully applied to ensure value for money in all purchases of goods and procurement of services for the project, and the project will use strict internal and external audit controls that meet international standards.

### 2.7. Sustainability

- 102. The project addresses key national development priorities highlighted in the São Tomé and Principe Second Poverty Reduction Strategy Paper (PRSP II) 2012-2016 as well as climate change-related priorities identified and specified through the participatory and bottom-up NAPA process. The project has strong government support as well as buy-in at the district level. Consequently, a high commitment to carry out project activities and to internalize them in long-term government actions, to scale up and mainstream adaptation learning into long-term policies, plans, and national budgets is given. In addition, other key stakeholders (including the private sector) consulted during the PPG phase have expressed their full support as it addresses urgent and immediate adaptation priorities identified through the NAPA.
- 103. As the project interventions at the demonstration site level are needs-driven and will be implemented in a participatory manner, applying state-of-the-art farmers' action learning, a high level of sustainability and absorption of adaptive capacity is also foreseen.
- 104. Capacity building is one of the key foundations to the approach of the design. Government institutions will be strengthened to be able to deal with climate change risk and adaptation needs. Especially CIAT, CATAP and the CADR, as well as District level staff and authorities of the most vulnerable districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL) will be better positioned to emerge as competent authorities on adaptation in the agricultural and food security.
- 105. Therefore the project is designed with a strong capacity building focus, particularly the training of at least 90 Agricultural extension staff (including on-the-job trainings scheme) on adaptation strategies to support the village climate change platform and vulnerable communities in the CMPLCL transition to climate-resilient livelihoods (Activity 1.3.3). These Extension Officers as well as broad stakeholder participation and consultation through the district and village platforms will be the guarantee that project activities can be continued beyond the period of LDCF support. Furthermore, putting in a concerted effort of addressing climate change risks with local farmers, piloting adaptation options and using the demonstration site as a 'laboratory for learning' including for Extension

Officers, will form the foundation for sustainability of: i) the proposed adaptation action on the ground and; ii) addressing climate change risks and adaptation sustainability throughout the policy framework. This is consecutively addressed in Outputs 2.1, 2.2 and 3.2 to 3.3 and the underpinning project activities.

- In addition, the project specifically includes a suite of capacity and training initiatives all aimed at ensuring the sustainability of the project outcomes, particularly in Component 1. These include namely: the establishment of a partnership with an international climate change adaptation training centre to develop and deliver an in-house training programme for CIAT, aimed at the development of a strategy for the sustainability of CIAT climate change adaptation research programme in STP (Activity 1.1.3); the training of 50 Trainers (technical staff members of CATAP) in climate change impacts on agricultural production, resilient farming, and climate change adaptation agricultural technologies to strengthen its institutional capacity as national agro-sylvo-pastoral climate change adaptation training centre (Output 1.2); the development and delivery of capacity and training programme in CC planning of resilience and adaptation methods and techniques (Activity 1.4.4) for the Leading and Management Members (LMMs) of all 30 villages CC Platforms (CC-DAVIP); the training of up to 300 representatives of the districts and villages platforms, district governments assemblies on how to identify resilient elements of current livelihoods options and integrate into Climate Change Annual Adaptation Plans (CC-VAAP) for development and implementation of adaptative practices (Output 1.5); and finally the training of up to 10 members of the Center of Ecology Surveillance (CES) and Directorate General for the Environment (DGE) in GIS techniques and skills to increase their capacity in the integration of climate risks in the monitoring of the evolution of the STP ecosystems and the identification of the climate risks in 6 districts of CMPLCL and 30 most vulnerable villages (Output 1.6).
- To sustain the LDCF project interventions beyond the project implementation period, ownership of the LDCF project by government structures (primarily the Ministry of Agriculture, Fisheries and Rural Development (MoAFRD)) is essential. Consequently, relevant government departments (such as CIAT, CATAP and CADR), as well as local communities have been involved in the design and need to be fully involved in the implementation of project interventions. This participatory approach has been initiated right through the initial stages of the process through collaboration with national government departments in designing the LDCF project approach and interventions. Implementation of the project activities will include technical capacity building focused on appropriate government departments that will coordinate and/or support the implementation of the LDCF project. Furthermore, local communities will be consulted during the development of any adaptation measures or infrastructure. Community needs will therefore be addressed by the LDCF project, through the Districts and Village levels platforms (climate change committees- CC-DAVIP) in the 6 districts of CMPLCL, which will encourage community ownership of the project's activities. Government staff, particularly the Extension Officers will be involved in these community capacity building exercises, and as a result the capacity of government staff working within the project to develop and implement climate resilient-related measures will be significantly strengthened, which will be beneficial for the future food security of vulnerable communities within São Tomé and Principe.

# 2.8. Replicability

108. The project is being implemented in selected most vulnerable communities of São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL). There is thus considerable potential for widespread replication of the interventions at a larger national scale. The project anticipates the establishment of Climate Change Farmers Field Schools (CC-FFS's) demonstration

plots, to train and enlighten Community Based Organizations and community farmers on the safety and efficient use of agriculture inputs (equipment, seeds, other agriculture inputs). Local-level stakeholders will be capacitated through these specific project activities and involved in implementing the project's activities, thereby ensuring the project delivers tangible benefits. This will surely improve the likelihood of replication of such activities in additional sites as stakeholders will be capacitated with the skills to replicate activities and will be exposed to the benefits associated with successful activities.

- 109. The project will also generate important documentation of studies and analyses, including the development of Climate Change Training and Adaptation Modules (CCTAM), a toolbox that will include courses, handbooks and manuals that will be widely disseminated through workshops and existing knowledge networks. Importantly, the project will ensure that project lessons emerging from key project activities, such as rainwater harvesting, rainwater infiltration and reforestation are documented. Furthermore, best practices and documentation from the project will be disseminated globally via the project's web-based platform to be created for dissemination of community-based adaptation approaches, lessons learnt and communities' traditional knowledge to be widely shared with local partners, international agencies, scientific community and through the UNDP"s Adaptation Learning Mechanism (ALM) and "weADAPT Knowledge Base" Platforms.
- 110. Finally, the design, testing and diffusion of the innovative micro-finance products by the project will increase awareness of the communities of small scale market opportunities related to adaptation to climate change. By demonstrating how investments in climate-resilient livelihoods can be profitable, the project will thereby promote the extension of micro-financing services beyond the project sites.

#### 2.9. Stakeholder involvement plan

- 111. All major stakeholders have been consulted in the project conceptualization and design phase before and during the project preparatory phase, as part of their mandates as key governmental counterparts of the process.
- 112. The draft proposal was presented to a wide range of stakeholders at a National workshop in (November 2013) and their inputs were used to further develop the project design and the core of the Project Document. One additional mission was carried out to the country to establish the baseline of Communities' and stakeholders vulnerability towards climate change-induced extreme weather events and to find out about community and stakeholder priorities for climate change adaptation to enhance the communities' livelihoods resilience. See Annex 2 for the full list of project stakeholder analysis and consultations.
- 113. Stakeholders involved in all consultations that were undertaken during the project preparation phase include a range of types of groups, all with their own interests and concerns (Table 6). They have different roles to play in the project, and the table below indicates key stakeholders and their possible roles. National level groups will include central government, and autonomous GoSTP agencies like the Ministry of Agriculture, Fisheries and Rural Development (MoAFRD), CIAT, CATAP and CADR.

\_

<sup>&</sup>lt;sup>9</sup> http://weadapt.org/knowledge-base/guidance/knowledge-base.

114. Traditional leadership, although civil, is appointed through state institutions. The lead institution for all project outputs is the Ministry of Agriculture, Fisheries and Rural Development (MoAFRD). The implementation strategy for the project is dependent on comprehensive stakeholder participation.

Table 6. Key stakeholders involved in all consultations and their possible roles and their possible roles

STAKEHOLDER	RELEVANT ROLES
Ministry Of Agriculture, Fisheries and Rural Development (MoAFRD)	<ul> <li>Will assume the role of implementing agency and therefore will be accountable for programme execution.</li> <li>Will be part of the Steering Committee.</li> <li>Will chair the project technical committee (CTP).</li> <li>Will designate a national director for the project within it.</li> <li>Will host the project management team (allocate appropriate work spaces, including water and electricity).</li> <li>Will implement project activities and assure the involvement of its representing institutions at the 2 islands level</li> <li>Will ensure the integration and sharing of lessons learned from the project in sharing knowledge networks.</li> </ul>
Agriculture Division, Ministry of Planning and Development	<ul> <li>Will be part of the Steering Committee</li> <li>Will participate in the selection of the project sites</li> <li>Will share responsibility for supporting and monitoring the project at local and community level</li> </ul>
Agricultural development associations and cooperatives intervening in the project implementation areas	<ul> <li>Will participate in the selection of three sites at the local and community level</li> <li>Will facilitate the efficient coordination of the project at the national, local and community level</li> <li>Will be responsible for community mobilization</li> <li>Will share responsibility for supporting and monitoring the project at local and community level</li> </ul>
Center for Agro Pastoral Development (CATAP)	<ul> <li>Will be part of the Steering Committee.</li> <li>Will provide technical supervision of beneficiary farmers;</li> <li>Technical support and advice for the benefit of the beneficiary communities;</li> <li>Implementation of training programmes and extension of good agricultural practices to adapt</li> <li>Will be responsible for the identification and the test of climate resilient agriculture technologies packages</li> <li>Will support the CIAT in the design and implementation of a training package on climate resilient agriculture technologies packages</li> <li>Will ensure the integration of climate change in any research programme on agriculture</li> <li>Work in collaboration with the CIAT for the development of a national platform for sharing knowledge and experiences from the climate change adaptation projects including this project</li> </ul>
Agricultural Research and Technology Centre (CIAT)	<ul> <li>Will be part of the Steering Committee.</li> <li>Will be responsible for the design and implementation of a training package on climate resilient agriculture</li> <li>Will be responsible for the identification and tests of climate resilient agriculture technologies</li> <li>Participate in the development and review of the policy of the country in research on agricultural development</li> <li>Work with the CATAP for the development of a national platform for sharing knowledge and experiences from the climate change adaptation projects in the agricultural sector, including this project</li> </ul>
The Centre for Support	Will be part of the Steering Committee.

of Rural Development of the Ministry of Planning and Development (CADR)	<ul> <li>Will be responsible for the design and implementation of a training package on climate resilient agriculture</li> <li>Will be responsible for the identification and tests of climate resilient agriculture technologies</li> <li>Will be responsible for carrying out agriculture and fisheries extension support to local communities in the six districts, promoting all kinds of support needed for a good agricultural, fishery and environmental development.</li> <li>Will work with CATAP and CIAT for the development of a national platform for sharing knowledge and experiences from the climate change adaptation projects in the agricultural sector, including this project.</li> </ul>
Federation of NGOs – FONG STP	<ul> <li>Execution of the project above all on aspects related to the implementation of building communities capacities and other support activities to protect communities' livelihoods against climate change.</li> </ul>
District authorities	<ul> <li>Will be part of the Steering Committee.</li> <li>Will be part of the Climate Change District and Villages Platforms and designed in the Village annual and multiyear adaptation plans (CC-VAAP).</li> <li>Execution of the project above all on aspects related to the implementation of building communities capacities and other support activities to protect communities' livelihoods against climate change.</li> </ul>
Local communities	<ul> <li>Main beneficiaries of the project.</li> <li>Execution and control</li> <li>Will be involved in implementation and accountability</li> <li>Public tenders</li> <li>Recruitment and facilitations</li> <li>Preparation of AWP</li> <li>Budget expend</li> <li>Reporting</li> </ul>
Community leaders	<ul> <li>Community supervision and represent communities in decision-making processes.</li> <li>Will be part of CC district Committees (CC-DC's) to oversee, support and guide the process of establishment of districts and villages CC Platforms (CC-DAVIP).</li> <li>Will be part of Leading and Management Members (LMMs) of all 30 villages CC Platforms.</li> </ul>
National Court of Auditors	Financial control     Report     Capacity building for districts staff
Decentralization directorate	<ul><li>Facilitate the work of districts</li><li>Government policy on decentralization</li></ul>

# 2.10 Compliance with UNDP Safeguards Policies

115. The process of applying UNDP safeguard requirements indicates that activities proposed by the project will not be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions. In fact the intent of the project is to address this existing risk through increasing climate resilience through i) the establishment of small scale terracing structures complemented by tree/grass planting to protect cropping land from erosion phenomena in sloped and vulnerable locations of CMPLCL 30 villages; and ii) the rehabilitation programme for rural trails (caminhos rurais) to support organization of rural markets in 30 most vulnerable villages.

- 116. In addition, it is unlikely the process of applying UNDP safeguard requirements for the activities developed by the project will have negative impacts that could affect women's and men's ability to use, develop and protect natural resources and other natural capital assets as the idea is to improve land and natural resource management in the vicinity of proposed community based small scale infrastructures with participation of community organizations.
- 117. Furthermore the UNDP safeguard requirements do not indicate that the physical intervention that will result during the project implementation will be likely to affect areas that have known physical or cultural significance to indigenous groups and other communities with settled recognized cultural claims because these will be small scale community-driven or based on cash-for-work infrastructure schemes.
- 118. The project will result in policy and planning level outcomes (Output 1.6 and Activity 1.6.2 & 1.6.3) particularly with respect to (i) mainstreaming of climate change risks into national policies and plans aimed at protecting agriculture and forest ecosystems against climate changes and variability impacts and (ii) mainstreaming of climate change risks into biodiversity conservation strategies at the community level to achieve 3 of the 5 strategic objectives of the NBSAP.
- 119. Conspicuously, the only clear area that this screening has identified for further work is to review the measures in place for the design and implementation of some categories of small scale rural infrastructure, particularly in relation to small scale rainfall harvesting (Activity 2.1.2) as well as the installation of water storage at community level and small scale irrigation networks, including installation of water conduction and delivery networks to support community resilient farming systems in drought prone areas of CMPLCL 30 villages (Activity 2.1.3). Therefore follow up with this issue is recommended, and should be addressed during an LPAC meeting and included as an agenda item in the UNDP Environment Unit project inception meeting. There should be particular follow-up for Outputs 2.1, 2.2 and 3.3.

### 3. PROJECT RESULTS FRAMEWORK

### This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD:

By 2016, the Government and districts, as well as the population, adopt techniques and behaviours that promote a sustainable environment and ensure better prevention and management of risks and natural disasters

#### **Country Programme Outcome Indicators:**

Number of monitoring systems in place for pollution and disaster risk management

Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): Promote climate change adaptation

Applicable SOF (e.g. GEF) Strategic Objective and Program: Applicable SOF (e.g. GEF) Strategic Objective and Program: Objective 2 "Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level"

Applicable SOF (e.g. GEF) Expected Outcomes: Outcome 2.1 "Increased knowledge and understanding of climate variability and change-induced risks at country level and in targeted vulnerable areas" and Outcome 2.2 "Strengthened adaptive capacity to reduce risks to climate-induced economic losses"

### Applicable SOF (e.g .GEF) Outcome Indicators:

2.2.1 No and type of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability

1.3.1. Households and communities have more secure access to livelihood assets (Score) – Disaggregated by gender

	Indicator	Baseline	Targets End of Project	Source of verification	Risks and Assumptions
Project Objective <sup>10</sup> To strengthen the resilience of rural community livelihood options against climate change impacts in the São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL).	Percentage change in vulnerability of local community to climate risks via perception based survey (VRA)	The PIF and local level assessments at demonstration sites during PPG consultation process indicates high vulnerability of the selected sites.	At mid-term 25% increase of VRA score; at end-of-project 50% of VRA score.	Gender sensitive field survey based experimental design principles / VRA and/or local level assessments at demonstration sites (Questionnaire based appraisal - QBA) APRs/PIR	Risk: Insufficient institutional support and political commitments and lack of coordination of the various key stakeholders  Assumptions:  Government is committed to support the implementation of the adaptation measures in the selected vulnerable villages of the Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL) districts;  Stakeholders and local communities are committed to implement the project interventions and provide the necessary support and collaboration.

<sup>&</sup>lt;sup>10</sup> Objective (Atlas output) monitored quarterly ERBM and annually in APR/PIR

Outcome 1 <sup>11</sup>	1.1 Capacity perception	1.1 VRA to be undertaken at the project	1.1 By year 4 of the	1.1 Gender sensitive	Risk: Weak institutional capacity at District
The capacity of the CATAP, CIAT, district governments and assemblies, district councils, CSOs and CBOs strengthened to	index in CATAP, CIAT, CSE, CSOs, CBOs and districts councils.	onset.	project Target ≥ 3	field survey based experimental design principles /VRA Field survey and APRs/PIR	level to oversee, support and guide the process of establishment of districts and villages CC Platforms (CC-DAVIP)
support the enhancement of climate resilience of					Assumptions:  • The project activities will develop capacity building to help mitigate the risk associated
rural community livelihoods.	1.2 Number of Agricultural Extension staff (including on-the job trainings scheme) trained on adaptation strategies to support village climate change platforms.	1.2 Currently The Ministry of Agriculture, Fisheries and Rural Development (MAPDR) has only two Agricultural Extension staff in each of the six CADR Extension delegations at district and village level.	1.2 By the end of the project at least 60 Agricultural Extension staff (including on-the job trainings scheme) have been trained on adaptation strategies to support village climate change platforms.	1.2 Gender sensitive field survey based experimental design principles /Project monitoring and APRs/PIR	with the weakness of institutional capacities.     CIAT, CATAP and CADR will have the technical capacity and political will to develop capacity building to carry out training and capacitance of new agriculture extension officers.
Outcome 2  Vulnerability of rural livelihoods reduced through climate risks supportive infrastructures and mechanisms.	2.1 Number of small scale rainfall harvesting, number of water storage structures and/or small sale irrigation networks established at community level.	2.1 Currently no rainfall harvesting, no sizeable water storage structures and/or irrigation networks have been established at community level in the selected pilot sites.	2.1 By the end of the project at least 1(one) rainfall harvesting, and/or 1(one) sizeable water storage structures and/or 1(one) irrigation network has been established at community level in the selected pilot sites particularly in drought	2.1 Gender sensitive field survey based experimental design principles /Project monitoring and technical assessment reports APRs/PIR.	Risk: Poor coordination, weak capacity of relevant stakeholders and lack of willingness of community villagers to support implementation of climate change adaptation measures in target selected vulnerable village.  Assumptions:  The climate change adaptation measures correspond to the urgent needs expressed by the primary proponents, particularly the
	2.2 Number of ha that has benefited from any forms of erosion control as well as dykes and bunds to protect fields against flooding.	2.2 In the baseline no erosion control measures are being developed in the selecte vulnerable locations.	prone areas.  2.2 By the end of the project at least 30 (thirty) % of the identified eroded areas is benefited by any forms of erosion control as well as dykes and bunds to protect fields against flooding.	2.2 Gender sensitive field survey based experimental design principles /Project monitoring and technical assessment reports (PIR).	community villagers which will reduce the risk of lack of support from the communities.  • There will be a clear project management arrangements and regular interactions between the stakeholders.

<sup>&</sup>lt;sup>11</sup> All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes.

Outcome 3  Adaptation strategies are designed and transferred to strengthen communities' climate resilience in the 30 most vulnerable villages of the 6 districts of CMPLCL	3.1 Number of CCA measures successfully implemented by the community members as a result of Project assistance.	3.1 Currently there is no GoSTP or Private assistance scheme operating in the selected vulnerable villages supporting implemented CCA measures by the community members and there is no CCA measures successfully implemented by the community members.	3.1 By the end of the project, at least two CCA measures have been implemented by the community members as a result of project assistance.	3.1 Gender sensitive field survey based experimental design principles //Project evaluation reports (PIR) and technical assessment reports APRs/PIR.	Risks: Microfinance Institutions (MFIs) ability to develop innovative products to finance adaptation can be affected by the communities' engagement, as they can be deterred from incurring upfront expenses and rigid repayment schemes even when the overall balance of costs and benefits is positive.  Assumptions:  • Micro-finance institutions will adopt a
of São Tomé and Principe.  (equivalent to activity in ATLAS)	3.2 Number of Integrated Adaptation Measures (IAMs) included in the annual and multiyear adaptation plans (CC-VAAP) that were successfully demonstrated and scaled up at community level.	3.2 Currently, no annual and multiyear adaptation plans or policies that explicitly integrate climate change adaptation measures.	3.2 By the end of the project at least 50% of Integrated Adaptation Measures (IAMs) included in the annual and multiyear adaptation plans (CC-VAAP) have been successfully demonstrated and scaled up at community level in the target vulnerable villages.	3.2 Gender sensitive field survey based experimental design principles /Project evaluation reports (PIR. Integrated Adaptation Measures & Annual and Multiyear Adaptation Plans developed.	wholesale approach with flexible repayment installments, yearly or seasonal will be tested to consider the seasonal or inter-annual climate variability.  Risks: Lack of capacity of communities to develop Integrated Adaptation Measures (IAMs) included in the annual and multiyear adaptation plans (CC-VAAP) and not enough Extension Workers able to support rural areas and implementation of village annual and multiyear adaptation plans (CC-VAAP).  Assumptions:
					The project will train at least 90 Agricultural Extension staff (including on-the job trainings scheme) on adaptation strategies to support village climate change platform and vulnerable communities. Communities will be trained and provided with the mean to identify their own adaptation needs, prioritize, coordinate and plan.

# 4. TOTAL BUDGET AND WORKPLAN

Award ID:	00083410	Project ID(s):	00091898			
Award Title:	PIMS4645					
Business Unit:	STP10					
	São Tomé and Principe					
Project Title:	Enhancing capacities of rural communities to pursue climate resilient livelihood options in the Sao Tome and Principe districts of Caue, Me-zochi, Principe, Lemba, Cantagalo and Lobata					
PIMS no.	4645					
Implementing Partner (Executing Agency)	Ministry of Agriculture, Fishery and Rural Do	evelopment				

SOF (e.g. GEF) Outcome/Atlas Activity	Responsible Party/	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD)	Amount Year 4 (USD)	Total (USD)	See Budget Note:
	Implementing Agent										
OUTCOME 1:	Ministry of	62160	GEF	71200	International Consultants	72,975	72,975	72,975	72,975	291,900	a
The capacity of the	Agriculture, Fishery and		LDCF	72100	Contractual Services - Companies	90,500	45,250	45,250	-	181,000	b
CATAP, CIAT, district	Rural			71300	Local Consultants	8,250	8,250	8,250	8,250	33,000	с
governments and assemblies, district	Development			72300	Materials and Goods	45,000	-	-	-	45,000	d
councils, CSOs and				74200	Audio Visual and Print Production Costs	8,750	17,500	8,750	-	35,000	e
CBOs strengthened to support the enhancement of climate resilience of				75700	Training, Workshops and Conferences	85,000	85,000	85,000	85,000	340,000	f
rural community				71400	Contractual service-individual	30,000	30,000	30,000	30,000	120,000	g
livelihoods.				72200	Equipment (general) and Furniture	65,000	65,000	-	-	130,000	h
				Total Outcome 1		405,475	323,975	250,225	196,225	1,175,900	
OUTCOME 2:	Ministry of	62160	GEF	71200	International Consultants	69,175	69,175	69,175	69,175	276,700	i
Vulnerability of rural	Agriculture, Fishery and		LDCF	71300	Local Consultants	68,142	114,074	102,667	23,118	308,001	j
livelihoods to climate risks reduced through	Rural			72100	Contractual services-Companies	42,035	70,370	63,333	14,261	189,999	k
climate risks	Danalana and		72300	Materials and Goods	52,500	70,000	70,000	17,500	210,000	1	
management infrastructures and				74200	Audio Visual and Print Production Costs	-	13,050	6,525	6,525	26,100	m
mechanisms.				75700	Training, Workshops and Conferences	22,124	37,037	33,333	7,506	100,000	n

				71400	Contractual Service-Individuals	30,000	30,000	30,000	30,000	120,000	0
				72200	Equipment (general) and Furniture	45,000	-	-	-	45,000	p
				Total Outcome 2		328,976	403,706	375,033	168,085	1,275,800	
OUTCOME 3:	Ministry of	62160	GEF	71200	International Consultants	66,540	110,900	83,175	72,085	332,700	q
Adaptation strategies	Agriculture, Fishery and		LDCF	71300	Local Consultants	38,900	38,900	38,900	38,900	155,600	r
are designed and transferred to strengthen	Rural Development			72100	Contractual services-Companies	60,909	111,667	90,541	71,883	335,000	S
communities' climate	Development			72300	Materials and Goods	129,412	31,429	44,000	15,159	220,000	t
resilience in the 30 most vulnerable villages of the				74200	Audio Visual and Print Production Costs	-	30,000	15,000	15,000	60,000	u
6 districts of CMPLCL of São Tomé and Principe.				75700	Training, Workshops and Conferences	14,286	33,333	33,333	19,048	100,000	v
				71400	Contractual services-Individual	10,000	10,000	10,000	10,000	40,000	W
				72200	Equipment (general) and Furniture	57,500	57,500	-	-	115,000	Х
				Total Outcome 3		377,547	423,729	314,949	242,075	1,358,300	
PROJECT	Ministry of	62160	GEF	71400	Contractual services-Individual	25,000	25,000	25,000	25,000	100,000	у
MANAGEMENT	Agriculture, Fishery and		LDCF	71600	Travel	5,000	5,000	5,000	5,000	20,000	Z
	Rural			74500	Miscellaneous Expenses	17,500	17,500	17,500	17,500	70,000	aa
	Development			Sub Total Pro	ject Management GEF	47,500	47,500	47,500	47,500	190,000	
		04000	UNDP	72200	Equipment and Furniture	71,500	73,500	73,500	71,500	290,000	ab
				74500	UNDP Direct Project Services cost recovery charges	16,000	14,000	14,000	16,000	60,000	ac
				Sub-Total Pro	oject Management UNDP	87,500	87,500	87,500	87,500	350,000	
				Total Project Management		135,000	135,000	135,000	135,000	540,000	
					PROJECT TOTAL	1,246,998	1,286,410	1,075,207	741,385	4,350,000	

Sı	ummary of Funds: <sup>12</sup>	Amount Year 1	Amount Year 2	Amount Year 3	Amount Year 4	Total
	GEF	1,159,498	1,198,910	987,707	653,885	4,000,000
	UNDP (In-Kind)	87,500	87,500	87,500	87,500	350,000
	UNDP (Core Resources)	87,500	87,500	87,500	87,500	350,000
	Ministry of Public Works, Infrastructure, Natural Resources and Environment (MoPWINRE)	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
	Ministry of Agriculture, Fisheries and Rural Development (MoAFRD)	894,070	894,070	894,070	894,070	3,576,281
	Ministry of Agriculture, Fisheries and Rural Development (MoAFRD)	2,000,000	2,000,000	2,000,000	2,000,000	8,000,000
	TOTAL	5,228,568	5,267,980	5,056,777	4,722,955	20,276,281

Budget Note	*Description of cost item				
	Outcome 1: The capacity of the CATAP, CIAT, DGE, district governments and assemblies, district councils, CSOs and CBOs strengthened to support the enhancement of climate resilience of rural community livelihoods.				
	CTA contribution in the Outcome 1 (IC/FTA) 121 days @ \$600/day + 4 flights @ \$2,000 +75 days DSA @ \$200/day).				
	International Scientist in Agrarian Research and strategic Planning specialist to support CIAT (80 days @ \$300/day +4 flights @ \$2000 +80 days DSA @ \$200/day).				
	International Specialist in development of Agriculture Mobile Advisory Services to support CIAT & CATAP (80 days @ \$300/day +2 flights @ \$2000 +30 days DSA @ \$200/day)				
	Outcome 1 - International M&E expert (15 days @ \$500/day +1 flight @ \$2,000 +4days DSA @ \$200/day).				

 $<sup>^{12}</sup> Summary\ table\ should\ include\ all\ financing\ of\ all\ kinds:\ GEF\ financing,\ cofinancing,\ cash,\ in-kind,\ etc...$ 

	Conduct 2 Budget/Project audits (2 @ \$6000/ea).
a	Consultancy to develop technical curricula to support capacitance of CADR agriculture sector decision makers and technical staffs with the experience and skills to assess and advise on linkages between rural livelihood options and the coordination, design, implementation and monitoring of districts and villages annual and multiyear climate change adaptation plans; @\$40,000ea.
	Consultancy to carry out Human & Technical Resources (including hard and soft infra-structure) Diagnosis and Training Needs Analysis of CIAT, CATAP and CADR to cover Activities 1.1.1; 1.1.2; 1.2.1; 1.2.2 and 1.3.1.(1 ea @ \$10,000/ea).
	International Consultancy in Agromet to develop Agromet sector warnings to support farming management to strengthen resilience to climate change induced droughts; @ \$10,000ea.
	Partnership between CATAP and a PALOP international agricultural and climate change training centre to enhance human and technical capacity in CATAP to design and carry out tailored CC adaptation based agricultural programmes for agricultural extension workers and other agricultural officers at the national and regional levels; 1 ea @ \$30,000/ea.
	Support integration of climate change concerns in the CIAT Agricultural Division standard operating procedures (SOP) for breeding programme of main food crops and the identification of extension needs in cropping techniques; (1 ea @ \$10,000/ea).
	Support the development of a CIAT Mobile Advisory Service (CIAT-MAS) to support the CC Platforms implementation Plans in soil fertilization, crop husbandry, weed and pesticide control techniques; (1 ea @ \$45,000/ea).
b	Develop a CADR Mobile Advisory and Training Service (CADR-MATS): 1 ea @ \$45,000/ea
U	Carry out climate "lens" livelihoods analysis through VCA to identify resilient elements and potential alternative livelihood options, and determine the influence of external factors on current livelihoods; 1 ea @ \$10,000/ea.
	National Training, Capacity Building in Agrarian Research and Rural Extension to support CIAT, CATAP & CADR (30 days @ \$200/day+30 days DSA @ \$100/day).
	International Training, Capacity Building in Agrarian Research and Rural Extension to support CIAT, CATAP & CADR (30 days @ \$600/day +4 flights @ \$2000 +30 days DSA @ \$200/day).
	National Climate Expert in Farming Mechanisation and Crop Management (30 days @ \$200/day).
	National Training and Capacitance Expert in Farming Mechanisation and Crop Management (30 days @ \$200/day).
С	National Agromet Expert to develop an online agricultural advisory forecasting service to support cocoa & coffee farming against "Harmattan" impact in close collaboration between CIAT, and National Institute of Meteorology and in cooperation with ongoing AGRHYMET programmes for exchange of data. @ \$15,000/ea
	National Training and Capacitance Expert in Climate Change Erosion and drought control (30 days @ \$200/day).
d	GIS tools and activities to carry out identification, selection and prioritization of 30 most vulnerable community villages in all 6 districts (CMPLCL); 1 ea @ \$45,000/ea.
e	Development of Climate Change Training and Adaptation Modules (CCTAM) with relevant organizations (CIAT, CATAP, CADR) and district and village Platforms that will be used in the trainings planned in the outputs 1.1, 1.2, 1.3, 1.5 and focusing: Crop/Agro-Forestry; Small Livestock; Fisheries/Aquaculture; Fruit/Vegetables; Rain water harvesting and Irrigation; Climate Change and erosion control, etc. 1 ea @ \$35,000/ea.
	In close partnership with CIAT and international partner(s), support the training of up to 50 CATAP trainers in climate change based resilience rural extension issues and climate changes adaptation agricultural technologies; 1 ea @ \$50,000/ea.
	Partnership between AGRHYMET African and Sahel observatory for farmers and CATAP-CIAT and CADR to train at least 90 Agricultural extension staff (including on-the-job trainings scheme) on adaptation strategies to support village climate change platform and vulnerable communities in CMPLCL transition to climate-resilient livelihoods; 1 ea @ \$70,000/ea.
	Development and delivery capacity and training programme by CATAP in CC planning of resilience and adaptation methods and techniques for the Leading and Management Members (LMMs) of all 30 villages CC Platforms (CC-DAVIP); 1 ea @ \$30,000/ea.
	Training of up to 300 representatives of the districts and villages platforms (CC-DAVIP), district governments assemblies on how to develop, implement and monitor Annual Adaptation Plans (CC-VAAP) and related budgets using the results of the output 1.6; 1 ea @ \$30,000/ea.
	Local back up support through project unit for the development and delivery of an in-house training programme for CIAT, aiming at the development of a strategy for the sustainability of CIAT climate change adaptation research programme in STP (1 ea @ \$60,000/ea).

f	Development and delivery of awareness raising, organizational & leadership training campaign for Community Based Organizations (farmers' association, women based groups and other local stakeholders) in each of the rural community of the 6 districts of CMPLCL to efficiently contribute in the processes of identifying and addressing the underlying causes of vulnerability and developing adaptative practices; 1 ea @ \$25,000/ea.
	Yearly, organization and implementation of Climate Change Farmers Field Schools (CC-FFS's) demonstration plots, for CBO's and community farmers on the safety and efficient
	use of agriculture inputs (equipment, seeds, other agriculture inputs); 1 ea @ \$20,000/ea.  Yearly, establishment of demonstration field plots and Farmers Field Schools for greater awareness and understanding of CC and linkages to drought and irrigation practice in the
	implementation process of districts and villages annual and multiyear adaptation plans; 1 ea @ \$25,000/ea.
	Hiring of 2 professional trainers to facilitate and conduct training events for Climate Change Farmers Field Schools (CC-FFS's) in Communities of the six districts. 2 ea @ \$5000/ea
	Host a National Inception workshop. 1 ea @ \$20,000/ea
g	Project Team (24 months @ \$5000/month) national coordinator, procurement, admin and finance
	6 Motorcycles, hard and soft infrastructure (Computers, workstations and specialised software and IT equipment) to enhance institutions technical performance in climate change impact reduction activities in the CMPLCL communities; 1 ea @ \$35,000/ea+ (6 ea @ \$2500/ea)= @ \$50,000
h	Office equipment and air conditioning units for crop processing units for CATAP. 1 ea @50000/ea
	Hard and soft infrastructure (Laptop Computers, workstations and specialised software of enhanced capacity and IT equipment) to enhance Unidade de Gestão on; 1 ea @ \$30,000/ea
	Outcome 2: Vulnerability of rural livelihoods to climate risks reduced through climate risks management infrastructures and mechanisms.
	CTA contribution to the Outcome 2 (122 days @ \$600/day + 4 flights @ \$2,000 +75 days DSA @ \$200/day)
	International Climate Change Expert in Farming Mechanisation and Crop Management (20 days @ \$600/day +2 flights @ \$2000 +20 days DSA @ \$200/day).
	International Training and Capacitance Expert in Climate Change Erosion and drought control (20 days @ \$600/day +2 flights @ \$2000 +20 days DSA @ \$200/day) = \$20,000
i	International Training and Capacitance Expert in agriculture produce storage, processing, transformation and commercialisation (20 days @ \$600/day +2 flights @ \$2000 +20 days DSA @ \$200/day)= \$20,000
1	International GIS Mapping/Expert (20 days @ \$600/day +2 flights @ \$2000 +20 days DSA @ \$200/day).
	International Climate Change Adaptation Rural Extension and Agriculture Market network rehabilitation expert (80 days @ \$400/day +2 flights @ \$2000 +20 days DSA @ \$200/day).
	International Climate Change expert for post inception Budget Review, Baseline Survey and development of indicators and targets (15 days @ \$600/day +4 flights @ \$2000 +15 days DSA @ \$200/day).
	Outcome 2 - International M&E expert (15 days @ \$500/day +1 flight @ \$2,000 +15days DSA @ \$200/day).
	Conduct 2 Budget/Project audits (2 ea @ \$6000/ea).
	Support CADR to make an inventory of communities' water needs, distribution and application through irrigation systems selecting the priority most vulnerable villages. 1 ea @ \$15,000/ea
	Develop MOU between directions and or centres for development of small sale irrigation networks including installation of water conduction and delivery networks (with a maintenance and management plans) to support community resilient farming systems in drought prone areas of CMPLCL 30 villages; 1 ea @ \$60,000/ea
	Support for CADR to develop small scale terracing structures complemented by tree/grass planting (with a maintenance and management plans) to protect cropping land from erosion phenomena in sloppy and vulnerable locations of CMPLCL 30 villages through a "Cash-for-Work" scheme; 1 ea @ \$60,000/ea
j	Support for Directorate for Forest ( <i>Direcção de Florestas</i> ) and in line with the Districts and village level climate change platforms annual/plurianual Plans establish small scale nurseries for tree seedling production through a "Cash-for-Work" scheme to support erosion control measures in vulnerable locations of CMPLCL 30 villages; 1 ea @ \$60,000/ea
	Support for CADR to develop through climate change platforms annual/plurianual Plans a rehabilitation programme for rural trails (caminhos rurais) (with a maintenance and management plans) on "Cash-for-Work" scheme to support organization of rural markets in 30 most vulnerable villages; 1 ea @ \$50,000/ea

]	Support to CADR to promote the setting up of Community CC food Cooperatives (CC FOOD-COOPs) in each of the six districts, to Plan and develop strategies for food crop surplus management and conservation and/or commercialization; 1 ea @ \$50,000/ea  National training and workshop facilitator (30 days @ \$200/day +2 flights @ \$200 +30days DSA @ \$100/day); 1 ea @ \$13,000/ea  Support organization of community tomato producers and potentiate long term storage and small scale processing to enhance resilience of highly productive communities against climate variability impacts; 1 ea @ \$25,000/ea
;	Support organization of community tomato producers and potentiate long term storage and small scale processing to enhance resilience of highly productive communities against
	chimate variability impacts; 1 ea @ \$25,000/ea
1	Support organization of community fruit (banana/pineapple/mango) producers and potentiate long term storage and small scale processing to enhance resilience of highly productive communities against climate variability impacts; 1 ea @ \$25,000/ea
	Technical Support to CADR and CC Districts and Village Platforms to strengthen the association of producers in general so to organize/restore/rebuild a network of rural markets to facilitate goods exchange and strengthen community resilience against CC impacts; 1 ea @ \$25,000/ea
	Operative expenses to Extension delegations to support women fishmonger associations in coastal Districts of CMPLCL 30 villages through a "Cash-for-Work" scheme to set up robust fish market stands and communal solar freezers to enhance resilience of fishing community against climate variability impacts; 1 ea @ \$25,000/ea
	Support for CADR to carry out rehabilitation programme for rural trails (caminhos rurais) (with a maintenance and management plans) on "Cash-for-Work" scheme to support organization of rural markets in 30 most vulnerable villages; 1 ea @ \$30,000/ea
	Support for CADR to carry out small scale terracing structures complemented by tree/grass planting (with a maintenance and management plans) to protect cropping land from erosion phenomena in sloppy and vulnerable locations of CMPLCL 30 villages through a "Cash-for-Work" scheme; 1 ea @ \$35,000 /ea
1	Promoting at district level, the development of small scale and innovative customized cereal banks structures for community grain surplus storage; 1 ea @ \$25,000/ea
1	Acquire/construct greenhouse material and equipment to set up small scale nurseries for tree seedling production through a "Cash-for-Work" scheme to support erosion control measures in vulnerable locations of CMPLCL 30 villages; 1 ea @ \$25,000/ea
1	Acquire/construct robust fish market stands and communal solar freezers to enhance resilience of fishing community against climate variability impacts; 1 ea @\$25000/ea and mobile solar freezers; 1 ea @ \$25,000/ea
, ,	Acquire and install equipment and products to support and promote the establishment of small-scale artisanal craft and pottery industry to enhance communities' livelihoods in the poorest drought and flood stricken communes of the Cuvelai Basin; 1 ea @ \$25,000/ea
(	Acquire and install water pumps, drip irrigation systems & Construct water reservoirs for the delivery of practical irrigation training to Extension Officers in relevant Districts and communities 1 ea @ \$25,000/ea.
	Operative expenses to support CADR Extension delegations to develop small scale rainfall capture and water storage units (with a maintenance and management plans) as well as rehabilitating the existing structures (Tanquões) at Old Cocoa Farms (Roças) through a "Cash-for-Work"; 1 ea @ \$60,000/ea
!	Buy equipment and products required to support Agriculture produce Storage, conservation and Processing in Relevant Districts; 1 ea @ \$25,000/ea.
	CADR/CIAT/Editing, printing and publishing protocols, handbooks, policy and information briefs and/or guidelines on climate change adaptation, hydro-meteorological and early warning systems. 1 ea @ \$26,100/ea
	Training in Climate Change Based Extension Training programme to mainstream/integrate the climate change component into the current extension services. 1 ea @ \$20,000/ea
	Training in tailored agricultural extension services to master/access agricultural techniques (seed/plant resistant to drought, irrigation management) adapted to increased climate variability in selected District; 1 ea @ \$20,000/ea
n	Training in conservation agriculture techniques using climate-resilient crop varieties to communities of 30 most vulnerable villages of the 6 districts of CMPLCL of São Tome and Principe to enhance their resilience capacity to drought event. 1 ea @ \$20,000/ea
Į.	Training in tailored agricultural extension services to master erosion control measures and techniques to support communities to adapt to increased climate variability in selected District; 1 ea @ \$20,000/ea
1	Training and awareness campaign for communities of 30 most vulnerable villages of the 6 districts of CMPLCL of São Tome and Principe to plan for and manage climate change threats to water supply (small scale irrigation) and erosion phenomena; 1 ea @ \$20,000/ea
0	Project team (24 months @ \$5000/month) national coordinator admin and finance, procurement to complement the unit. 1 ea @ \$120,000/ea
p	One Vehicle (including motobycicles) for CATAP technical personnel working with communities in CART's. 1 ea @ \$45,000/ea

	Outcome 3: Adaptation strategies are designed and transferred to strengthen communities' climate resilience in the 30 most vulnerable villages of the 6 districts of CMPLCL of São Tome and Principe.
	CTA contribution to the Outcome 3 -122 days @ \$600/day + 4 flights @ \$2,000 +75 days DSA @ \$200/day).
	International Climate Change Expert in Community Platform establishment, development of annual and multiyear adaptation plans (CC-VAAP) and Integration of Adaptation Measures (IAMs); (80 days @ \$300/day +2 flights @ \$2000 +30 days DSA @ \$200/day). @ \$34,000/ea
	International Climate Change Expert in Rural Economy and development of Community Platform investment Plan; (80 days @ \$300/day +2 flights @ \$2000 +30 days DSA @ \$200/day). @ \$34,000/ea
	International Climate Change Expert in Tropical faming system and development of livestock and small scale poultry farming; (80 days @ \$300/day +2 flights @ \$2000 +30 days DSA @ \$200/day). @ \$34,000/ea
	International Climate Change Expert in Agro-sylvo-pastoral adaptation technologies and soils fertility issues; (80 days @ \$300/day +2 flights @ \$2000 +30 days DSA @ \$200/day). @ \$34,000/ea
q	International Climate Change Expert in financial risk assessments and micro-finance financial products; (30 days @ \$600/day +2 flights @ \$2000 +30 days DSA @ \$200/day). @ \$28,000/ea
	Outcome 3 - International M&E expert (15 days @ \$500/day +1 flight @ \$2,000 +5days DSA @ \$200/day). @ \$28,000/ea
	Conduct an Independent Mid-term evaluation (1 ea @ \$20,000/ea).
	Conduct an Independent Terminal evaluation (1 ea @ \$30,000/ea).
	Conduct 2 Budget/Project audits (2 @ \$6000/ea).
	National data collection and/or VRA Expert for 30 most vulnerable villages of the 6 districts of CMPLCL of São Tome and Principe to understand the social and economic costs and benefits of CCA measures; (30 days @ \$400/day). 1 ea @ \$12,000/ea
	National Climate Change Expert in Rural Economy and development of Community Platform investment Plan; (30 days @ \$400/day). 1 ea @ \$12,000/ea
	National Climate Change Expert in Tropical Faming Systems and Development of livestock and small scale poultry farming; (30 days @ \$200/day). 1 ea @ \$6000/ea
	National Climate Change Expert in Agro-sylvo-pastoral Adaptation Technologies and Soils fertility issues; (30 days @ \$200/day). 1 ea @ \$6000/ea
r	National Climate Change Expert in Financial Risk Assessments and Micro-Finance financial products; (30 days @ \$200/day). 1 ea @ \$6000/ea
	National Climate Change Rural Development and Livelihood Economist (30 days @ \$200/day). 1 ea @ \$6000/ea
	Regional Focal Points for districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata; 6x(365 days ea @ \$10/day) x 4 yrs = 1 ea @ \$87,600/ea
	2 GoSTP internships at Unit (24 months) to collect info from target communities for calibration and upgrade of climate risk and vulnerability sector-specific maps produced by Outcome 1, 2 and Outcome 3. 1 ea @ \$20,000/ea
	Operating Expenses to provide technical support in the design and development of investment Plan of communities Microfinance products. 1 ea @ \$200,000/ea.
	Operating Expenses to provide technical support in the design and development of investment Plan of communities' selected community-level adaptation measures identified by the communities themselves through the climate change district and villages platforms; 1 ea @ \$25,000/ea.
	Operating Expenses for the establishment of SOPs for each of the 30 districts and villages CC Platforms to allow timely and systematic analysis of climate change constraints of existing farming systems and identification of resilient elements; 1 ea @ \$20,000/ea.
	Map the underlying causes of vulnerability against Agromet seasonal forecasting products linking to EWS LDCF project; 1 ea @ \$5000/ea.
	Operating Expenses for yearly Development and demonstration of Integrated Adaptation Measures (IAMs) to be included in the annual and multiyear adaptation plans (CC-VAAP) for each of the 6 districts and 30 villages (CMPLCL); 1 ea @ \$5000/ea.
	Operating Expenses for scoping out capacity development needs for Village CART's implementation of short listed adaptation measures; 1 ea @ \$5000/ea.
	Operating Expenses for i) mapping key constraints to animal production of current faming system (including small scale poultry farming, livestock, rabbit and pig production) and ii) developing adaptation technologies, tools and mechanism to support/overcome identified priority actions and strengthen community resilience in 30 most vulnerable villages; 1 ea @ \$5000/ea.

S	Operating Expenses for i) mapping key constraints to crop production of current faming system (including soil fertility constraints, vermicomposting using biomass, chemical fertilizers and pesticides management shortfalls, residue management & green leaf manuring techniques for moisture conservation, seed/seedling resilience needs, weed control, zero tillage, new resistant crop varieties; capacitance in grafting and pruning techniques) and ii) developing adaptation technologies, tools and mechanism to support/overcome identified priority actions and strengthen community resilience in 30 most vulnerable villages; 1 ea @ \$5000/ea.  Operating Expenses for launching a call for proposals for MFIs to offer at least three micro-finance financial products, services/mechanisms (i.e. micro-credit, savings, micro-insurance) tailored to the identified adaptation needs of the local communities so to increase resilience of current livelihoods and support alternative income generating activities; 1 ea @ \$5000/ea.
	Operating Expenses for MFIs to undertake financial risk assessments of climate change for priority short-listed options and carry out financial, organizational, and institutional assessment for all bidders received; 1 ea @ \$5000/ea.
	Operating Expenses for i) identification of communities' members with willingness to participate in the microfinance scheme and ii) identification of final list of CCA options in the VCA report and short-list options to be funded by grant for each of 6 districts and 30 villages (ie public goods) based on cost effectiveness and feasibility analysis; 1 ea @ \$5000/ea.
	Operating Expenses for systematic follow up on-site to oversee implementation, monitoring and evaluation of outputs and financial performance of short listed adaptation measures; 1 ea @ \$5000/ea.
	Operating Expenses for yearly monitoring and evaluation of implementation of identified interventions in 6 districts and 30 villages (CMPLCL) to build experiential learning for up scaling through comprehensive action in the country; 1 ea @ \$20,000/ea.
	Operating Expenses for the setting up of Village Centres for Agriculture Resources Transformation (Village CART's) to enhance Communities livelihood potential in 6 districts and 30 villages (CMPLCL); 1 ea @ \$25,000/ea
	Acquire equipment and materials for the creation of small-scale CART's physical and logistic infrastructures to allow the functioning of CART's sector activities in one pilot site:
	<ul> <li>creation of art crafts workshops;</li> <li>construction and the maintenance of the low cost community infrastructures including facilities and equipment for production of native fruit jam;</li> </ul>
	- support establishment of beekeeping and honey production facilities;
t	<ul> <li>- support establishment of native fruits liquor production facilities;</li> <li>- construction and the maintenance of the low cost community infrastructures for small ruminant and poultry breeding; 1 ea @</li> <li>\$25,000/ea.</li> </ul>
	Hard and soft infra-structure (Computers, workstations and specialised software and IT equipment) to enhance CATAP technical performance in climate change impact reduction activities in the CMPLCL communities; 1 ea @ \$50,000/ea
	Equipment and materials for crop processing laboratories and slaughter house. 1 ea @ \$100,000/ea
	Acquire equipment and materials for small scale poultry farming, livestock, rabbit and pig production project development in 6 districts and 30 villages (CMPLCL); 1 ea @ \$30,000/ea.
	Acquire equipment and materials for small scale project development in vermicomposting using biomass, crop residue & green leaf manuring in 6 districts and 30 villages (CMPLCL); 1 ea @ \$15,000/ea.
	Develop a participatory videos and community radio shows on successful community-based adaptation approaches for 6 districts and 30 villages (CMPLCL); 1 ea @ \$15,000/ea
	Project lessons learnt and communities' traditional knowledge widely shared with local partners, international agencies, scientific community and communities through mechanisms such as but not limited to the UNDP Adaptation Learning Mechanism (ALM); 1 ea @ \$15,000/ea
u	Developing and promoting 'toolboxes', protocols, handbooks, policy and information briefs and/or guidelines on climate change adaptation and small scale alternative livelihood options. 1 ea @ \$15,000/ea
ŭ.	Editing, printing and publishing protocols, handbooks, policy and information briefs and/or guidelines on change adaptation and small scale alternative livelihood options. 1 ea @ \$15,000/ea
	Organization of participatory workshops and field visits with farmer community and extension officers to scope out suggestions for improving their farming operations under the Climate Change impact; 1 ea @ \$5000/ea.
	Deliver capacity building to smallholder to adopt and implement new elected adaptation technologies, tools and mechanisms; 1 ea @ \$25,000/ea

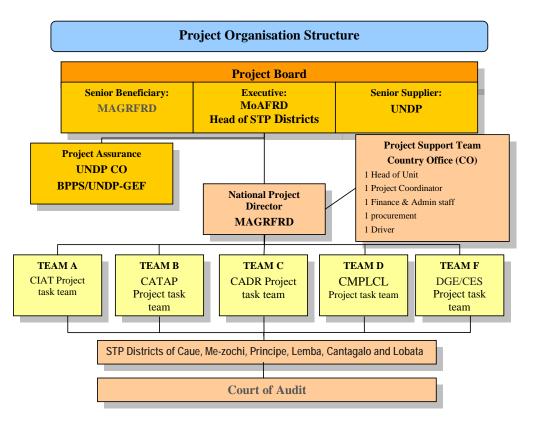
	Trainings/technical assistance to the local communities to acquire the skills and tools for developing adaptation investment plan developed for short-list livelihood options; 1 ea @ \$20,000/ea
v	Capacitance sessions for Agro-pastoral Resources Transformation (CCART's) farmer's in resilient crop/seed storage methods; 1 ea @ \$10,000/ea
	Training sessions on small scale poultry farming, livestock, rabbit and pig production for 30 most vulnerable communities of 6 districts and 30 villages (CMPLCL); 1 ea @ \$20,000/ea.
	Training sessions on soil fertility constraints, vermicomposting using biomass, chemical fertilizers and pesticides management shortfalls, residue management & green leaf manuring techniques for moisture conservation, seed/seedling resilience needs, weed control, zero tillage, new resistant crop varieties; capacitance in grafting and pruning techniques) for 30 most vulnerable communities of 6 districts and 30 villages (CMPLCL); 1 ea @ \$20,000/ea
W	Project Management support structure, driver and temporal technical committee; 1 ea @ \$40,000/ea
	One multipurpose Tractor and 6 motorcycles, hard and soft infra-structure (Computers, workstations and specialised software and IT equipment) to enhance CADR technical performance in climate change impact reduction activities in the CMPLCL communities; 1 ea @ \$100,000/ea
Х	Vehicles (6 motorcycles) for focal points in the target communities to develop and facilitate project activities related to climate change adaptation measures. 1 ea @ \$15,000/ea
	Project Management cost
у	Project Coordination Unit staff
Z	Travel (1 ea @ \$20,000/ea)
aa	Miscellaneous Expenses (1 ea @ \$10,000/ea): translation, printing and publication, Socio economic data acquisition, subscription to national newspaper and international climate change adaptation related magazines and publication
ab	Vehicles for the project coordination unit and other mobility equipment for the project staff in the field.
ac	UNDP Direct Project Services (procurement of goods and services, permanent project staff and consultants recruitment, payroll management and other human resources management services) cost recovery charges

### 5. MANAGEMENT ARRANGEMENTS

- 120. The project will be implemented over a period of 4 years. The project will be nationally implemented (NIM) by The Ministry of Agriculture, Fisheries and Rural Development (MoAFRD). The project will be executed in close collaboration with local authorities (*Camara* Districts as host of direct project beneficiaries-populations), CIAT, CATAP, CADR, CES, and DGE as responsible parties, as well as the selected pilot communities of the six São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL) with the responsibility for the local level pilot interventions of the project.
- 121. UNDP (via the Country Office and the BPPS/UNDP-GEF team) will provide oversight support. The project will be implemented in line with the Standard Basic Assistance Agreement (SBAA of 26 March, 1976)<sup>13</sup> and the UNDP Country Programme Action Plan (UNDAF ACTION PLAN 2011-2016) signed between the UNDP and the Government of São Tomé and Principe.

Figure 3. Proposed Management Structure

<sup>13</sup> In particular, Decision 2005/1 of 28 January, 2005 of UNDPs Executive Board approved the new *Financial Regulations and Rules* and along with them the new definitions of 'execution' and 'implementation'.



122. Working in close cooperation with MoAFRD, the Directorate of Decentralization, the UNDP Country Office (CO) following the proposed Management structure (Figure 3), will be responsible for: (i) providing financial backstopping and audit services to the project; (ii) recruitment and contracting of the Technical International Team and the procurement of Finance & Admin Officers; (iii) overseeing financial expenditures against project budgets approved by the Project Steering Committee (PSC); (iv) appointment of independent financial auditors; (v) recruitment and contracting external evaluators; (vi) ensuring that all activities, including procurement and financial services, are carried out in strict compliance with UNDP and GEF policies and procedures, as well as national rules and regulations; and (v) procurement of all equipment described in the project. Descriptions and specifics will be provided by partners through the MoAFRD. Therefore, implementation oversight will be by UNDP CO in São Tomé and Principe, Department of Environment and Sustainable Development Unit and the BPPS/UNDP-GEF

Unit based at the Regional Service Centre in Addis Ababa and New York. Accordingly, UNDP has overall responsibility for supervision, project development, guiding project activities through technical backstopping and logistical support.

- 123. The daily administration and implementation of the project will be carried out by the **National Project Director (NPD)**. The NPD will be appointed (by the MoAFRD using national rules and regulations and ensuring international standards on recruitment processes) on a full-time basis to the project implementation. The National Coordinator will be based in São Tomé Island in order to facilitate smooth implementation in the target districts with frequent visits to Principe Island as necessary.
- 124. A **National Project Coordinator** (**NPC**) will be hired/contracted/appointed to directly support the National Project Director on administrative, finance and implementation/coordination issues. The National Project Coordinator has the authority to run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The NPC's primary responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost.
- 125. Due to the complexity of the project, the **Procurement, Finance & Admin Officer** will be recruited by UNDP to financially support and capacitate the MoAFRD on financial and administrative issues.
- 126. Due to the need for constant monitoring and technical support of the project activities in the selected districts a **Driver** will be recruited by UNDP to support the **Project Support Team**.
- 127. **Project Support Team**: The Project Support Team role provides project administration, management and technical support to the **National Project Coordinator** and the Districts in the implementation of activities.
- 128. **Project Board (PB)** is responsible for making management decisions for the project in particular when guidance is required by the National Project Coordinator. The Project Board plays a critical role in project monitoring and evaluations by quality assuring these processes and products, and using evaluations for performance improvement, accountability and learning. It ensures that required resources are committed and arbitrates on any conflicts within the project or negotiates a solution to any problems with external bodies. In addition, it approves the appointment and responsibilities of the National Project Coordinator and any delegation of its Project Assurance responsibilities. Based on the approved Annual Work Plan, the Project Board can also consider and approve the quarterly plans (if applicable) and also approve any essential deviations from the original plans.
- 129. In order to ensure UNDP's ultimate accountability for the project results, Project Board decisions will be made in accordance to standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case consensus cannot be reached within the Board, the final decision shall rest with the UNDP HoU.
- 130. The responsibilities of the PB will be to:
  - Supervise and approve the annual work plans and short term expert requirements
  - Supervise project activities through monitoring progress and approving annual reports

- Review and approve work plans, financial plans and reports
- Provide strategic advice to the implementing institutions to ensure the integration of project activities with national and sub-national sustainable development and climate resilience objectives.
- Ensure inter-agency coordination and cross-sectoral dissemination of strategic findings
- Ensure full participation of stakeholders in project activities
- Assist with organization of project reviews and contracting consultancies under technical assistance
- Provide guidance to the HoU
- 131. Potential members of the Project Board are reviewed and recommended for approval during the PAC meeting. Representatives of other stakeholders can be included in the Board as appropriate. The Board contains three distinct roles, including:
  - 1) An Executive: individual representing the project ownership to chair the group.
    - The Ministry of Agriculture, Fisheries and Rural Development (MoAFRD)
    - São Tomé districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL)
  - 2) Senior Supplier: individual or group representing the interests of the parties concerned that provide funding for specific cost sharing projects and/or technical expertise to the project. The Senior Supplier's primary function within the Board is to provide guidance regarding the technical feasibility of the project.
    - UNDP
  - 3) Senior Beneficiary: individual or group of individuals representing the interests of those who will ultimately benefit from the project. The Senior Beneficiary's primary function within the Board is to ensure the realization of project results from the perspective of project beneficiaries.
    - National Directors of CIAT, CATAP, CADR, CES and DGE.
  - 4) The Project Assurance role supports the Project Board Executive by carrying out objective and independent project oversight and monitoring functions. The National Project Coordinator and Project Assurance roles should never be held by the same individual for the same project.
    - Portfolio Manager (Environment and Disaster Risk Management), UNDP São Tomé and Principe, Regional Technical Adviser Climate Change Adaptation, UNDP Regional Service Centre.

#### 6. MONITORING FRAMEWORK AND EVALUATION

- 132. The project will be monitored through the following M&E activities. The M&E budget is provided in the table below (Table 7). The Project Results Framework presented in Part III of this project document is aligned with the AMAT and UNDP M&E frameworks and includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks are to be developed in some more detail and fine-tuned during the inception phase of the project and will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized below. Other M&E related costs are also presented in the priced M&E Plan (Table 7) and are fully integrated in the overall project budget. Additionally, under Outcome 3 of the project, a Capacity Building and M&E Expert (either one full-time or 2 part-time positions) is budgeted for. The M&E expert would be specifically working on establishing and implementing local-level, participatory M&E systems, linked to the overall project M&E framework.
- 133. The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation at the time of project approval baseline data for some of the indicators established in the Results Framework are available. Baseline data gaps will be addressed during the first year of project implementation.
- 134. Day-to-day project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the National Project Coordinator to inform the Project Board of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.
- 135. The Project Board will receive periodic reports on progress and will make recommendations concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight is the responsibility to the Regional Technical Adviser of UNDP. The Regional Technical Adviser will review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.
- 136. Project supervision will take an adaptive management approach and the UNDP Regional Technical Adviser will develop a project supervision plan at the inception.

# Financial and other procedures

137. The financial arrangements and procedures for the project are governed by the UNDP rules and regulations for National Implementation Modality (NIM)<sup>14</sup>, with Country Office support on specific tasks, such as procurement of equipment. Given the NIM scenario that applies in

<sup>&</sup>lt;sup>14</sup> There are two scenarios of NIM: (a) Full national implementation, in which national implementing partners directly assume the responsibility for the related output (or outputs) and carry out all activities towards the achievement of these outputs; and (b) National implementation, in which the national implementing partner assumes full responsibility for the related output(s) but where, at the request of the government, UNDP as a responsible party undertakes specific and clearly defined activities for the implementing partner.

São Tomé and Principe, the major part of financial transactions will be conducted through direct payment requests made by MoAFRD. Some funds will be transferred to the MoAFRD, as Advance of Funds, for the day-to-day functioning of the project. The National Project Coordinator, with support from the project support team, will prepare Requests for Direct Payments and Requests for Advance of Funds, that will be signed by the National Project Director (or deputy) to be sent to UNDP CO.

- 138. Full UNDP cost-recovery policy will be applied to those recruitments, procurement process and services requested by MoAFRD to UNDP.
- 139. **Project start**: A Project Inception Workshop will be held <u>within the first 2 months</u> of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and program advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.
- 140. The **Inception Workshop** should address a number of key issues including:
  - a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and RCU staff vis-à-vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again as needed.
  - b) Based on the project results framework and the LDCF related AMAT set out in the Project Results Framework in Section III of this project document, and finalize the first annual work plan. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
  - c) Provide a detailed overview of reporting, monitoring and evaluation (M&E) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.
  - d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
  - e) Plan and schedule PB meetings. Roles and responsibilities of all project organisation structures should be clarified and meetings planned. The first PB meeting should be held within the first 12 months following the inception workshop.
- 141. An **Inception Workshop report** is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

### **Quarterly**:

- > Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- ➤ Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high. Note that for UNDP/GEF projects, all financial risks associated with financial instruments such as revolving funds, microfinance schemes, or capitalization of ESCOs are automatically classified as critical on the basis of their innovative nature (high impact and uncertainty due to no previous experience justifies classification as critical).
- > Based on the information recorded in Atlas, a Project Progress Report (PPR) can be generated in the Executive Snapshot.

- > Other ATLAS logs will be used to monitor issues, lessons learned. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.
- 142. **Annually**: Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period (30 June to 1 July). The APR/PIR combines both UNDP and GEF reporting requirements. The APR/PIR includes, but is not limited to, reporting on the following:
  - Progress made toward project objective and project outcomes each with indicators, baseline data and end-of-project targets (cumulative)
  - Project outputs delivered per project outcome (annual).
  - Lesson learned/good practice.
  - AWP and other expenditure reports
  - · Risk and adaptive management
  - ATLAS OPR
  - Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.
- 143. **Periodic Monitoring through site visits:** UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Board may also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Board members.
- 144. **Mid-term of project cycle:** The project will undergo an independent <u>Mid-Term Evaluation</u> at the mid-point of project implementation (expected to be in November 2016). The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document. The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-EEG. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the <u>UNDP Evaluation Office Evaluation Resource Centre (ERC)</u>. The relevant SOF (GEF) Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.
- 145. **End of Project:** An independent <u>Final Terminal Evaluation</u> will take place three months prior to the final Project Board meeting and will be undertaken in accordance with UNDP and SOF (e.g. GEF) guidance. The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-EEG.

- 146. The Final Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the <u>UNDP Evaluation Office Evaluation Resource Centre (ERC)</u>. The relevant SOF (e.g GEF) Focal Area Tracking Tools will also be completed during the final evaluation.
- 147. During the last three months, the project team will prepare the <u>Project Terminal Report</u>. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.
- 148. Learning and knowledge sharing: Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyze, and share lessons learned that might be beneficial in the design and implementation of similar future projects. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.
- 149. Communications and visibility requirements: Full compliance is required with UNDP's Branding Guidelines. These can be accessed at <a href="http://intra.undp.org/coa/branding.shtml">http://intra.undp.org/coa/branding.shtml</a>, and specific guidelines on UNDP logo use can be accessed at: <a href="http://intra.undp.org/branding/useOfLogo.html">http://intra.undp.org/branding/useOfLogo.html</a>. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo. The GEF logo can be accessed at: <a href="http://www.thegef.org/gef/GEF\_logo">http://www.thegef.org/gef/GEF\_logo</a>.
- 150. The UNDP logo can be accessed at <a href="http://intra.undp.org/coa/branding.shtml">http://intra.undp.org/coa/branding.shtml</a>. Full compliance is also required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at:
- 151. <a href="http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08">http://www.thegef.org/gef/sites/thegef.org/files/documents/C.40.08</a> Branding the GEF%20final 0.pdf. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items. Where other agencies and project partners have provided support through cofinancing, their branding policies and requirements should be similarly applied.

**Table 7: Project Monitoring and Evaluation** 

Type of M&E activity	Responsible Parties	<b>Budget US\$</b> Excluding project team staff time	Time frame	
Inception Workshop and	<ul> <li>National Project Coordinator</li> </ul>	Indicative cost: 10,000	Within first two months of	
Report	<ul> <li>UNDP CO, UNDP CCA</li> </ul>	indicative cost. 10,000	project start up	
Measurement of Means of	<ul> <li>UNDP CCA RTA/National Project</li> </ul>	To be finalized in Inception Phase	Start, mid and end of project	
Verification of project	Coordinator will oversee the hiring of	and Workshop.	(during evaluation cycle) and	
results.	specific studies and institutions, and	Indicative cost is 20,000.	annually when required.	

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
	delegate responsibilities to relevant team members.		
Measurement of Means of Verification for Project Progress on <i>output and</i> <i>implementation</i>	<ul> <li>Oversight by National Project Coordinator</li> <li>Project team</li> </ul>	To be determined as part of the Annual Work Plan's preparation. Indicative cost is 15,000.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	<ul> <li>National Project Coordinator and team</li> <li>UNDP CO</li> <li>UNDP RTA</li> <li>UNDP EEG</li> </ul>	None	Annually
Periodic status/ progress reports	National Project Coordinator and team	None	Quarterly
Mid-term Evaluation	<ul> <li>National Project Coordinator and team</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 40,000	At the mid-point of project implementation.
Final Evaluation	<ul> <li>National Project Coordinator and team,</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost: 40,000	At least three months before the end of project implementation
Project Terminal Report	<ul> <li>National Project Coordinator and team</li> <li>UNDP CO</li> <li>local consultant</li> </ul>	0	At least three months before the end of the project
Audit	<ul> <li>UNDP CO</li> <li>National Project Coordinator and team</li> </ul>	Indicative cost per year: 3,000	Yearly
Visits to field sites (UNDP staff travel costs to be charged to MoAFRD fees)	<ul><li>UNDP CO</li><li>UNDP RCU (as appropriate)</li><li>Government representatives</li></ul>	For GEF supported projects, paid from IA fees and operational budget 12,000	Yearly
	TAL indicative COST taff time and UNDP staff and travel expenses	US\$ 140,000 (+/- 5% of total budget)	

# 152. Audit Clause

Audit will be conducted according to UNDP Financial Regulations and Rules and applicable Audit policies.

# 7. LEGAL CONTEXT

- 153. This document together with the CPAP signed by the Government and UNDP which is incorporated by reference constitute together a Project Document as referred to in the SBAA (or other appropriate governing agreement) and all CPAP provisions apply to this document.
- 154. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.
- 155. The implementing partner shall:
- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.
- 156. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.
- 157. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via
  - http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.