



# GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: Least Developed Countries Fund

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## PART I: PROJECT INFORMATION

Project Title:	Strengthening Resilience and Adaptive Capacity to Climate Change in São Tomé and Príncipe's Agricultural and Fisheries Sectors		
Country(ies):	São Tomé and Príncipe	GEF Project ID: <sup>1</sup>	9113
GEF Agency(ies):	AfDB (select) (select)	GEF Agency Project ID:	
Other Executing Partner(s):	Ministry of Agriculture, Fisheries and Rural Development (MADR)	Submission Date:	04/09/2015
GEF Focal Area(s):	Climate Change	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>	Corporate Program: SGP <input type="checkbox"/>	
Name of parent program:	[if applicable]	Agency Fee (\$)	332,782

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

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
(select) CCA-1 (select)	LDCF	2,000,000	10,153,900
(select) CCA-2 (select)	LDCF	752,000	4,364,800
(select) CCA-3 (select)	LDCF	750,968	2,502,780
Total Project Cost			
		3,502,968	17,021,480

## B. INDICATIVE PROJECT DESCRIPTION SUMMARY

<b>Project Objective: To reduce the vulnerability of agricultural and fisheries communities to the adverse impacts of climate change in São Tomé and Príncipe through adaptation measures meant to enhance the resilience of affected sectors, natural systems and communities</b>						
Project Components	Financing Type <sup>3</sup>	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
Component 1: Strengthening resilience of the agricultural and fisheries sectors, natural systems and communities to climate change and variability	Inv	1.1 Climate-resilient technologies and practices adopted and scaled up for reduced sectoral vulnerability and ecosystem based adaptation	1.1.1 Intensified and resilient agricultural production by promoting adaptation through climate-smart agriculture and SLM on 150 ha (tbd)  1.1.2 Adaptation measures implemented for resilient fisheries: installation of 20 fish aggregating devices (16 in Sao Tome and 4 in Principe); establishment and equipping of pilot fish ponds (# tbd)  1.1.3 Irrigation schemes for agriculture on (# tbd) ha: assessment of irrigation needs and options in Principe; introduction of irrigation	LDCF	1,900,000	9,343,353

<sup>1</sup> Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

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

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

		<p>1.2 Physical assets and natural systems strengthened for improved resilience of the agriculture and fisheries sectors and communities</p>	<p>schemes on 30 ha in Principe; 20 drip irrigation systems and kits established and distributed (16 in ST and 4 in P); 5 drip irrigation kits to CIAT, CATAP, CADR (2), RAP</p> <p>1.1.4 Techniques for efficient water use and climate resilient SWM implemented: pilot hillside dam(s) (tbd) in Pinheira/Pedroma; construction of water conservation, harvesting or collection basins in Pinheira or Agostino Neto (including assessment and monitoring) to store water and create a strategic reserve</p> <p>1.2.1 Localized reforestation on 100 ha (tbd) for windbreaks, coastal protection, and to reduce both soil and coastal erosion caused by CC and human activities</p> <p>1.2.2 Adaptation measures implemented in targeted agricultural districts for increased ecosystem resilience: CCA technologies and INRM demonstrated through agro-forestry, soil conservation and/or climate smart agriculture, including establishment of greenhouses</p> <p>1.2.3 Measures for coastal protection and safe harborage: construction of one protective breakwater structure in Praia Sao Paulo (tbd); establishment of one scheme to reduce coastal erosion and flooding in Pantufo (e.g. beach drainage, sea wall, offshore breakwater, or beach nourishment)</p> <p>1.2.4 Technologies piloted/assessed to reduce consumption of fuelwood: dissemination of improved cooking stoves in 5 (tbd) communities; small community nurseries to contain forest degradation; assessment and identification of renewable energy options in STP</p> <p>1.2.5 Distribution of equipment for safety at sea: simple GPS, lifejackets, first aid kits,</p>			
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		<p>1.3 Livelihoods and sources of income of households and communities diversified for enhanced resilience and food security</p>	<p>1.3.1 Climate resistant seeds and flood and drought-resistant food crop varieties identified and piloted on 5 sites (tbd) (e.g. manioc, tomatoes, potatoes)</p> <p>1.3.2 Diversified livelihoods and sources of income improved for households and communities in 3 districts linked to above activities in crop diversification, gardens/ greenhouses, agro-forestry, etc.</p> <p>1.3.3 Project greenhouses and location specific vegetable plots serve as food reserves and climate resilient food production methods</p> <p>1.3.4 Development of pilot aquaculture schemes in a target district (tbd)</p>			
Component 2: Enhancing technical and institutional capacities for adaptation to climate change at all levels	TA	<p>2.1 Awareness, technical and institutional capacities strengthened to identify, develop and implement effective adaptation and NRM strategies</p>	<p>2.1.1 Environmental awareness-raising campaign conducted at community level to sensitize on climate risks, impacts and response measures, including climate-smart agriculture, water-borne diseases, etc.</p> <p>2.1.2 Capacity building of communities in SLM/SWM and in management/maintenance of new infrastructure and technologies through local NGOs</p> <p>2.1.3 Training of local communities on CCA and livelihood diversification options: 3 districts</p> <p>2.1.4 Technical training at institutional and district level: 100 (tbd) staff trained on CCA and sustainable NRM</p> <p>2.1.5 Training of 50 (tbd) technical agents responsible for monitoring fisheries on early warning and data analysis/monitoring</p>	LDCF	752,000	4,364,800

		2.2 Improved data and technical knowledge base for better assessment of vulnerabilities, threats and preparedness	<p>2.2.1 Detailed vulnerability assessment conducted of small scale fishermen, fish sellers, and farmers in order to inform adaptation planning</p> <p>2.2.2 Analysis and monitoring of coastal erosion in 2 exposed areas and vulnerable communities, linked to coastal protection activities</p> <p>2.2.3 Increased knowledge of vulnerability and risk assessment tools and agro-climatic monitoring by 4 national level institutions</p> <p>2.2.4 Support to and enhancement of national agricultural, and fisheries statistics</p>			
Component 3: Monitoring, evaluation and knowledge management for effective adaptation	TA	3.1 Enhanced monitoring and reporting of adaptation measures established and strengthened for anticipatory planning	<p>3.1.1 Knowledge management plan developed to capture and share information on climate change impacts and lessons learned</p> <p>3.1.2 Monitoring and surveillance of the fisheries sub-sector by supporting operationalization of a vessel monitoring system (VMS) (software, antennas, servers, etc.)</p> <p>3.1.3 Sectoral climate risk assessment guidelines developed to enable enhanced response at national and community level</p> <p>3.1.4 Climate change adaptation and disaster risk management strategies and plans developed for and with 3 communities</p>	LDCF	684,160	2,502,780

		3.2 Lessons learned and best practices from demonstration activities and capacity development initiatives captured, up-scaled and disseminated	3.2.1 Learning tools produced and disseminated on CCA technologies and practices and used for trainings (manuals, technical briefs, brochures, etc.), including manuals on sustainable agriculture and fisheries  3.2.2 Project-related best practices and lessons learned captured and circulated widely			
		3.3 Better M&E of adaptation strategies and measures	3.3.1 M&E plan developed and implemented for project and adaptation interventions  3.3.2 Field based data systematically collected to monitor project outcome indicators at all levels, including on gender			
Subtotal					3,336,160	16,210,933
Project Management Cost (PMC) <sup>4</sup>				LDCF	166,808	810,547
<b>Total Project Cost</b>					<b>3,502,968</b>	<b>17,021,480</b>

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: (LDCF)

#### C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
GEF Agency	African Development Bank (AfDB)	Loan	15,759,000
Recipient Government	Government of Sao Tome and Principe	In-kind	518,739
Beneficiaries	Beneficiaries (TBC)	In-kind	743,741
<b>Total Co-financing</b>			<b>17,021,480</b>

#### D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS <sup>a)</sup>

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) <sup>b)</sup>	Total (c)=a+b
AfDB	LDCF	Sao Tome and Principe	Climate Change	(select as applicable)	3,502,968	332,782	3,835,750
<b>Total GEF Resources</b>					<b>3,502,968</b>	<b>332,782</b>	<b>3,835,750</b>

a) Refer to the Fee Policy for GEF Partner Agencies.

#### E. PROJECT PREPARATION GRANT (PPG)<sup>5</sup>

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

Is Project Preparation Grant requested? Yes  No  If no, skip item E.

**PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS**

Project Preparation Grant amount requested: \$150,000					PPG Agency Fee: 14,250		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee <sup>6</sup> (b)	Total c = a + b
AfDB	LDCF	Sao Tome and Principe	Climate Change	(select as applicable)	150,000	14,250	164,250
<b>Total PPG Amount</b>					<b>150,000</b>	<b>14,250</b>	<b>164,250</b>

**F. PROJECT’S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS<sup>7</sup>**

Provide the expected project targets as appropriate.

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

**PART II: PROJECT JUSTIFICATION**

1. *Project Description*. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and

<sup>5</sup> PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

<sup>6</sup> PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

<sup>7</sup> Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

1) The global environmental and/or adaptation problems, root causes and barriers that need to be addressed

São Tomé and Príncipe (STP) is an archipelago located in the Gulf of Guinea comprising two main islands and several islets, 350 km off the coast of Gabon. The country is one of Africa's smallest nations with a total area of 1,001 km<sup>2</sup> and a population size of about 200,000. As both a least developed country (LDC) and small island developing state (SIDS), STP is highly susceptible to the effects of climate change and variability.

As a LDC, STP is distinguished generally by low income, weak human resource capacities, and high economic fragility. As a SIDS, STP has unique vulnerabilities and characteristics which include isolation, small size, high population density, circumscribed natural resources and enhanced proneness to natural disasters. Given these features, it is expected that climate change (CC) and variability will have a strong impact on STP and affect the basis of livelihoods and development on the island state: food/crop production, freshwater resources, infrastructure, health, and ecosystem services. Consequently, CC will disproportionately affect STP's poorest and most vulnerable people.

As with numerous SIDS, STP's rural sector is constrained by small internal markets, dependence on one primary export (cocoa), high rates of imports, and exposure to external factors including climatic and economic shocks (e.g. fluctuating food prices). STP's vulnerability is additionally due to the fragility of both its coastal and inland ecosystems and to its low level of economic development. STP has a principally agrarian economy with much of the population rural farmers and fishermen. Cocoa production is the main source of income for rural families. About 60% of the arable land is devoted to cocoa production. Despite the island state's abundant natural resources which underlie huge agricultural, water and tourism potential, STP remains a LDC and net food importer. Ranked 142<sup>nd</sup> out of 187 in the human development index, half the population lives in poverty. 68% of farmers and fishermen are poor while 29% live in extreme poverty.

STP's economy is based primarily on subsistence agriculture and fishing, sectors which currently have the lowest capacity to absorb and adapt to environmental instabilities and natural resource degradation. These sectors continue to face major constraints due to:

- Low access to production inputs, including adaptive technologies;
- Low technical capacity in the rural sphere and weak agricultural and fisheries production systems;
- Unsustainable practices by rural communities, leading to degradation of natural resources;
- A limited domestic market, characterized by lacking storage capacity, conservation and supply markets;
- Limitations in the processing capacity of the agri-food sector to diversify and add value to production;
- Institutional weaknesses related to training, research and the commercialization of products;
- Low adaptive capacities in agriculture and fisheries sectors, assets and natural systems.

Saotomean agriculture is characterized by low productivity, worsened by the climatic conditions under which farmers operate. The reasons are primarily due to unsustainable agricultural practices, aged cocoa plants, the bad state of support infrastructure (irrigation, roads, etc.), inadequate access to credit, lack of modern equipment, inadequate electric supply, low advisory support, and deficiencies in the agricultural input and output markets (i.e. lacking or low quality inputs, low commercialization, scarce access to markets). The concentrated use of STP's arable land for mono cash crops has led to a reliance on food imports to meet local consumption needs and to degrading soil nutrient quality and increased erosion. Despite efforts made in the promotion of the productive potential of food crops, the country continues to depend heavily on imports.

Such circumstances contribute to amplifying the vulnerability of farming communities that rely on the country's natural resources as their source of income and livelihood. STP has rich water resources and dense tropical forests. However, according to the country's 2007 National Adaptation Program of Action (NAPA), these resources are being poorly managed, putting them at risk for future generational use. Moreover, high population growth is presenting serious challenges. An increase in population in an economy dependent upon agriculture and with highly constrained land area creates pressures on habitats, leading to clearing of forests in order to expand crops and

agricultural land. The consequences of such activities limit the ability of ecosystems to act as buffers to climatic change and extreme weather events, to the detriment of populations and habitats.

The fisheries sector also suffers greatly from climatic events due to the continued use of practices that are unable to cope with the increased recurrence of storms, floods and extensive coastal erosion. Due to a long tradition, fishing continues to be practiced using the same techniques of over half a century ago and canoes continue to be made from the trunks of trees. As a consequence of strong winds, fog, and rough seas (and changing climatic conditions that are forcing fishermen to move to ever more distant areas), accidents, deaths, and material losses are frequent and increasing. This has a direct impact on poverty too due to loss of life, fishing equipment and livelihood sources for households and communities. Importantly, fishing and littoral communities are increasingly suffering the effects of coastal erosion and rising sea levels.

In such a context, trends associated with increased exposure and poor sustainability are being observed that risk exacerbating STP's vulnerability to climate change. These include the extension of low-resilience crops with a low potential to protect soils and productivity; the weakening of land and forest ecosystems resulting from a decline in vegetation and tree cover; declining fish catch due to changing composition of fishery resources and their distribution; forest degradation as a result of the overexploitation of timber for fuelwood; and net soil nutrient loss resulting from unsustainable land practices and the conversion of forests to savannah. Consequently, the importance of sustainable land and water management (SLM/SWM) in São Tomé and Príncipe has become critical. STP must adapt to expected climatic variability and change by addressing underlying barriers, existing adaptation deficits and unsustainable resource use.

Studies conducted during preparation of the NAPA emphasize that critical phenomena are being observed primarily in rising temperatures over time, extended dry seasons, decreases in rainfall and increased coastal erosion. These are the most evident manifestations of climate change in STP and the country's greatest concerns given their repercussions on river flow, groundwater resources, and land erosion. Decreased rainfall over the years is expected to disturb the island's hydrological pattern by altering the rainfall/runoff ratio and has led to reduced river flow and inadequate water supplies. Higher temperatures and longer dry seasons (i.e. lengthening of the "gravana" season) are leading to drier conditions which, followed by torrential rains, cause landslides, flooding, and groundwater contamination. Longer and drier periods are also a barrier to food production, particularly in the northern part of São Tomé Island. Due to reduced recharge, groundwater supply and quality will be reduced by less rainwater infiltration, thus decreasing the groundwater table and the dilution effect to salt water intrusion. Variability in rainfall results in disturbances in the agricultural calendar and irregular agricultural production, with erratic farm outputs aggravating food price volatility. Sea level rise is an additional risk in STP, and has already led to loss of houses and infrastructure, isolation of communities, and is currently leaving populations unprotected.

Long-term climatic projections for STP thus foresee more extreme weather events combined with higher average temperatures, reduced river flows, lower subterranean water supplies, and increased floods and sea-level rise which threaten agricultural and fisheries structures and consequently the underlying systems for food production. Harsher environmental conditions and degrading ecosystems are and will increasingly have negative impacts on the agriculture and fisheries sectors which, in turn, will severely exacerbate food insecurity, poverty, and the future sustainability prospects of the island state. In these sectors, vulnerability to climate change is not only a result of changing weather patterns and exogenous forces, but also of very poor adaptive capacities, including poor management, the absence of resistant species, ineffective infrastructure and a strong lack of environmental awareness and predictability. The low institutional and technical capacities within national institutions, decentralized authorities and communities for climate change adaptation represent obstacles to an effective response to climatic challenges. Communities themselves, who suffer most, do not have the knowledge or means to develop suitable adaptation measures and better cope with risk or bounce back following a stress event.

STP's NAPA vision is to reach a high level of adaptive capacity in the face of the negative and growing impacts of climate variability and change. STP's first National Communication (NC) to the UNFCCC in 2004 identified five particularly vulnerable sectors: fisheries, forests, health, education, and water/agriculture. The NAPA additionally identifies 22 urgent adaptation priorities within these sectors. Nonetheless, institutional gaps limit implementation of

these critical actions. Weak technical, financial and political capacities in planning and execution of sustainability and adaptation objectives are impediments to effectuating the NAPA.

The long term solution to the underlying causes of climate change vulnerability in STP is for all stakeholders to understand the threats of - and responses to - current and anticipated climate impacts to the rural sector. Adaptation remains the more pressing issue for the population. Recent initiatives have centered on the policy and planning gap; however, more effort is needed to translate initiatives, policy and lessons into on-the-ground interventions that will make a difference at household level. Furthermore, the sustainable use of natural resources is inextricably linked to enhanced resilience and sustained environmentally-friendly development. Proposed measures which can lessen the detrimental effects of climate change are the integrated development of the agriculture and fisheries sectors in a way that guarantees the resilience of productive systems, food safety and that generates income for farmers and fishers, while also protecting natural ecosystems.

## 2) The baseline scenario or any associated baseline projects

STP has positive economic prospects given fertile and good quality soil, an estimated annual fishery potential of between 23,000 and 29,000 tons, water availability during the dry season, and a variety of micro-climates. Despite all these advantages, STP remains among LDCs, has low agricultural productivity, food deficits and a low GDP per capita. Analyses of production constraints highlight problems of irregular food supply, inadequate product preservation, low human resource capacity and inadequate infrastructure.

This situation led the AfDB to develop the Infrastructure Rehabilitation for Food Security Support Project (PRIASA) in November 2010. PRIASA aimed to support increased and improved agricultural and fishery production and focused on the development of specific expertise and skills in areas key to the STP economy (irrigation, infrastructure, quality control and product preservation, etc.) by rehabilitating and modernizing key infrastructure. PRIASA ended in December 2016. Given positive results and the continued challenges faced by STP, a second phase of implementation (PRIASA II) was approved by the AfDB in June 2015 for the period 2016-2020. The baseline project for this LDCF project is therefore PRIASA II. Although the baseline project has already begun, the LDCF funded adaptation activities are still fully relevant and justified.

In order to consolidate gains from phase I and build on lessons learned, PRIASA II puts special emphasis on essential agricultural and fisheries infrastructure and promotes interventions in modernization, production, the promotion of value chains, access to markets, and the development of knowledge and new technologies. Beyond basic infrastructure, the project also seeks to develop and disseminate techniques necessary for conservation and processing of food products. These interventions will be accompanied by the strengthening of local and organizational capacities and the promotion of skills essential to sustain innovations.

The overall objective of PRIASA II is to contribute to the promotion of sustainable and inclusive economic growth and to the overall reduction of poverty and food insecurity in STP. The specific objective is to increase the availability of quality agricultural and fisheries products throughout the year. PRIASA II favors not only food production but also improving the living conditions of populations, in particular as regards nutrition, human health, and income options. PRIASA II will have a duration of 5 years, will cover both island territories of STP, and will intervene on new sites and in new communities. The project is based on three components summarized below:

### Component 1: Rural infrastructure development

This component focuses on the rehabilitation and modernization of infrastructure to support enhanced production in agriculture and fisheries. The component covers needed basic infrastructure (roads, irrigation systems, etc.), enhanced production areas, as well as improving the quality of marketed products. The project will also strengthen select value chains, supporting producers to upgrade their operations and better link them to markets. Specific activities include developing fisheries infrastructure and equipment (cooling units, landing sites, etc.); rehabilitation and development of irrigation systems; rehabilitation of rural roads and construction of feeder roads; and support to production, processing and marketing of agricultural products.

### Component 2: Capacity development

The second component aims to develop knowledge and capacities in key government institutions and in communities to manage and sustain the activities initiated, process and market products, and to use and maintain infrastructure. A particular focus will be on training, institutional support, and access to knowledge so as to ensure more effective product control, consideration of environmental issues, and better data/information. PRIASA II will support capacity building to strengthen government institutions and professionalization of actors in agri-food development (CIAT, CADR, CATAP, PNASE). A plan for community technical assistance and rural extension is also envisaged through a framework for technology transfer, the strengthening of extension mechanisms and rural development based on participatory processes and adapted to family farming and fisheries.

### Component 3: Project management

This component strengthens project implementation and coordination to ensure the effective and coordinated execution of all activities related inter alia to procurement, monitoring and evaluation, financial management, and communication.

Below is a summary of the main activities per operational component (1 and 2):

#### 1. Rural infrastructure development

- rural feeder roads rehabilitated or established
- development and extension of irrigated areas
- infrastructure to support production, conservation, processing and marketing of agricultural products: rehabilitate or build new markets, nurseries, solar dryers, small processing units, etc.
- modernisation of fisheries infrastructure: markets, fish landing sites, cooling units, ice plants, fibre glass canoes, etc.
- strengthening support and extension services to rural producers and organisations

#### 2. Capacity development

- improving fisheries monitoring and building the capacity of fishermen
- strengthening oversight and equipping of relevant Ministries and departments (MADR, CADR, CIAT, CATAP): monitoring and training activities conducted, including for statistics (for agriculture and hydrology), planning, analysis, policy/regulatory improvements, etc.
- extension and advisory support services in agriculture
- school canteens established and nutrition awareness
- fisheries surveillance centre and quality control laboratory modernized
- fishermen and fish traders supervised and trained
- CATAP and CIAT extensions rehabilitated and functional
- farmers, producer associations and institutional technicians trained

PRIASA II was approved in June 2015 to commence in 2016. Despite some initial startup delays due to the ratification of the loan, project implementation is now on track. The PIU is fully operational and numerous procurement processes, studies and activities have begun and are ongoing. As of August 2017, the disbursement rate of the loan is 18.5% and major results thus far are as follows:

- several feasibility and other studies for select infrastructure and required trainings are ongoing
- most MoUs with project implementation partners have been finalized and signed
- the Bobo Forro fish market (in Sao Tome) will soon be fully rehabilitated (work began under PRIASA I)
- 29 km of feeder roads have been assessed; work will begin on 10 km by the end of 2017
- an irrigation plan for STP is being developed and is on course
- the access road to CATAP has been rehabilitated; new equipment for CATAP and CIAT has been procured
- 50 female wholesale fish vendors trained on enhanced conservation and processing techniques
- 30 youth trained at CATAP (1 year trainings) in techniques for irrigation, gardening, land restoration, etc.

3) The proposed alternative scenario, with a brief description of outcomes and components of the project

Adaptation is crucial for STP and urgent for its rural communities. As other insular countries, STP faces several developmental challenges, including small territorial extension, limited agricultural resources, susceptibility to natural disasters, and limited capacity and means for sustained and environmentally-friendly growth. Given its small size and low-lying coasts with high people concentrations, STP's population is very vulnerable to climatic stress. Its positive economic potential as described above is not fully exploited and it is threatened by changing climatic patterns and unsustainable use of the island's natural resources. The alternative scenario to the baseline will add much needed climate change adaptation considerations to a baseline focused on rural production infrastructure and modernization aspects.

The LDCF project will promote and fully integrate critical climate change adaptation measures within the AfDB baseline project. Building on STP's needs, barriers and climatic threats, the LDCF project will critically supplement PRIASA II by incorporating long-term environmental considerations and adaptation actions as additional necessary activities which will render holistic the baseline project intervention. Without consideration for climate change and for adaptation in the agriculture and fisheries sectors of STP, no intervention can be fully effective in reducing food insecurity, enhancing livelihoods, and ensuring the sustainable development of the island state.

In STP, interventions for adaptation to climate change do exist but have not yet been fully exploited or implemented through a holistic vision of the land/seascape and rural needs. The project will focus on enhancing adaptation in agriculture and fisheries by improving sustainable and integrated natural resources management (INRM), knowledge, and capacity at all levels, ultimately enhancing the resilience of the population, ecosystems and of underlying socio-economic systems to climate change. It will build synergies with other GEF focal areas given the cross-sectoral and integrated nature of the envisioned activities. Building on PRIASA II, the LDCF project will represent the critical elements in the project for climate change adaptation. It is fully consistent with the LDCF eligibility criteria and priorities and numerous of STP's NAPA priority actions.

Together, the project components will address short and long term climate change risks and response mechanisms by strengthening: (i) adaptive short and long term planning capacities and technologies, including habitat and population vulnerability; (ii) institutional capacities and knowledge at all levels to enhance response capacity; (iii) community adaptation interventions and livelihood options for improved resilience in priority areas; and (iv) awareness and knowledge on climate impacts, vulnerabilities, and mitigation options. The project will lead to reduced vulnerability at local, district and national levels.

#### *Outcomes and components*

The ability of people to adapt to climate change is inextricably linked to basic human needs and to the health of the ecosystems they depend upon for their livelihoods and wellbeing. The landscape itself is the first to offer protection from climate change and variability. In general, poor and vulnerable people rely most on the goods and services provided by ecosystems. For adaptation to be effective it must therefore integrate efforts to sustain and restore ecosystem functions and promote basic needs in the face of variable climatic conditions. The sustainable use and management of natural resources enhance resilience to the adverse impacts of climate change. As such, climate change adaptation in STP also centers on the strengthening or rehabilitation of degraded or degrading ecosystems, caused by the clearing of land for agriculture and the overexploitation of forest resources. The fact that the population of STP lacks adequate income generating activities contributes to the pressure on and degradation of natural resources. Livelihood diversification must also be enhanced.

The AfDB LDCF project will aim to strengthen the adaptive capacity of the Saotomean population and the country's critical rural productive sectors, physical assets and natural systems. An integrated and holistic approach to CCA and NRM will be the focus of the project, based additionally on the technologies and knowledge necessary and suitable to a small island least developed context and with specific consideration for the needs, gaps and vulnerabilities of STP. The objectives of such an approach are to: promote the resilience of livelihoods; reduce the impacts of natural disasters on vulnerable people and fragile ecosystems; build the capacity of communities and government institutions to apply integrated approaches to adaptation; increase awareness of the underlying causes of vulnerability and response measures; promote the sustainable management of natural resources to sustain the goods, services, and benefits provided by ecosystems; and ultimately result in better food and nutritional security in the long term. The

project will be implemented through three operational components, each with interlinked activities:

*Component 1. Strengthening resilience of the agricultural and fisheries sectors, natural systems and communities to climate change and variability*

The first component is based on strengthening the adaptive capacity of rural production systems and an integrated approach to ecosystem management for CC adaptation. It targets concrete adaptation interventions at community level, the sustainable use of STP natural resources and the goods and services required for reducing the vulnerability of the population to climatic change and variability. This will entail the implementation of demonstration activities in the agricultural and fisheries sectors, the identification and application of climate resilient technologies and practices, and enhancing the sustainable use and management of land, water and forest resources (with implications for soil conservation, water efficiency and crop diversification). The component will additionally promote diversified, sustainable and thus resilient livelihood options as a means to enhance resilience and lessen anthropogenic pressures on natural resources that act as buffers to climatic events. Given the small size of STP and its population, the numerous adaptation measures planned will in general be considered pilots with potential for strong impact within specific communities and easy to duplicate by other donors and/or beneficiaries. Regarding the specific context of STP, New technologies and practices cannot be implemented on grand scale in STP but must first be tested and then scaled up.

As a small island country with limited land resources, it is essential to optimize the use of cultivated land and enhance productivity in a sustainable way. An ecosystem-based adaptation approach that involves a range of INRM activities will be deployed in the project through demonstration activities in sustainable land and water management and reforestation. Given that deforestation is a growing problem in STP, investments, such as in localized reforestation and agro-forestry, will also be assessed and initiated to curb pressures on natural resources and riparian forests which shield communities and households from coastal threats and flooding. These have also been identified as needs and mitigation measures in STP's second NC. The project will also target coastal erosion, a phenomenon that has worsened in the country and which has clear impacts on marine and terrestrial ecosystems, and the livelihoods of traditional fishing communities. In an environment of shifting seasonal patterns and increasing strength of weather events, early warning and safety equipment are needed when traditional knowledge and navigation practices are no longer reliable for safety and sustained food production.

Climate change adaptation measures will be fully linked with INRM and to the training, knowledge enhancement and capacity building proposed by the project. As such, the plethora of activities must not be viewed as independent interventions but as fully interlinked and mutually reinforcing. Irrigation devices will feed SLM actions; crop and livelihood diversification will be linked to agro-forestry, climate smart agriculture and reduced fuelwood consumption; the testing of resilient seeds and crops will be done in the planned nurseries and greenhouses, and so on. All activities will be integrated for greater impact.

*Component 2. Enhancing technical and institutional capacities for adaptation to climate change at all levels*

The second component will aim at enhancing awareness and technical knowledge on climate change vulnerabilities, risks and adaptation measures at institutional and community level. By building capacity on adaptation response measures, activities will strengthen knowledge at all critical levels for better planning and information sharing. The focus is to move from a 'risk to resilience' approach: when risk is reduced through better knowledge and preparedness, it can make a substantive contribution towards CCA. Furthermore, through training, the effort of mainstreaming CCA into national planning and institutions will also be enhanced as a knock-off effect.

Technical capacities for adaptation in agriculture and fisheries, and particularly institutional skills in the fields of research, demonstration, and sustainable NRM, must be strengthened as a transversal approach. National capacities with regards to planning, monitoring and statistics also need reinforcement in STP. Outreach and awareness at community level instead will be implemented through partnerships with local NGOs based on improving awareness, skills and socio-economic and environmental advice to beneficiaries. Different NGOs with extensive experience in sub-sectors will focus on three distinct groups of beneficiaries: farmers (ADAPA), small-scale fishermen and fish sellers (MARAPA), and small agricultural processors (ALISEI). Capacity building of communities will include training in SLM and SWM and in management/maintenance of new infrastructure so as to sustain the interventions

over time.

Strengthening early warning through enhanced data, information and analysis of natural and social vulnerabilities (areas, villages, communities, social groups, etc.) will further strengthen adaptive capacity and enhance the proactive and coordinated management of climate-related initiatives. Based on preliminary needs analysis, the expertise and knowledge of human resources (civil servants, local administration, civil society, and communities) will be reinforced. Vulnerability and adaptation indicators will be developed for the fisheries and agriculture sectors. Importantly, capacity building will not be stand-alone but linked to demonstration activities and planned activities in component 1 in order to learn from actual adaptation interventions of the project.

### *Component 3. Monitoring, evaluation and knowledge management for effective adaptation*

The final component will support project management and overall monitoring and evaluation (M&E). Building on demonstration sites, assessments, and feasibility studies, the project aims to develop indicators, frameworks, and responsibilities for monitoring changes in CCA and in poverty reduction. The use of climate information to inform decision making must also be fostered. Inter-annual variability of rainfall is expected to become a constraint to agricultural production in STP. Since climate change will exacerbate this problem, using environmental monitoring and seasonal climate forecasts to inform land users and planners at institutional level will be necessary to avoid shocks. Such would allow appropriate use of information under favorable conditions and good decision-making in case of impending disasters such as storms. The population's adaptation capacity will be built through the dissemination of risk management tools/manuals, agro-meteorological information and the provision of support to farmers to incorporate climate information into the management of their own agro-sylvo-pastoral activities.

Lessons learned in the techniques adapted – biophysical and social – will be disseminated among different stakeholders to facilitate access to information and knowledge sharing and strengthen innovation and technology transfer in rural areas. This will involve a package of outreach, educative and awareness-raising materials, suitable to different stakeholders with different needs, realities and levels of understanding (government, households, men, women). Lessons learned will be extrapolated from the different demonstration activities for replication, based primarily on the unique needs of CCA in a SIDS context. The component will also provide resources for the implementation of an M&E framework which will promote dialogue on climate change at national level. Furthermore, the component will promote better coordination and synergy amongst partners and enhance the implementation and monitoring of activities in different districts and villages.

Below is an indicative list of main activities for the LDCF project, without which adaptation considerations or measures in both agriculture and fisheries would not be considered or implemented in the baseline project. These will be further defined and detailed during CEO endorsement stage, including specific outputs (beneficiaries targeted, indicators, target zones, number of activities, etc.).

### **Indicative list of additional activities funded by LDCF (not covered by baseline project):**

- Adaptation in agriculture and diversification of crops through SLM and climate smart agriculture (number of hectares tbd, in # of communities tbd) for increased ecosystem and livelihood resilience: e.g. agro-forestry, soil conservation, greenhouses which serve as food reserves and climate resilient food production
- Techniques for efficient water management, collection and conservation in # of communities (tbd), plus irrigation for sustainable water management (SWM): irrigation devices and schemes (tbd # of ha); drip irrigation systems established and kits distributed; pilot hillside dam(s) (tbd); construction of water conservation, harvesting or collection basins to store water and create a strategic reserve in times of shortage
- Installation of fish aggregating devices; establishment and equipping of pilot fish ponds (# tbd) for more resilient fisheries and food production
- Localized tree planting on hillsides, in fragile agricultural areas and on coasts (ha tbd) to act as windbreaks, for

coastal protection, and to reduce both soil and coastal erosion caused or threatened by heightened climatic events

- Rehabilitation of beaches, coastal protection and barriers to fight coastal erosion caused by increased storms and rising sea levels: construction of one protective breakwater structure in Praia Sao Paulo (tbd); establishment of a scheme to reduce coastal erosion and flooding in Pantufo (e.g. beach drainage, sea wall, offshore breakwater, or beach nourishment)
- Technologies introduced to reduce deforestation (i.e. curb consumption of fuelwood) in areas where trees act as protection against wind, floods, etc.: dissemination of improved cooking stoves in # of (tbd) communities; community nurseries; assessment and identification of renewable energy opportunities in STP
- Fishing equipment and technologies distributed for reduced vulnerability to variable climatic patterns: equipment for safety at sea such as simple GPS, lifejackets, first aid kits, emergency flares, etc.
- Identification of new climate resilient crop varieties and their implementation with/in communities in agricultural areas identified for the SLM/SWM activities: climate resistant seeds and flood and drought-resistant food crop varieties identified and piloted on sites (tbd); linked to diversified livelihoods and sources of income
- Awareness, sensitization and capacity building at community and institutional levels linked to above activities will include: environmental awareness-raising campaign at community level to sensitize on climate risks, impacts and adaptive response measures; capacity building of communities in CCA and sustainable natural resources management (land, water, forests) etc.; technical training at institutional and district levels on CCA, sustainable NRM, early warning and data analysis/monitoring
- Knowledge management and data/studies to enhance preparedness to CC and to inform adaptation planning will include: vulnerability assessments of small scale fishers and farmers; analysis and monitoring of coastal erosion in exposed areas; support to and enhancement of national fisheries statistics plus monitoring and surveillance; sectoral climate risk assessment guidelines and community management strategies; learning tools on CCA technologies and practices developed and used for trainings (manuals, technical briefs, brochures, etc.)

4) The incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Despite numerous productive advantages, two-thirds of STP's total population is affected by poverty and more than one fifth of the population is food insecure. For this reason, the baseline project PRIASA II aims at increasing the availability and quality of agricultural and fisheries products, improving production systems, developing irrigation and other necessary infrastructure, and bettering conditions for conservation, processing and marketing, with a view to both enhancing productivity and adding value to production. PRIASA II focuses on interventions in high-impact rural sectors critical to rural productivity and food security in STP. The additional cost reasoning of the LDCF will be to make the interventions climate smart, with a clear emphasis on enhancing adaptive capacities at all levels, and by taking into account increasing climatic stresses being experienced by the population and ecosystems. Adaptation will be integrated into the baseline project through funding from the GEF/LDCF as a fundamental component and added priority, so critical to SIDS and the rural sectors of LDCs.

The total cost of the project is estimated at about USD 20.5 million. To co-finance the GEF/LDCF resources of USD 3.5 million, the amount is divided between an AfDB financing of USD 15.759 million, financing from the Government amounting to USD 518,739, and from beneficiaries in kind of USD 743,741. Within this context, the importance and applicability of climate change adaptation will be ensured by funding from the GEF/LDCF.

As PRIASA II builds on the positive outcomes of PRIASA I, the LDCF project builds on PRIASA II to make it an effective initiative for climate change adaptation, critical to any intervention in STP's rural sector. The LDCF project will address a number of unique and urgent needs in STP and its critical vulnerabilities as defined in the NAPA. The PRIASA II context and approach makes this an ideal framework. GEF will catalyze adaptation into the larger AfDB development

initiative with a view to both increasing and sustaining adaptive capacity in all rural spheres through tangible impact on the ground. As a SIDS, activities in STP will target those unique and critical vulnerabilities and characteristics that enhance its fragility, including limited land resources, low lying coasts, rising sea levels, limited livelihood options, etc.

Given limited land resources, it is essential to optimize STP's land area under cultivation, increase the sustainable use of natural resources, and enable households and ecosystems to be resilient in the face of climate change by addressing the drivers of vulnerability. LDCF financing will help do this, centering on measures that reduce unsustainable natural resource use, sensitivity to inter-annual variation in climate parameters, and the propensity to over-exploit agricultural land and trees. Interventions will be subject to monitoring and evaluation with a view to drawing lessons and identifying good practices. Through an integrated approach to NRM which will target both the agriculture and fisheries sectors and cross-cutting needs related to infrastructure, capacity, awareness and technical knowledge, the LDCF project represents the actualization of what is missing in previous interventions that have been either sub-sector or issue focused.

The baseline and GEF projects will complement and reinforce each other, with the first one focused on needed infrastructure for agriculture, fisheries and enhanced productivity/modernization, and the second one making sure technologies and practices are climate-proof, ensuring implementation of adaptation interventions on the ground, and sustained knowledge at institutional and community level. Moreover, the first expects to create momentum in production processes while the second one focuses on field activities and demonstration of concrete adaptation responses on the land, particularly at the level of smallholders. The LDCF adaptation activities will be fully integrated into the larger baseline project and mutually supportive. Adaptation measures will be implemented in selected sites and be demonstrative, in support of activities that would not otherwise be undertaken in the baseline scenario and that can later be scaled up on larger scale. Without the LDCF activities, adaptation would not be considered in the baseline project. As such, the activities and financing are critical to the project and to STP and will bring additional adaptation benefits to the baseline.

The rationale of the GEF intervention follows the strategic orientations of the LDCF and supports the implementation of priority projects expressed in STP's NAPA. Overall, this project will focus on community adaptation, but build linkages with other NAPA priorities, responding in particular to priorities 1, 3, 4, 5, 6, 8, 10, 11, 17, 19, and 21. The project is entirely in accordance with country priorities, executed by national stakeholders, and actively involves vulnerable communities. As regards LDCF goals, the project will specifically contribute to achieving in particular objectives under CCA-1 and CCA-2 of the GEF LDCF strategy.

Although the baseline activities will offer some reduction in the risks posed by climate change, PRIASA II would be carried out without specific attention to adaptation if LDCF funds are not committed. Therefore, climatic threats such as higher temperatures, erosion and reduced rainfall constitute a real risk for the success and sustainability of the baseline activities. Without the LDCF funding, the baseline will not sustain resilience over time and will not be enough to ensure food and nutrition security in the long term. With the added impact of climate change, the baseline would see a continued degradation of natural resources and the failure of productive and non-productive land use systems with the resulting loss of ecosystem functions and increased poverty. Projected climate variability and change would continue to impact the primary sectors of the economy which will aggravate food insecurity; increase poverty; increase dependence on food imports; and increase STP's chronic trade balance deficit. This will contribute to further reversing any achievements to date in terms of MDGs.

With GEF support, the approach offers both capacity building interventions as well as community-based demonstration activities to enable them to play an active role in environmental conservation, adaptation of their assets to the challenges of climate change and the sustainable management of the country's natural resource base which acts as protector in the face of changing climatic patterns. With LDCF funds, the main interventions will contribute to strengthening resilience in STP by improving diversification and the productivity of the agriculture and fisheries sector based on healthier ecosystems and enhanced livelihood options. As such, if a shock is to occur, be it climatic or economic, STP's population will be able to bounce back and better adapt to difficult circumstances, when previously all would go lost. An approach based on an adaptive scenario, the specific needs of small-scale farmers and fishers, and integrated NRM that focuses on the holistic land/seascape is STP's best and only way towards

sustainability and resilience.

The proposed GEF project is targeted to be demonstrative, integrating adaptation interventions that are meant to be complementary to the baseline. Therefore, as baseline component 1 is about the establishment of hard investments in infrastructure, the same component in the GEF project is meant to create resilience and a better enabling environment (capacity building, demonstration pilots, etc.). Although the adaptation measures are numerous and diverse, they must be viewed as complementary of each other, with component 1, 2, and 3 each feeding into the other and mutually sustaining. As such, the studies and knowledge products will be used for training, while training will directly run parallel to activities on the ground. With GEF support, the population will play an active role in adapting their assets to the challenges of climate change. Hence, from a project based more on mitigating environmental impact, the GEF LDCF funds will place climate change adaptation, resilience and sustainability at the core of the intervention.

#### 5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The project draws its focus from needs identified in STP's NAPA and NCs which are directly relevant for supporting national development goals. The project will pursue a holistic approach to addressing vulnerabilities and increasing the underlying, long-term resilience of ecosystems, populations and assets. It will address several of the priority areas of the LDCF, in particular, support to capacity building, food security, and natural resources management. The adaptation benefits that will ensue are therefore many. The project is expected to directly affect about 20,000 people (16,000 farmers and 3,000 fishers), 35-40% of which women.

The baseline's planned interventions will enhance food security, nutrition and health. The envisioned technological innovations and skills promotion in the agricultural and fisheries sectors and relevant national institutions will lead to enhanced food production. The project will empower local communities through capacity building and dissemination of technologies and knowledge to plan and implement sustainable and integrated NRM with a view for adaptation. Overall the aim is not only to promote food production but contribute to the improvement of the living conditions of the population, with special attention to women and youth which are strong actors in rural areas but often lack assets, inputs, and training. Women and youth represent the most vulnerable sections of STP society and thus are a strong focus for activities and participation.

Expected adaptation benefits from the project through LDCF funded activities include improved management of land and water resources giving rise to enhanced resilience and reduced economic vulnerability of those dependent on rural activities and the country's natural resource base. Specifically, adaptation will result in: decreased coastal erosion, decreased land and forest degradation, and enhanced safety of fishermen at sea. The ultimate benefit is the reduction in absolute economic losses at local and country level resulting from climate change and variability.

Ecosystem-based adaptation offers a valuable yet underutilized approach to CCA, complementing traditional actions such as infrastructure development. It ensures the use of ecosystem services as part of an overall strategy to help people and communities adapt to the negative effects of climate change. In addition to climatic protection, the emphasis on EbA will provide many benefits to communities, for example through the maintenance and enhancement of ecosystem services critical for livelihoods and well-being, such as clean water and food, but also to biodiversity conservation of STP's endemic species. Activities in agro-forestry and reforestation also contribute to climate change mitigation by reducing emissions from ecosystem loss and degradation, and enhancing carbon sequestration, all of which are extra benefits resulting from this project.

In addition to adaptation benefits, the project is expected to deliver a number of positive socio-economic benefits. These will include: higher food production and conservation; improved food security and nutrition; job creation, especially for youth and women; increased and diversified income; increased and diversified crop production; improved contribution of agriculture and fisheries in the national economy; rehabilitation and modernization of basic infrastructure; and overall poverty reduction. Expected impact is on the contribution of the rural sector to the promotion of sustainable and integrated economic growth, with clear improvements in food production and nutrition indicators.

The baseline project also expects to deliver numerous, complementary socio-economic benefits and positive effects to the local population and country as a whole and are worth mentioning. These include: enhancing and diversifying agro-forestry and fisheries production systems; ensuring innovation and sustainable technologies for added value; guaranteeing increased incomes and employment opportunities particularly for women and youth (both male and female); bettering livelihood conditions and access to basic services; and improving market access and production conditions. The project will also encourage and involve the participation and effective empowerment of vulnerable groups in the management of natural resources and infrastructure through information, awareness and capacity building. It will contribute to keeping young people in rural areas and reduce problems of unemployment and poverty at household level which most affects women, youth and children, particularly common in urban centers, and will improve the nutritional status and food security of most vulnerable social groups: children under five and women of childbearing age.

#### 6) Innovativeness, sustainability, and potential for scaling up

When it comes to adaptation, one sectoral area of focus should not dominate research, interventions, capacity building and planning at the expense of other equally relevant needs. The AfDB-GEF project will be innovative in fully targeting the adaptation needs of STP through a holistic approach to the landscape on the ground. Project interventions will provide opportunities to increase understanding of the implications of climate change for the achievement of development objectives in the near and long terms; identify strategies and measures to reduce vulnerability; communicate and build awareness of climate risks, vulnerabilities and solutions; and implement integrated actions on the ground that build adaptive capacity, thus translating NAPA needs into reality.

Building on previous AfDB and other donor projects, the LDCF project will focus on CC adaptation through an integrated approach, a critical aspect that has not yet received enough attention in STP. Previous projects have been sub-sector focused initiatives (fisheries, livestock, coastal erosion, etc.). This project approach represents an opportunity to address food insecurity in conjunction with CCA by giving full attention to the natural resource base of the island on which the population depends. The integrated approach will allow capitalization of the entire island's possibilities (crop, fish and tree) and their potential for providing additional and sustained ecosystem services.

In PRIASA II, the technical solutions adopted are based on criteria and standards that ensure the sustainability of investments and proper ownership by beneficiaries. They take into account lessons from phase I and are based on design options tailored to meet local and island conditions which can better guarantee viability over time. For example, for planned infrastructure, emphasis are placed on the use of local material and local skills, and prioritize the low cost of maintenance that does not require high technical expertise. The issue of climate-proofing interventions, particularly infrastructure, and reception of CCA awareness at local level, is a central concern in the GEF project design, and particularly reflected in the two intimately linked components relating to integrated NRM and capacity building.

Through capacity building activities the project contributes to training and ensuring sustained knowledge in various local actors, primarily farmers and fishermen, and relevant government institutions, in sustainable land, water, fisheries and forestry in addition to more baseline focused needs such as irrigation, quality control and processing. By rehabilitating or establishing key infrastructure and investing in NRM while building the capacity of stakeholders to manage the different investments over time, the project will ensure sustainability of activities and objectives in the long run. An environmental awareness campaign and targeted trainings will be conducted at community level, linked with the CCA ground activities for INRM, SLM, SWM, etc. As such, GEF components will focus on sustaining adaptive capacity of productive systems over time.

Both the baseline and GEF capacity building activities will contribute to the formation and consolidation of knowledge of different stakeholders, including technical staff, farmers and fishermen, with the additional support of NGOs specialized in production and community organization. The project will additionally serve to consolidate within the Sao Tome government the necessary expertise for modernization and technological innovation. The adoption and acquisition of specific technologies and equipment will in each instance be accompanied by training of

staff and technicians. In the baseline, over 200 technical officers of diverse services (one third women) will benefit from targeted technical training to enable them to acquire the necessary knowledge for the introduction and sustainment of new technologies. Additionally, at least 150 staff and technical agents will be trained in CCA and sustainable NRM.

The design of this project adopts proven procedures suitable to an island context. PRIASA II and the LDCF activities will aim to draw on best practices and develop complementarity and synergy with other partners. Past experiences have clearly shown that the development of innovations and support to restructuring in various sectors require technical solutions that are tailored to the capacity of actors as well as sustained support entailing the intervention of operators and specialized NGOs on the ground familiar with local realities. Such will entail sustainability of the introduced activities, knowledge and infrastructure. The use of feasibility studies and the support envisaged to farmers and fishers, building on the experience of popular local NGOs, are geared primarily towards ensuring the long-term sustainability of actions undertaken and greater reach.

The project's potential for scale-up is related to the consequent demonstration effects of reduced vulnerability brought about by better consideration of climate change in the rural sphere. From a methodological and operational point of view, the GEF project is expected to be an example to replicate in other contexts given the benefits it is expected to induce. In the long-run, food security will increase as a result of the dissemination of adaptation practices to the prime benefit of the most vulnerable communities, households, and individuals.

2. *Stakeholders.* Will project design include the participation of relevant stakeholders from civil society and indigenous people? (yes  /no  ) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation.

The major stakeholders in the AfDB/GEF initiative are small-scale farmers and fishermen living in STP's rural and coastal communities. This project will build and use successful participatory approaches through which different stakeholders, including grassroots associations, professional associations and NGOs, will have equitable partnership relations with both Government agencies and the AfDB. As main beneficiaries, communities will play a role in project planning, implementation, monitoring and evaluation.

The project area covers the entire territory of Sao Tome and Principe with the exception of two protected nature reserves. The island of Sao Tome is divided into six districts. The baseline plus LDCF activities will target more specifically districts with higher agricultural potential and need and higher pressure on natural resources, hence those of Me-Zochi, Lobata and Cantagalo, and will also intervene in the Autonomous District of Pagué located on the island of Principe. The project is thus expected to directly impact 16,000 farmers and 3,000 fishers, 40% of which will be female. These numbers are the same as for the baseline project. Given the small size of STP, the fully integrated activities and complementarity between the baseline and LDCF projects, the activities as a whole are expected to benefit all members of the specific targeted communities, but indirectly a much larger number of the STP population provided the ensuing cumulative benefits and ramifying effects.

Partnering with relevant stakeholders and enhancing coordination amongst them is critical to ultimate impact at local level. The establishment of partnerships with relevant public institutions is an essential condition for the successful implementation of the project, in addition to promoting greater synergy and involvement of these institutions and contributing to their technical strengthening. Similarly, the establishment of partnerships with local NGOs will contribute decisively to better monitoring of beneficiaries and the promotion of their involvement, participation and ownership of project activities and outputs. The country has local NGOs with specific technical skills (in fisheries, agriculture, etc.) and widely recognized territorial response capabilities. These NGOs have a strong record of work in STP and proven efficiency and will be used for outreach activities and training of project beneficiaries. For specific adaptation activities, when and if needed, a training of trainers is envisioned. This potential will be catalyzed by the AfDB given its positive impact on efficiency, social participation, and community mobilization and acceptance.

Project preparation has been based on a participatory process for identification and design relating to the location of potential intervention sites, modes of intervention and technical requirements. Consultations were conducted in 2014

and early 2015 with diverse stakeholders, including the relevant government actors and civil society partners involved in the implementation of PRIASA I, and new partners identified for the implementation of PRIASA II. Consultations with Government, NGOs, farmers, fisheries and ongoing donor initiatives were pursued during the preparation and appraisal missions, and several visits were made to the field, both on the Sao Tome and Principe islands. Many visits were made on the ground to the level of potential intervention sites and on sites which have undergone previous interventions in order to determine feedback and feasibility. This approach enabled a better understanding of island realities, difficulties, needs, and priorities (target areas, communities, etc.) and proper assessment of the operational constraints, vulnerable groups and identification of possible synergies.

During project implementation, the same participatory modalities will be used. Farmers and fishermen are fully involved in decision-making and will contribute to the construction and maintenance of community infrastructure. They benefit throughout the project from training and the assistance of experienced NGOs. PRIASA II established in early 2017 agreements with several NGOs (MARAPA, ADAPA, ZATONA ADIL, etc.). Under the supervision of the project team, communities are closely involved in participatory planning processes and, depending on the type of infrastructure and activity, will contribute physically and/or financially. Preference will be given to a demand-driven intervention process, governed by a number of eligibility criteria and based on real commitment. Civil society and farmers are also represented on the baseline project steering committee (PSC) which is in place since 2016.

The implementation of the project will follow a pattern substantially similar to that adopted under PRIASA I, and articulated around a stand-alone project management unit, consisting of a team located in Sao Tome and placed under the supervision of the Ministry of Agriculture, Fisheries and Rural Development (MADR). The project is being executed by a PMU, headed by a project manager, which has been evaluated and will be reinforced based on the specific needs of the new project and LDCF activities (operations assistant, infrastructure expert, financial expert, expert trainers, etc.). An additional expert will be recruited to lead, integrate and follow the implementation of the LDCF activities within PRIASA II. Furthermore, the implementation of specific activities additionally exploit local and institutional actors with specific operational expertise: the Directorate of Fisheries and MARAPA for activities related to fisheries; MADR and CI (Cellule Infrastructure) (ex-FIC) for agricultural infrastructure and activities related to production; CATAP and CADR for technical training, extension and advisory support; CIAT for product development and research. Local NGOs and civil society are consulted throughout and are implementing partners, in particular: FONG (NGO Federation), MARAPA (fisheries and environment), FENAPA (small family farmers federation), AZATONA - ADIL (action for the development of local initiatives organizing producers), ADAPA (agricultural development, environment, livestock), and ALISEI - QUA TELA (processing and marketing).

An AfDB supervision mission for the baseline project was recently held in August 2017 and involved meetings and consultations with different government agencies and representatives, NGOs, the baseline PMU, and various partners involved in project implementation. Government officials expressed continued support for the current PIF and reacted very positively to the new availability of LDCF funds.

3. *Gender Considerations.* Are gender considerations taken into account? (yes  /no  ). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

In STP the proportion of female-headed households is about 40%, making it one of the highest in Africa. Poverty affects 71% of women. In rural areas, women engage in multiple activities and are strongly present in the agricultural (processing, marketing, etc.) and fisheries (as sellers) sectors. An analysis of the situation of women and children in STP, published by UNICEF in 2009, reveals that the country's achievement of certain MDGs contrasts with a relatively low social picture, characterized mainly by family poverty, low participation of children and women, and lack of basic social services as reflected in the high incidence of water-borne diseases and the low internal efficiency of basic education. In 2012, poverty continues to affect women (71.3%) more than men (63.4%). The number of women with a monthly income below the minimum wage (44.5%) is twice that of men (20.8%). 41.2% of households are female-headed while the number of teenage pregnancies among young women aged 14-18 is at a high 12%.

Climate change affects men and women in different ways; as such, efforts are most effective when gender perspectives are reflected in vulnerability assessments and risk management, and interventions involve women in the design and implementation of adaptation solutions. In the NAPA itself, a number of issues have been emphasized related to the specific consequences of climate change on women. These include the destruction of houses as a result of sea level rise and the loss of a husband's fishing materials, equipment or life at sea which result in an increase in women's poverty. As a result, women must take care of the home administration with scarce resources; and children give up school to fish and to reinforce family income, leading to increased illiteracy. The gender differentiated impacts of climate change will thus be analyzed and addressed throughout the project, including through early consultation and continued participation/monitoring. Additionally, project activities, such as those on livelihood diversification, will in particular target women and youth given their more limited livelihood options and higher vulnerability.

Women account for over 90% of the workforce in fish marketing, over 80% of traders in food products and vegetables, and over 90% of operators involved in small-scale processing of agricultural and fishery products. This context demonstrates the need to promote high participation of rural women in the project, given the leading role they play within the household and society. As such, in addition to rehabilitating infrastructure to support agricultural and fish processing (markets, fish landing sites, docks, storage and preservation buildings, etc.), activities will support women to better organize themselves in production and marketing, and contribute to the strengthening of women's cooperatives and associations. The project will systematize the representation of women and youth in all consultative and decision-making bodies to enable them to defend their interests and gradually improve their socio-economic status. Gender considerations will be a systemic part of the training targeting the various parties involved (project staff, technical services, partner institutions, NGOs, etc.) to enhance knowledge and skills in sustainable NRM, adaptation to climate change and soil conservation practices.

Women play a critical role in natural resources management and rely on those resources for their and their household's livelihoods. The participation of women in practices and technologies selection at the community level is critical and thus expected to be high. Furthermore, gender-disaggregated data will be systematically integrated in the project's monitoring and evaluation framework, with specific attention on impact over time. Developing a gender profile in agriculture and fisheries will lead to a precise typology of the different beneficiaries and better knowledge on the status of women in food production as well as their role in all rural activities.

A gender analysis was developed for PRIASA I and will be updated for PRIASA II to guide implementation of activities. In 2005, the STP Government adopted a National Strategy for Equality and Gender Equity (SNEEG) in its poverty reduction efforts, reviewed and updated in 2012. The implementation of this strategy has been entrusted to the National Institute for the Promotion of Equality and Gender Equity (INPG), created in 2007. To ensure better integration of gender aspects into the project, an agreement was made in 2016 with the INPG and a focal point has been appointed to better integrate gender into the project and institutions. Furthermore, the project will hinge on the above gender analyses and envisions the following to strengthen its gender components: improving the access of women to productive resources and factors (market gardening, sales and product processing, marketing, etc.); improved representation and participation of women in decision-making bodies; strengthening technical capacity for intervention and organization of women in the activities supported by the project; and, appointment of a gender focal point (in progress). In addition to supporting agricultural and fish processing, women will be supported to better organize themselves in production and marketing and in the development of cooperatives and women's associations. Project target to promote and enhance women place in decision instance and comity. The baseline project, in collaboration with the INPG, will also implement trainings on gender equity targeting various stakeholders (project staff, technical services, partner organizations, NGOs, etc.). In total, 23.7% of the financing will go to specific gender activities (women, youth and child).

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

The major identified risks that could hamper the achievement of project objectives are: (i) institutional weaknesses;

(ii) the chronic difficulty of structuring the artisanal fisheries sector; (iii) social conflict/acceptance; and (iv) climate change. Institutional weaknesses and instability could have negative consequences on the effective and timely implementation of PRIASA II. These risks will be lessened by the fact that the project team is already in place and familiar to procedures of the Bank and to the overall country context. Also, different components are entrusted to experienced independent structures, already involved in the context of PRIASA I, which significantly reduce operational risks.

PRIASA II intensifies support and monitoring of fishermen and farmers in general, in order to ensure the durability of investments on an economically and socially sustainable basis. Entrusting the implementation of community activities to local NGOs that have working relationships with both government and communities will limit social conflict. Continued consultation with communities, enhanced awareness of benefits, and participatory development plans will further limit this risk. With regard to artisanal fisheries, the sector remains weakly organized, traditional, and limited to relatively individualistic practices that have changed little despite various interventions. Awareness raising and support to these actors are indispensable for restructuring the sector. In that regard, the project is using the MARAPA NGO which is specialized in small-scale fisheries to facilitate consultation with the various actors.

Given the expected positive environmental and social impacts, PRIASA II is classified under the Bank’s Environmental Category II. Environmental awareness actions and support for M&E will foster the promotion of responsible practices. Potential environmental impacts will be offset by appropriate corrective actions and by the specific adaptation activities of the LDCF project. The negative impacts identified relate mostly to the rehabilitation or construction of infrastructure (noise, dust, security), but will be minimal. The development of irrigation could encourage the clearing of wooded areas, while improving access through road rehabilitation could lead to increased logging. These will be offset by planned LDCF reforestation. In conformity with Bank guidelines and policies, an Environmental and Social Management Plan (ESMP) has been prepared and will be implemented simultaneously with the project to mitigate adverse impacts. The ESMP was prepared in accordance with the regulations of STP in the area of environmental assessments, as well as procedures for environmental and social safeguards of the AfDB. A mitigation plan, part of the ESMP, is being developed and implemented as part of the project. Environmental monitoring throughout will allow for flexibility and the application of corrective measures.

During implementation, mitigation measures will use specific technical requirements related to waste management, information and awareness, safety and sanitation, etc. that must accompany all activities, particularly on a small island state where interventions are so interlinked. For example, the project will provide supplemental training to farmers on the use of pesticides and fertilizers, develop good practices and the use of organic fertilizers, and awareness of water borne diseases.

With the exception of risks related to governance and sustainability of the project, climate change, particularly in the form of natural disasters, remains a major threat to the effective implementation of the project on the ground. Because of its small size, low lying coasts, and the fact that many socio-economic activities occur on the coast, STP and its population are very vulnerable to climate change. In addition to adaptation, the Government of STP has established a contingency plan to manage natural disasters that may occur in general and during project implementation.

Risk	Probability	Mitigation measure
Weaknesses in management and coordination result in delay in the implementation of the project	Low	<p>Already established PRIASA team with expertise and contacts. The team has been enhanced as needed given new activities, including financial support and gender expertise.</p> <p>Government’s implementation capacity will be enhanced through Technical Assistance.</p> <p>The project is designed to have capacity building and awareness raising activities for both government and community stakeholders.</p> <p>Given the participatory approach, clear roles, partnerships and accountabilities are established, thus ensuring effective coordination of project activities.</p>

Location of the project in non-priority areas	Medium	Discussion and participatory identification between the PMU, partners and communities.
Low ownership of the objectives, results and activities of the project by the beneficiaries	High	Involvement of local NGOs in community mobilization, awareness raising and monitoring of beneficiaries: before, during and after the implementation of activities.
Communities reluctant to participate in project activities and lack interest in modifying behaviors and unsustainable practices	Low	Engage community leaders and encourage platforms for information sharing and demonstration of good practices to visually identify benefits.  The project will put a strong emphasis on social and environmental awareness, new income incentives, and stakeholder empowerment.  Extensive consultations with local stakeholders and beneficiaries will continue during implementation.
Individualistic and traditional practices of farmers and fishermen persist and compromise the sustainable management of infrastructure and achievement of project objectives	Medium	Selection of the most motivated groups, awareness raising and supervision by popular local NGOs (agreements and protocols already established).  Program of capacity building, targeted training, partnerships with structures involved in PRIASA.
Lack of technical capacity to effectively implement project activities	Medium	Ensure knowledge transfer through technical assistance.  When needed, introduce training of trainers.
Inappropriate use of infrastructure, equipment and technologies by the communities	High	Training activities and technical assistance throughout the project cycle.
Low involvement of institutions and local partners in the implementation of the project and inadequate participation by all stakeholders to prioritize adaptation needs	Medium/low	Placement of focal points in institutions since the beginning of the baseline project in 2016, regular meetings and greater sharing of information through communication and visibility (internal and external)  Careful attention to ensuring the involvement of all relevant stakeholders at an early stage and throughout the project implementation process.
Overlap of activities and actions with other projects in the country	Medium	Continued dialogue between the PMU, government, NGOs and development partners. Invite NGOs and development partners to occasionally participate in the meetings of the Steering Committee in order to share information.
Monitoring and evaluation ineffective	Low	M&E system being established and continuous assessment and follow-up based on results and impacts through the participation of various partners.  A strong M&E system coupled with quality baseline data is imperative for better monitoring of project implementation, performance evaluation and impact assessment.
Adverse climatic variability and changes resulting in flash floods and prolonged drought undermine achievements	Medium	Awareness raising and climate resilient technologies.  Use early warning at national and community level.

5. *Coordination.* Outline the coordination with other relevant GEF-financed and other initiatives.

A number of interventions spanning various sectors are currently underway on climate change in STP which address a range of issues including coastal zone management, early warning, and climate information services. Some of these are part of larger African regional climate change initiatives with a strong focus on research, policy mainstreaming, and capacity building. STP has secured funding from a diverse set of sources, including the LDCF and bilateral donor assistance. However, despite significant interventions currently underway, a more holistic initiative spanning cross-sectoral needs and the integrated land/seascape is missing. The impacts of climate change on coasts, health, freshwater, energy and land, though identified as key national vulnerabilities, have not yet been addressed in full through adaptation activities in key productive sectors. As such, this LDCF initiative will target this gap by building upon and complementing other initiatives but with a strong focus on adaptation at community level.

Strengthening climate information, early warning, and adapting infrastructure to rising sea levels and increases in extreme weather events must be supplemented with concurrent ground-level actions developing the resilience of agricultural and fisheries sectors, physical assets and ecosystems, giving the full spectrum of rural needs a chance at resilience. As such, this project will seek to coordinate with ongoing GEF and adaptation initiatives in STP to ensure that synergies are generated and gaps are addressed. Consultations have already begun with relevant development partners and will continue. These will provide opportunities for collaboration, information sharing and lessons learned with the AfDB LDCF project.

UNDP, the World Bank and IFAD all have GEF funded projects in STP upon which AfDB will build to avoid overlap and expand reach across the territory. Furthermore, the LDCF funded AfDB project on strengthening the adaptive capacity of most vulnerable Sao Toméan's livestock-keeping households represents a clear opportunity to complement activities in livestock with those envisioned in the new project on agriculture and fisheries. The World Bank project "São Tomé and Príncipe - Adaptation to Climate Change" (with a GEF-LDCF financing) focuses on coastal adaptation for vulnerable communities with activities in early warning systems, coastal adaptation protection, and safety at sea. The project has an expected end date of 31 December 2017, underlying good timing and continuity with the AfDB intervention. A UNDP led GEF-LDCF project is centered on the strengthening of climate information and early warning systems and aims to make available relevant climate and weather information and support the development of agro-meteorological tools to enhance the climate resilience of STP's agriculture. It includes training of staff in climate risk management, georeferenced mapping, the development of meteorological surveillance stations and community adaptation plans. IFAD has a biodiversity focal area project centering on STP's Obo national park and an integrated ecosystem approach to the reduce pressures on natural resources and conserve biodiversity. IFAD and the EU additionally are implementing large rural development and food security projects (PAPAPFDA, PIPAGA). Each of these initiatives will be very useful to the AfDB project as a way of strengthening its own activities and using available information for the application in real time of lessons learned and best adaptation practices. Furthermore, coordination with these donors will ensure complementarities and synergies while avoiding overlap, drawing as needed on the adaptive long term planning and data strengthening activities of the UNDP and WB projects. AfDB has thus considered incremental adaptation activities, different sites, and different targeted vulnerable communities. The integrated approach of the AfDB LDCF project that centers on fisheries, agriculture, coastal and inland adaptation, and sustainable INRM will be the added value to these previous projects.

STP is also participating in the "Supporting Integrated and Comprehensive Approaches to Climate Change Adaptation in Africa," or Africa Adaptation Program (AAP), a multi-national, USD 92 million initiative launched in 21 African countries by the Japan International Cooperation Agency in 2010. The Saotomean component of the program is a USD 3.25 million project (with co-financing from the World Bank and UNDP) focused on capacity building and leadership, with a geographic focus on both coastal zones and the northern part of Sao Tome island. The AAP has also mainstreamed climate change into national policies and bodies for better monitoring and climate response, a critical move on which AfDB can consequently build upon. An EU sponsored program has also been identified with a large component on mainstreaming climate change into policy, and began implementation in 2016. As such, this LDCF project will not include mainstreaming of CCA adaptation into development and policy options given the plethora of donors already doing this but will focus on translating those strategies and needs to the ground for impact at community and household level, knowing also that the envisioned training will assist in mainstreaming CCA into national institutions.

Through all these current initiatives, valuable information and lessons learned will be continuously shared and can be used for more effective climate change adaptation as well as response to risks in order to capitalize on and respond to expected threats throughout project implementation. They will be beneficial to ensure effective implementation and risk avoidance in the AfDB LDCF project. AfDB can draw on the available information, mainstreaming and planning activities, and critically complement with interventions on the ground at community level. Indeed, despite the fact that a number of projects are underway on adaptation in STP, and a number financed under the LDCF itself, these do not sufficiently address the rural sphere holistically. The AfDB LDCF project will consider missing elements in previous interventions and represent an opportunity for donor initiatives to come together and be better coordinated.

6. *Consistency with National Priorities.* Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes  /no  ). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

STP's classification as a LDC and a SIDS underline its extreme vulnerability to climate change and give it primary status for development and LDCF interventions. The country ratified the UNFCCC in September 1999, submitted its first National Communication in 2004 and prepared its NAPA in 2006. STP's experience shows that focusing on the most affected development-related sectors is the most effective way to link NAPA activities to national development plans. The project is first and foremost consistent with STP's NAPA (and thus also the GEF Strategy on Adaptation to Climate Change), whose main objectives are:

1. To develop and implement projects based on activities to counter the effects of climate change;
2. To protect the life and people's well-being, as well as infrastructure and the environment;
3. To incorporate objectives and adaptation measures in national policies and various sectors, as well as in the development objectives; and
4. To increase knowledge on the impact of climate change and activities of adaptation in communities, civil society and Government.

Agriculture remains at the core of national development policies given it is the primary employer and source of GDP. The NAPA has a strong focus on agriculture, fisheries and food security. The majority of the 22 NAPA proposals center on needed capacity building, research, community-based adaptation and infrastructure. In 2005, the country also adopted a National Climate Change Adaptation Strategy which took stock of the climate related risks and measures needed to combat higher temperatures, rising sea levels and increasing extreme weather events. The project is fully consistent with actions needed to combat the impacts of these threats in STP. Indeed, the project aims to increase STP communities' resilience to climate change by strengthening central and local institutional and CSO capacity to support community resilience; developing and disseminating improved climate risk information and adaptation knowledge; protecting rural livelihoods from the impacts of climate change and degrading ecosystems; and reducing poverty through economic diversification.

In addition to the UNFCCC, STP has signed and ratified several important international conventions and prepared relevant national strategies and plans, including a NBSAP, National Plan for the Implementation of the Stockholm Convention on Persistent and Organic Pollutants, and a plan to combat deforestation and land degradation. Due to its physical location and circumstance, STP's biodiversity is endemic and of global importance, and the NBSAP emphasizes the need to sustainably conserve and protect STP's natural resources and biodiversity. The project is consistent with this through its sustainable and integrated approach to NRM and the application of ecosystem-based adaptation. Accordingly, it also aligns to the objectives and priorities of the land degradation strategy which prioritizes monitoring and evaluation of the effects of desertification and drought; and prevention of soil erosion through the extension and protection of forests.

The project is also in perfect harmony with the Government's macroeconomic and poverty reduction strategies, which reflect the determination towards sustainable and poverty-reducing economic growth especially its pillars: reform of public institutions, capacity-building, and promotion of a good governance policy; accelerated redistributive growth; and creation of opportunities to increase and diversify the incomes of the poor. These priorities are embodied in the country's Second Poverty Reduction Strategy Paper (PRSP II 2012-2016) which focuses on making the economy more competitive by increasing investment in infrastructure and promoting agriculture, fisheries and tourism as key sectors for growth and employment. The Government has started the preparation of a new PRSP for 2017-2021, expected to be completed by the end of 2017. The project is also consistent with the objectives of the national program of food and nutritional security (NPRS 2013-2023) in its promotion of food security through increased domestic production and reduction of external dependence, and improved basic infrastructure. Therefore, PRIASA II and the LDCF project will draw on the priorities of the NPRS by targeting specifically food security and the strengthening of key productive sectors and assets.

Finally, the project adheres to the AfDB's Ten-year strategy (2013-2022) by addressing infrastructure development,

technological change, equitable growth, and by directly addressing agriculture and food security as well as gender. It is additionally in line with the Bank's new strategy for the agricultural sector (Feed Africa – Strategy for Agricultural Transformation in Africa, 2016-2025) based on investments in agricultural infrastructure, agricultural commodity value chains, agribusiness and innovation, and taking into account the resilience and conservation of natural resources for food security and poverty reduction, including through climate smart agriculture. The Bank's operations in STP are defined in its Country Strategy Paper that recognizes climate change adaptation as a cross-cutting issue to be integrated in all investments particularly in the economic sectors that the country depends upon.

*7. Knowledge Management.* Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Knowledge management will have a strong role in the project, given the high potential for learning and the amalgam of projects in place in STP. Mainly through the capacity building and monitoring initiatives, the project will contribute to raising awareness and enhancing knowledge of different stakeholders, primarily farmers and fishermen, on CCA, thus consolidating technical capacity and sensitization. The project will also help to develop within the Sao Tome administration specific expertise in adaptation, as well as in the monitoring of climatic risks for agriculture and fisheries. It will provide better knowledge of natural resources management in an island context and specific adaptation measures needed in congruence with other needs as regards water and sanitation, and the preservation of ecosystems to ensure food security. Activities will be subject to frequent monitoring with a view to drawing lessons and identifying good practices for dissemination.

Training will be pursued in the context of support to the relevant national institutions (MADR, CIAT, CATAP, etc.) while simpler campaigns and briefing manuals will target community level on climate risks, impacts, vulnerabilities and response mechanisms, including how sustainably managing natural resources is in itself an adaptation measure. The system of national statistics will be consolidated on CC impacts on agriculture and fisheries sectors and will ensure a better understanding of resources and vulnerabilities of STP. From a methodological and operational point of view, the Bank will capitalize on learning from the right approaches and procedures for projects in island circumstances, and promote these lessons through its own means of communication.

M&E will be done according to procedures established by the AfDB and by the GEF. The logical framework will provide performance indicators against which the project will be evaluated and specify the baseline as well as the objectives to be achieved. The M&E system will build on that of PRIASA II, be adjusted and expanded as needed to the needs of the GEF project, and describe the main planned activities to be executed in the expanded M&E, reporting and project analysis system. M&E will play a key role in the planning, management and implementation of activities. An M&E expert will help coordinate the M&E aspects of the project; analyze baseline data from the diverse project stakeholders and implementers; and collect and store the data / information for dissemination. Gender-disaggregated data will be systematically integrated in the M&E system, as well as a geographic information, both critical to understanding the real impacts of CC on the ground and determining mitigation measures and risk/disaster prevention. The full participation of local NGOs will contribute to the monitoring of project intervention at the level of the community and household, improving the impact of local interventions, and improve overall monitoring and ongoing evaluation of the project.

PRIASA II is establishing an M&E Group with the goal of facilitating and enhancing overall M&E, composed of the PMU, government institutions and NGO partners directly involved on the ground. The objective of this is to ensure greater ownership and participation of the beneficiaries, as well as to strengthen the process of data collection, information sharing, monitoring and continuous assessment based on results and impacts. It will also ensure better coordination of actors and of actions on the ground and monitor community involvement, awareness, and participation, thus enhancing effectiveness of implementation and follow-up. The PMU has begun producing quarterly and annual reports highlighting the implementation rate of the different components in connection with the performance of the logical framework indicators. This will include the LDCF activities once they begin.

Project M&E will focus on key performance indicators, and those specifically related to women (systematic

disaggregation of data will be done throughout). From a baseline reference, monitoring will cover inter alia: (i) the level of production and catch (tons) and yields (t/ha); (ii) the increase of income of farmers and fishermen, including youth and women; (iii) the number of jobs created; (iv) the rate of progress of agricultural infrastructure (km of slopes, number of agricultural infrastructure and fishery by type, etc.); (v) areas benefiting from irrigation (hectares); (vi) areas under SLM, agro-forestry and reforestation; (vii) effective training organized (number of staff trained, with consideration for gender and level) and the involvement of women in decision-making bodies (percentage), and (viii) global social impacts arising from the project, including on food security and nutrition.

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

**A. RECORD OF ENDORSEMENT<sup>8</sup> OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):**  
 (Please attach the Operational Focal Point endorsement letter(s) with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Lourenco MONTEIRO DE JESUS	Director of Environmental Education and Statistics	Ministry of Public Works and Natural Resources	12/10/2014

**B. GEF AGENCY(IES) CERTIFICATION**

**This request has been prepared in accordance with GEF policies<sup>9</sup> and procedures and meets the GEF criteria for project identification and preparation under GEF-6.**

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Mahamat Assouyouiti African Development Bank		04/09/2015	Xavier Boulenger	+22520262753	x.boulenger@afdb.org

**C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)**

For newly accredited GEF Project Agencies, please download and fill up the required GEF Project Agency Certification of Ceiling Information Template to be attached as an annex to the PIF.

<sup>8</sup> For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

<sup>9</sup> GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF