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:	Integrated Approach to promote climate resilient economic growth and development in the Autonomous region of Principe (RAP)		
Country(ies):	Sao Tome and Principe	GEF Project ID:[1]	
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5444
Other Executing Partner(s):		Submission Date:	March __, 2015
GEF Focal Area(s):	Climate Change	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of parent program:	[if applicable]	Agency Fee ($)	570,000

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES[2]:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	**Trust Fund**	**(in $)**	
		GEF Project Financing	**Co-financing**
CCA-2	LDCF	550,000	1,132,344
CCA-1	LDCF	5,450,000	5,633,741
(select) (select) (select)	(select)		
Total Project Cost		**6,000,000**	6,766,085

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: Community-level livelihood and economic growth sources of the Autonomous Region of Principe (RAP) are made sustainable and resilient to climate change

Project Component	**Financing Type[3]**	**Project Outcomes**	**Trust Fund**	**(in $)**	
				GEF Project Financing	**Co-financing**
1. Strengthening capacity for climate resilient economic growth and development	TA	capacity of government, private sector and communities of the autonomous region of Principe (RAP) to develop, plan and implement climate resilient and low carbon economic growth and development strategies are enhanced	LDCF	525,000	1,132,344
2. Supporting inclusive, green sustainable and climate resilient local economy growth and development	INV	Sources of livelihoods and economic growth in the autonomous region of Principe (RAP) are made more resilient	LDCF	3,435,000	3,303,741
3. Improving energy access of the RAP productive sector to strengthen the climate resilience of the RAP economy	INV	Increased access for the productive sector of RAP to green and affordable energy to improve the resilience of the RAP economy	LDCF	1,755,000	1,800,000
	(select)		(select)		
	(select)		(select)		
		Subtotal		5,715,000	530,000
		Project Management Cost (PMC)[4]	(select)	285,000	

[1] Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.
[2] When completing Table A, refer to the GEF Website, *Focal Area Results Framework* which is an *Excerpt from GEF-6 Programming Directions*.
[3] Financing type can be either investment or technical assistance.

Total Project Cost		6,000,000	0

If Multi-Trust Fund project :PMC in this table should be the total and enter trust fund PMC breakdown here ( )

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

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount ($)
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Co-financing			0

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS [a)]

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	Agency Fee (b)[b)]	Total (c)=a+b
UNDP	LDCF	Sao Tome & Principe ☐	Climate Change	(select as applicable)	6,000,000	570,000	6,570,000
Total GEF Resources					**6,000,000**	**570,000**	**6,570,000**

a) No need to fill this table if it is a single Agency, single Trust Fund, single focal area and single country project.
b) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT PREPARATION GRANT (PPG)[5]

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

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in $)		
					PPG (a)	Agency Fee[6] (b)	Total c = a + b
UNDP	LDCF	Sao Tome and Principe	CC-A	(select as applicable)	150,000	14,250	164,250
Total PPG Amount					**150,000**	**14,250**	**164,250**

[4] For GEF Project Financing up to $2 million, PMC could be up to10% 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.

[5] PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to $50k for PF upto $1 mil; $100k for PF up to $3 mil; $150k for PF up to $6 mil; $200k for PF up to $10 mil; and $300k for PF above $10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

[6] PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS[7]

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	*(Enter number of hectares)*
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	*(Enter number of hectares)*
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;	*(Enter number of freshwater basins)*
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	*(Enter percent of fisheries, by volume)*
Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	*(Enter number of tons)*
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)	*(Enter number of tons)*
	Reduction of 1000 tons of Mercury	*(Enter number of tons)*
	Phase-out of 303.44 tons of ODP (HCFC)	*(Enter number of tons)*
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	*(Enter number of countries)*
	Functional environmental information systems are established to support decision-making in at least 10 countries	*(Enter number of countries)*

PART II: PROJECT JUSTIFICATION

Project Overview

A.1. Project Description. Briefly describe: 1) the global environmental 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 co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

1.1. Climate Change - induced problem

Administratively, Principe is an autonomous region (RAP) with a Regional Government and a Regional Legislative Assembly. The island of Principe, with an area of 142 km^2 and 105 km north of Sao Tome, has 7,324 inhabitants. The RAP is made up of mountains, several streams and rivers that rise in the main mountain ranges and run towards the coastal zone. The climate is hot and humid with abundant rainfall. The poverty rate on the island of Príncipe, very isolated as well as mostly rural, is a high 69 percent. With limited job opportunities, high urban unemployment, the absence of any other economic and production facility infrastructure, the economy of the RAP depends currently in majority in the exploitation of territorial sea waters. Indeed, Fishing and coastal agriculture (Coconut production) remain the main economic activities and source of livelihoods in the RAP. The fish represents

[7] 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.

85 % of consumption in protein population with an average of 23.6 kg of fish per capita (source: Directorate General for Fisheries, 2007). Therefore, the guarantee of income and livelihoods of these communities is directly connected to the sea. This is also the reason for why most of the human settlements are by the sea side, what make the Principe communities vulnerable to climate change. To sustainably put the RAP in the rail of sustainable economic development, the legislative chamber of the RAP has ratified an ambitious four year development economic program (FYP_2015-2018). The vision of the 2014-2018 Economic Development Plan of the Autonomous Region of Principe (RAP) is a gradual moving from the fight against poverty paradigm to the paradigm of sustainable economic transformation for the creation of wealth and the departure from eternal and extreme dependence of the state towards an economic development state in which citizens feel dignified and valued for their work[8]. The RAP aims to realize this vision through creating jobs, increasing production and productivity of the key economic sectors namely agriculture, fishing and tourism and individual responsibility of every citizen in society. For this purpose, the key pillars of the RAP FYP are: 1) revitalizing the economy, creating jobs, 2) the creation of wealth through increased production and productivity, 3) strengthening regulatory capacity and oversight of the state, 4) greater efficiency in the production of goods and services, 5) training of human resources and 6) rehabilitation and / or construction of infrastructure development to support the productive sector. However the RAP faces certain climate risks that may challenge the achievement of the objectives of the FYP.

The climate-related hazards considered most risky and to which community feel highly vulnerable are inland and coastal/river mouths floodings, droughts, landslides. The RAP is naturally prone to flooding and coastal erosion. High rates of erosion, caused both by removal of sand for construction and by storm surges, threaten coastal residents, who are among the poorest communities in STP. The vulnerability of coastal settlements is therefore increasing rapidly, particularly as floods and sea storms intensify and property loss worsens. Communities living along the coastline have been frequently hit by sea level rise and increased storm events exacerbating coastal erosion and affecting their livelihoods. These sea water invasions have led to home, vessels and fishing materials destruction (Abade in 2008, Praia de Secca in 2011, Praia de Santo Antonio 2010, Praia Burras and Praia Campanha in 2013), disparition of fish landing areas (Hospital Velho Community, 2011)[9]. Droughts and landslides are also considered but of medium risk/vulnerability (INC, 2005 and SNC, 2012). Also, communities living down the hills have also reported properties losses, deaths and injuries caused by landslides. STP's vulnerability to climate change can only increase: the climate projections reveal an increase for temperatures by an average of 2°C and a decrease of precipitation by about 15 percent; this means longer dry seasons and more flooding and fogs, which contribute to making fishing activities difficult and dangerous for the fishermen. Furthermore, the NAPA concluded that though the current rainfall trend show a steady decrease, its variability will be significantly exacerbated by climate change in coming decades with occurrence of extreme rainfall events. Furthermore, recent data in connection with the INC, SNC to the UNFCCC and the NAPA, show that São Tomé and Príncipe annual temperatures are expected to increase by between 0.8 and 2.4°C by 2060[10]. Future projections of rainfall suggest a likely increase in rainfall during the October to December period and episodes of heavy rainfall are predicted to increase[11], leading to more frequent episodes of flooding, which will cause further soil erosion. Additionnally, the IPPC scenario SREF A1F1 (as shown in the IPCC 4th assessment report) suggests a global sea level rise between 0.26 to 0.59 m, between the present (1980–1999) and the end of this century (2090–2099)[12]. These projections constitute a serious threat for Principe coastal communities and economy.

Long-term solution and barriers

To increase the climate resilience of the RAP economy and communities to current and future climate risks, especially within the overall context of strengthening food security, economic development and transformational change of the RAP, the key sectors of the local economy namely the agriculture, the fishing and tourism sectors, must be strengthened. This includes a shift to new climate resilient varieties and a new and integrated crops

[8] Autonomous Region of Principe: Economic Development Plan 2015-2018

[9] Republica Democratica de Sao Tome e Principe. Regiao Autonomia de Principe. Secretaria Regional da Economia (2014): Algumas vulnerabilidades das comunidades na Região do Príncipe

[10] http://country-profiles.geog.ox.ac.uk/

[11] Mark Tadross and Fiona Tummon. (2010). São Tomé and Príncipe: Adaptation to Climate Change Program. Technical support for climate modelling.Historical decadal changes in regional climate and aerosols. Climate Systems Analysis Group. University of Cape Town. 18p

[12] Giardino and al (Hydrology and coastal morphology at Sao Tome

management strategy towards agriculture landscape and value chains management (from the producer to the market); the livelihood diversification through the strengthening of the current and the creation of new segments of the key value chains of the Island (sea foods, coconut, banana and pineapple) as well as the development of new tourism products (ecotourism, cultural tourism) and access to basic financial services. The development partners including UNDP, as well as the government, recognize that these are the key elements for developing Principe economy and communities' resilience and adaptive capacity to economic, climate and other natural choc.

There are numerous barriers that prevent the RAP from attaining the long-term solution described above:

- The lack of capacity and knowledge on climate resilient agriculture including agricultural landscape management as well as on processing raw agricultural and sea food within communities and regional development support institutions
- The week access to climate resilient agricultural inputs of quality: for example about 25% of coconut trees are aged, requiring replacement and about 40% of coconut areas is encapoeirados requiring support materials for the opening and maintenance.
- The lack of livelihoods alternatives out of the fishing sector and coastal agriculture doesn't facilitate the relocation of coastal communities threatened by sea level rise towards the hinterland less vulnerable to sea level rise impacts.
- The lack of performing and resilient infrastructures for the efficient conservation, storage and processing of the raw products from the agricultural and fishing sectors
- The weak electricity production capacity doesn't allow the proper conservation and transforming of raw materials extracted from the sea and produced by the agricultural sector and to develop new tourism products: the yearly production of 1,400 KVa is totally dedicated to households consumption (for 15 hours per day) and cannot satisfy the needs for any economic productive activity
- The week access to affordable financial services necessary for any productive investment
- The lack of the required policy, regulatory and institutional framework necessary to remove the barriers for the emergence of climate resilient low carbon development including the private sector.

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To remove these barriers, the project will pursue the implementation of the following components:

Component 1: Strengthening capacity for climate resilient economic growth and development

To help the RAP to sustainably transition to climate resilient economic growth and development, it is necessary to build the capacity of the key public and private institutions supporting the development of the RAP on green low emission and climate resilient development (GLECRD) and also build the capacity of the private economic actors (farmers, fishermen, industries including the tourism industry) on relevant climate resilient technologies and livelihood alternatives in line with the comparative advantages of the RAP. Since 2014, The RAP has started an ambitious technical and vocational training program funded at the tune of US$1,132,344 from the RAP Government budget and its development partners including UNDP. This training program that is rolled out since 2014 aims at putting in the market young and qualified manpower including private advisory services providers able to accompany the different development investments currently undertaken and planned in the different strategic areas of the development identified in the RAP strategic development plan 2015-2018 and the STP PRSPII- (2012-2016) namely agriculture, fishing, tourism, energy, production and infrastructures. This training and education program is meant to ensure to young people of Principe career and entrepreneurship opportunities and partnership with foreign private sector.

This program includes the following elements:

- Strengthen the technical capacity of the Regional Directorate of Agriculture and fishing (DRAP) by training 12 high level technicians in the field of animal and plant production 8 high level technicians in mapping and agricultural topography by the CATAP and international training institutes
- Training of 175 farmers on cultivation techniques and animal breeding
- Training of 400 fishermen and palaiês on best practices and technologies for fish and other sea products processing (smoking, drying, …)
- Training of 300 young people in marketing technics and business management related skills

- Reorganisation of the fishermen and farmers associations and cooperatives

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While interesting and ambitious, the long term relevance and success of this training program to support the achievement of the development goals set in the 2014-2018 economic development plan of the RAP is questionable. Indeed, in the context of climate change, the program does not make provision for creating in the region the capacity able to identify, prevent and manage the climate challenges for the achievement of the goals of the 4-yeas economic development plan linked to the nowcasted and forecasted climate risks for the RAP. The LDCF project will support the design and implementation of a training program for key stakeholders within the key line institutions and for the vulnerable communities in managing climate risks, including the climate related disaster risks. This training program will be embedded in the training programs presented above. The project preparation will help to determine the main climate change vulnerabilities drivers for RAP economy and communities and identify with the communities, and the regional and national authorities and technical staff, the key priority elements of addressing the climate vulnerability of the key economic sectors and sources of livelihoods in the RAP, namely the agriculture, the fishing and the tourism and for disaster risks reduction and management. Building on the results of the identification of the adaptation strategies, the project preparation phase will identify the required capacity to address these vulnerability and carry out a capacity gap assessment that will inform the design and the development of a tailored capacity building program and its integration in the training program introduced above. The training program will first seek to put in place in RAP the capacity required to successfully implement the outcomes 1 and 2 and will include the creation of capacity for climate smart agriculture, climate informed hydroelectricity power plant management and maintenance, solar systems installation and maintenance, cooking stoves production, agriculture and fishing products processing, low emission and climate resilient tourism business management, DRR/DRM. Additionally, the capacity building program will also include the capacity required for the identification, appraisal, prioritization and mainstreaming adaptation options in the economic policy making, planning and development processes. The expected result of this training program is to create a comprehensive package of capacity able to advance the integration of a comprehensive long-term vision for climate-resilient and low emission economic growth and development in the entire development process of the RAP.

Component 2: Supporting the transition to a sustainable and climate resilient local economy growth and development in the RAP

The general development strategic objectives of São Tomé and Príncipe for 2012-2016 as set in the PRSP-II (2012-2016) are as follows: i) to achieve a growth rate of at least six percent (creating conditions for consistent diversification of the economy); ii) to reduce by ten percent the percentage of São Tomé and Príncipe's population living in poverty (promoting income-producing initiatives and thus improving the population's productive capacity); iii) to ensure that the entire population has (facilitated and improved) access to basic social services. These objectives have been reflected in the RAP four years development plan (2015-2018). The achievement of these objectives for the RAP requires the boosting of the primary sector of the economy, particularly agriculture, livestock, and fishing, as well as tourism, as well as to creating infrastructure conditions for re-launching the productive sectors on a sustainable basis and promoting conditions favorable to the private sector development. For this purpose, the Government of the RAP has decided to allocate for the next 5 years a budget of US$3,733,741 to finance productive investments in the sectors of agriculture, fishing and tourism. In the agriculture sector, these investments will specifically finance the renovation and extension of the villages markets, the diversification of food crops with a focus on exportable fruits (pineapple, mangoes, banana), the creation of irrigation systems, the renewal of 25% of coconut and cocoa aged tree, the construction of storage and processing facility in some villages, the construction of rural roads to facilitate the access to the market of the farming products. In the fishing sector, the planned investments will aim at supporting the increasing of the number of vessels available to farmers, the reorganization of fishermen and palaies, the organization of women involved in the distribution and artisanal transformation of fisheries products (drying, smoking) in cooperatives, the renovation of traditional fish markets and provide and the training of the technical team of the fisheries sector in policy formulation, planning and evaluation. In the sector of tourism, these investments aims at the strengthening of the tourism regulatory framework, creation of tourist offices, service and sale of tourist products, participation in tourism fairs in the

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country and abroad, training of the local population so that it becomes an integral part of the process through training, communication, hotels, guides, encouraging local artists in the local arts disclosure. While these investments are relevant for Principe communities' resilience, they have been designed and are implemented through a business-as-usual approach, with key environmental and climate changes related issues ignored. For example the agricultural lands are in majority in hill slopes and are subject to climate induced erosion (alternation of longer dryer episodes combined with heavy rainfall) and the farming activities are also negatively affected by the uncertainties related to the starting and the end of the raining seasons and other climate risks described above. And these programmes do not for example support measures to address the widespread erosion that is depleting the top productive soil layer affecting crop yield. Also, the interventions do not include measures to address the risks of impacts of sea level rise on the landing areas and on the wave's generation which make very risky the fishing activity and negatively affect the productivity of the fishing sector. In addition, the interventions do not cover extreme climate and weather disaster risks and do not include other custom based mechanisms for managing risks associated with the impacts of climate variability on foods resources, livelihoods and human settlements. And this could hinder the achievement of their objectives of advancing food security and the economy development in Principe. In another hand these interventions have been designed from a bottom-up focus on stand-alone projects without comprehensive vision for climate-resilient development – encompassing the required activities across this spectrum. For example, the factors that have been identified in the RAP FYP (2015-2018) as essential to economic growth and development have not been examined to determine from them the extent climate change might require modifications of established policy approaches to those factors.

Building on these baseline investments, LDCF resources will foster green, sustainable and climate resilient local economy growth by: i) financing investments in climate resilient and low carbon farming technologies (climate smart agriculture), agriculture landscape management (including climate informed SLM in hills' slopes and other vulnerable lands and Integrated water resources management practices), DRR/DRM; ii) supporting livelihoods alternatives; and iii) promoting the development and flourishing of low emission and climate resilient private initiatives around tourism, agriculture and fishing sectors able to trigger a resilient and sustainable transformational of the economy of the RAP.

Instead of promoting single and/or disconnected 'adaptation technologies', adaptation interventions will be promoted as part of a holistic 'climate resilient and low carbon economic growth and development strategy' aiming to achieve a triple win goal of simultaneously resulting in low emissions, building climate resilience and promoting green and inclusive economic growth and development. The project interventions units will be the landscapes and the activities will be organized taking in account : i) the interconnections of the adaptation services within the landscapes (cycles within the landscapes); ii) the integrated use of these services (for example livelihoods support activities around the watercourses able to produce hydroelectricity for the economic growth and development of these activities,) and iii) the need to avoid maladaptation and weakening these services (integration of watershed management activities and sustainable forest resources management plans within the adaptation strategies). Also, certain livelihood support activities will be located in less vulnerable in-land areas to promote the return in their villages of peoples who come to settle in vulnerable coastal areas for looking for economic opportunities around the fishing sector. Indeed, the Government has recommended the communities living in vulnerable and precarious settlement in the coastal areas to relocate back far from the coastline, but these communities have always refused to do so because of lack of economic opportunities in the hinterland. Generally speaking, this will include:

- The diffusion of new and easily replicable climate smart agriculture technologies and strategies including: i) coconut and cocoa based agroforestry complemented by small scale terracing structures and other SLM practices, integrated watershed management (IWM) practices, tree/grass planting including the renewing of the aging coconuts and cocoa trees to protect cropping land in sloppy and vulnerable areas from erosion phenomena and increase the adaptation services of coastal forests to protect coastal communities again storms, cyclones and other climate related disasters; ii) use of highly productive and climate resilient inputs, iii) development of small scale irrigation networks including installation of rain water harvesting system and water management technics in drought prone areas, iv) advancing the use of climate information in the farming decision making and the management of the agricultural landscapes. Based on a climate risks and vulnerabilities assessment, the PPG will help the beneficiaries to identify themselves the climate information

products they need to address the vulnerabilities identified and that will be produced by the CI-EWS established thanks to the GoSTP/UNDP/LDCF project "Strengthening climate information and early warning systems in São Tomé and Principe for climate resilient development and adaptation to climate change";

- the rehabilitation/construction of fishing landing infrastructures and coastal fish markets as well as the diffusion of mobile solar freezers, solar dryer, sea food conservation facilities for fishmongers to enhance resilience of fishing communities against climate variability impacts; this output will also include the development of new incomes generating activities around the processing, the installation and the maintenance of the solar equipment.
- the development of small scale and innovative customized agricultural products and fishing processing facilities that will help to strengthen the resilience of the sectors and increase and keep within the RAP the added value of the key value chains of these 2 sectors: these economic opportunities will be handled by private interest economic grouping (GIEs) that will be funded through a free grant provided by the project and a complementary credit from the microfinance institutions (MFIs). The project indeed will set up an innovations grant scheme that will award grants to the 20 most innovative climate resilient and low emission economic business concepts (10 for women GIEs and 10 for men GIEs) around the agriculture (7), fishing (7) and tourism sectors (6) to finance the equipment necessary for the business. Additionally the awarded business will be supported by business experts to improve their business plans and to develop bankable financial credit requests to the regional and national microfinance institutions to get the required complementary finance for running the business. The PPG will help to develop criteria for the assessment of the innovative concepts and the criteria will include, its nature of social business, the potential of job creation, diversification and export promotion, equitable sharing of benefits along the value chain, etc… In the same perspective other smaller scale private initiatives meant to support and /or complement the GIEs business described above such as the creation of private climate resilient agricultural extension services; import, installation and maintenance of irrigation systems and small solar energy systems; production and distribution of energy efficient charcoal cooking stoves, and other relevant economic opportunities supporting the climate resilience of RAP vulnerable communities and that will be identified during the PPG will be supported. The business management experts the project will hire will help the promoters of these private initiative to develop good business plans and financial credit request so that they can access to the funding they need to set up and run these small business.
- The development of new touristic products and concepts (as resilient livelihoods alternatives) around the Obo park (UNESCO World Heritage), the historic cocoa and café rocas (renovating the plantations habitations while keeping their authentic styles and transforming them in Guest houses where tourists will be staying while revisiting the history of cocoa and café production) and other attractive tourism products. As for the agricultural and fishing processing initiatives, these new touristic products and concepts will be handled by private interest economic grouping that will be funded through the grant scheme described above and a complementary credit facility from the regional and national microfinance institutions. As for the economic private initiatives around the agricultural and fishing sectors described above, the grant scheme will fund the fix capital of the most innovative business concepts around the tourism and the promoters of these initiatives will seek complementary financial resources from the MFIs with the support of the business set up experts mentioned above.
- The development of micro-finance products tailored to the identified financial needs of the local communities to support alternative income generating activities and business creation around the agricultural, fishing and tourism sectors,
- A rehabilitation programme for rural roads (*caminhos rurais*) based on a "Cash-for-Work" scheme to support improved access of agricultural products to the regional, national and international markets; but also the tourists, the sea products and imported essential or staple goods to reach the hinterland communities.
- The elaboration of a medium to long term climate compatible development (CCD) plan for the RAP that will identify and plan the required key policies, strategies, actions including the investments for the upscaling of the adaptation strategies and the expansion of the climate resilient business supported by the project. This CCD plan will build on the lessons learnt from the setting up and running of the 20 climate resilient and low emission small scale innovative business, the results of surveys and market analysis for identifying the barriers for the national market expansion and the access to the international market, consultations with the

national and international private sector to identify the requirements for their integration into the climate resilience business (including the required public goods investments) and the identification of the required policies and strategies to operationalize the CCD plan.

In the activities related to this outcome, the role of women will be central in developing and implementing the proposed climate change adaptation measure and climate resilient livelihoods alternatives. Particular attention (including reporting) will be paid on how women have been engaged in the decision-making process related to outputs outlined below and how the design and development of investment plans for communities' selected community-level adaptation measures have taken in account the need for addressing gender based vulnerabilities.

Component 3: Increasing green energy production in RAP to strengthen the resilience of the productive sectors and communities

The achievement of the development goals set in Autonomous Region of Principe (RAP) five year plan requires the access to a clean, affordable and reliable electrical energy. Currently, the electric power supply in Principe is based on two diesel generators, respectively of 900 Kva and 500 Kva and their operating time is controlled during the day due to the high cost of diesel. This production capacity is barely enough to satisfy the households' side demand. While the electricity production capacity has decreased, the households' demand of electricity has increased from 300Kw/h in 2000 to 950 Kw/h in 2014. As a result, the EMAE can no longer respond to the domestic needs as well as to the industrial demand. The operating time of the two generators, in weekdays, is set from 7:00 am to 3:30 pm and from 5:00 pm to midnight. On the weekend it goes from 9:00 am to 2:00 am next day, non-stop. Just over half the population of Sao Tome and Principe (57%, World Bank, 2012) have access to electricity; even then, the country has to resort to occasional load shedding. Those without electricity rely on candlelight and kerosene for lighting, and on biomass (firewood and charcoal) for cooking. The issue of connecting new buyers to the grid remains a great challenge for EMAE due to insufficient generating capacity. In this context, the few hotel resorts present in Principe have developed their own electricity production facility. With the potential for strong economic growth in the near future and the new development projects in tourism and the new airport already under construction, the RAP is anticipating a demand for electricity around 4 Mva at the end of the Five year economic development plan. To give to the RAP the capacity to respond to the anticipated increase of the demand of electricity, the RAP is currently implementing a project for increasing the electricity production in Principe. This project of US$ 1,900,000 entirely funded from the Sao Tome and Principe government budget aims at installing a diesel generator of 900 Kva, increasing the diesel fuel storage capacity to 20,000 liters and assuring the connection of the new generator to the RAP electricity grid. However, this additional capacity will not be enough to fill the current gap in meeting the current electricity demand and the projected demand of electricity, neither to support the desired green, sustainable, climate resilient and low emission economy growth and development in RAP. Indeed, the current gap of the supply vis a vis to the demand will affect the productivity and the success of the climate resilient economic initiatives supported within the component 2 to increase RAP communities economy resilience. Additionally, the sustainability and efficiency of the current option of producing electricity solely from diesel generators is strongly disputable because of the difficulty to assure a regular supply of diesel fuel in the context of the insularity of the RAP, and the lack of resources from the government. So often, the generators are on stop because delay in diesel supply and/or lack of financial resources from the government to pay up front the suppliers. Furthermore, in the context of climate change, the diesel generators which release too much GHGs are not the best electricity production systems to help the RAP and Sao Tome and Principe to meet their commitments of participating in the worldwide effort of keeping global temperature increase to below the 2 degrees threshold. Then it is obvious that the current electricity capacity cannot stand for supporting the green, sustainable and climate resilient local economy growth and development. So there is a need to promote a mix electricity supply grid including the diesel generators of EMAE, the private energy production (from the local resorts) and other sources of renewable energy providing more energy security to the country because not depending to a non-mastered inputs supply.

Building on the baseline project for increasing the electricity supply and the baseline development investments in the agriculture, tourism and fishing and education sectors, the government of the RAP wants to use LDCF resources to increase the energy production and supply capacity in the RAP using 2 approaches.

First, the LDCF resources will be used to install off-grid micro hydro power plants (MHPP)[13] disseminated around the RAP to be closer to the center of economic production. Indeed, the RAP hosts several rivers which have the capacity to host micro hydro power plants[14]. The LDCF resources will support the production of 800 Kw at the estimated costs of $3,865/Kw. These MHPP will aim primarily at supporting the development and expansion of businesses around the see food conservation, agricultural food processing and tourism and thereafter, if possible, to provide households living in these areas with electricity for domestic uses. The PPG will help to identify the rivers on which these MHPP will be installed according to criteria including the river capacity flow, the capacity factor and the potential of economic development around the rivers.

The activities under this component will include:

- Conducting basic pre-feasibility assessments, EIAs and load forecasts for the micro hydro-grids at the sites in targeted districts;
- Construction and commissioning of the MHPP (for a total installed capacity of 250 KW);
- Engineering supervision and quality assurance of construction and installation for the two sites;
- Development of sustainable O&M&M models for all mini-grid schemes
- Support for implementation of an innovative payment electricity system for businesses and households connected to the schemes
- In coordination with the training activities scheduled under the Component 1, Capacity building for EMAE and project partners; mentoring, trainings, guides and toolkit development; nn
- Carrying out energy access, efficiency and utilization campaigns at community and district levels;
- Collaboration with the relevant regulatory authorities for issuance and approval of required electricity generation and feed-in licenses
- Review and if necessary adjust the electricity tariffing system in the objective of achieving an affordable energy costs for private businesses and households: the EMAE applies currently14 different tariff categories, ranging from a subsidized rate of 8.3 US Cents/kWh (social tariff for those consuming ≤ 100 kWh/month) to 19.2 US Cents/kWh (also subsidized) for commercial services and industries to the highest tariff of 49.3 US Cents/kWh for the 463 customers labelled as "Public Administration" and 80 customers labelled as "State Autonomous Regions".

Secondly, to enhance the electricity supply and allow the other economic development opportunities to access to a cheap, green and reliable source of energy, this proposal, in connection with the GoSTP/UNDP/GEF project ID 5334 : "*Promotion of environmentally sustainable and climate-resilient grid-based hydroelectric electricity through an integrated approach in Sao Tome and Principe*" will additionally put in place the conditions for fostering the private sector to invest in the hydropower electricity generation sector and feed-in the EMAE grid in the RAP. Indeed, the project ID 5334 aims at removing the legislative and institutional barriers, at national and local levels, which currently hamper private investments in hydroelectricity generation plans to feed the EMAE grid. For this purpose, the project will determine the issues that act as barriers to the private sector playing a role in electricity generation from hydropower in the country. Following this, the project GoSTP/UNDP/GEF ID 5334 will develop a policy document outlining the remedial measures that are necessary and propose a legal/regulatory framework that will guide private sector investment in hydropower. The policy document will include the following:

- Technical report on grid capacity requirements to enable system stability feed-in for grid-connected mini-hydro systems followed by development of an updated grid code.
- Established procedures and standardized PPAs for the introduction of a transparent procurement process in the selection/award of hydro sites to private developers.
- Setting up of a one-stop shop within EMAE for issuance of construction licenses and permits to developers.

[13] For the purpose of this project a micro-hydro power plant (MHPP) is defined as an installation producing less than 100 kilowatts (kW),
[14] Idem

- Standard environmental methodology for evaluating hydropower projects and financial evaluation methodology for calculating small hydropower tariffs to be paid to IPPs, taking into consideration the benefit-sharing scheme based on the additional water flow that the SFM will bring.
- Capacity developed within EMAE, local banks and key national actors such as the Ministry of Public Works, Infrastructure, Natural Resources and Environment to appraise mini/small-hydro projects for PPAs and lending.
- Increased national and local capacity to coordinate institutions for inter-sectoral SLM approach and to implement integrated resources management at the watershed level.

In top of increasing the RAP electricity production capacity up to the level required to support the climate resilient local economic transformational change sought from this LDCF project, this component will also contribute to increase the access to energy services in the most vulnerable communities helping realize benefits of lighting, cooking, access to ICTs, conserving foods, creating new jobs, increasing profits, and offering new products and services to the local people. This will also allow the improvement of public services in the community through enhancing energy-related facilities and services in the village health centers and schools serviced by the schemes.

A.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:
First of all, the project preparation will be coordinated by the …….. The project design will count on the support and involvement of international NGOs, particularly those supporting the development process and poverty alleviation in the RAP and the key national NGOs working in food security and reduction of poverty namely the Sea, Environment and Craft Fishing NGO (MARAPPA), the Association for Agro-pastoral Development and Environmental Protection (ADAPPA) the Sao Tomean Organization for the Restructuring of the Rural Community (ZATONA-ADIL), the Federation of NGOs (FONG) and the National Federation of Small Farmers (FENAPA), the women based-associations of Principe. These NGOs/CSOs will be fully involved in the assessment of climate vulnerabilities of the communities, the project sites interventions and the identification of adaptation needs and resilient alternatives livelihoods. For the project intervention itself, the main project partners will be: i) …, ii) the Regional Secretary for Economics, iii) the EMAE, iv) the National Directorate of Meteorology. Similarly for the project preparation phase, the implementation of the capacity program and the diffusion of the climate smart agriculture and the development of the climate resilient livelihoods alternative will fully involve the NGOs and CSOs who will be contracted for the execution of some of these activities. The PPG, based on a CSO/NGO capacity assessment will help to identify the activities that will be executed by the CSOs.

A.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.
During the project preparation phase, gender based vulnerability assessments will be made in the different targeted village and districts in order to point out the specific gender related vulnerabilities. The results of this assessment will inform the identification and development of gender based adaptation measures and strategies to be supported by this LDCF in order to address the identified gender related climate risks and vulnerabilities. These adaptation strategies will be technically specified (including the required specific capacity building, organization and financial support) and their cost-effectiveness vis-à-vis to alternative approaches clearly demonstrated. Also, as stated in the outcome 2 and the stakeholders section, they will be fully involved in the identification and design of the adaptation strategies and also their capacity will be built to allow them to fully and efficiently participate in the RAP climate resilience development consultations and discussions.

A.4 Risk. 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):

Insufficient qualified human capacity (Medium): Strong capacity development approach will be incorporated in the

project design. Specific training opportunities e.g. for technical staff concerned on various CC risk and adaptation issues and dedicated capacity building programme at community level will be carried out.

Insufficient institutional support and political commitments and lack of coordination of the various key stakeholders (Medium): The proposed project is strongly supported by the Regional Government of the RAP and other key stakeholders and development partners including the private sector. The regional and national Governments are committed to support the implementation of the adaptation measures in the selected vulnerable villages and stakeholders and local communities are committed to implement the project interventions and provide the necessary support and collaboration.

Microfinance Institutions (MFIs) ability to develop innovative products to finance adaptation and the climate resilient business initiatives can affect their engagement, and therefore the success of this initiatives as they can be deterred from incurring upfront expenses even when the overall balance of costs and benefits is positive. (Medium): the project will engage business development experts who will support the individual and GIEs businesses promoters to develop attractive business plan and credit request that will reassure the MFIs to provide them with the required credits. In the other hand, the PPG will also hold consultations with the MFIs to identify the support they need to be fully engaged in this project and the project inception phase will develop information packages to help them better understand the risks and benefits of their engagement.

Risks of impacts of external chocks (including climate change) lead to the falling down of the international prices of the raw and processed agricultural and fishing products that may lead to a disinterestedness of community members and private sector for the project activities around these products, negatively affecting the achievement of the project objectives (low): the project preparation will see the feasibility of adopting long-term fixed or capped price contracts that also present a certain interest because they offer benefits to the buyers and suppliers as they guarantee the necessary flow of goods at a price which is sustainable for both parties. The project will also look at more holistic options including: i) the increase of producers' capacity through the transfer of financial technology and market knowledge; ii) build a robust infrastructure in two priority areas: regulatory and statistical information of underlying assets; iii) coordinate access through local stakeholder organizations, such as producers' associations; iv) increase governments' capacity for the proper use of a menu of market-based instruments; v) pilot financial risks transfers;

Climate risk reducing and alternative income generating activities financing mechanisms increase indebtedness and vulnerability (low): Capacity building and technical support programmes will be designed and implemented for any innovative financial product intended to finance climate risk reduction that will be introduced. The capacity building will target to improve the capacity of MFI to assess applicants' suitability for any climate risks reduction credit facilities and the economic profitability of the climate risks reduction strategies seeking financing.

A.5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives:
The coordination and the management arrangement will be defined in detail during the project preparation phase. Based on initial discussions with the Government of the RAP, the …. Will ensure the overall coordination of the project as the main national implementing agency and in close collaboration with the …. The project coordination unit will be hosted by the ……. It will ensure the coordination of the project activities with the baselines investments described above. The Ministry of Agriculture, Fisheries and Rural Development (MoAFRD) which is the main implementing partner of the GoSTP/UNDP/LDCF project "Enhancing capacities of rural communities to pursue climate resilient livelihood options in the Sao Tome and Principe districts of Caué, Me-Zochi, Principe, Lemba, Cantagalo, and Lobata (CMPLCL)" will ensure the coordination of the capacity building activities of the aforementioned project with the outcome 1 of this proposal and the livelihoods support and climate resilient agriculture activities of the aforementioned project with the outcome 2 of this LDCF. The Directorate Generate of the Meteorology that is the main implementing partner for the GoSTP/UNDP/LDCF project "Strengthening climate information and early warning systems in São Tomé and Principe for climate resilient development and adaptation to climate change" will make sure to coordinate its capacity building activities with the outcome 1 of this LDCF proposal, to provide the required climate information for the successful implementation of the climate resilient economic production activities planned under the outcomes 2 produce and the design, construction and operation of

Commented [HRD4]: The regional institution in charge of the project implementation.

Commented [HRD5]: The other regional and national institutions that will execute and support some of the projects activities.

the MHPP the outcome 3 will support. The Ministry of Public Works, Infrastructure, Natural Resources and Environment (MPWINRE) which is the main IP of the GoSTP/UNDP/GEF project "Promotion of environmentally sustainable and climate-resilient grid-based hydroelectric electricity through an integrated approach in Sao Tome and Principe" will assure the coordination of the aforementioned project with the capacity building activities of the outcome 1 and the MHPP design, construction and operations under the outcome 3 of this LDCF proposal. The MPWINRE who is the main IP of the GoSTP/WB/LDCF project "São Tome and Príncipe: Adaptation to Climate Change" will also ensure the coordination of this aforementioned project with this LDCF.

Description of the consistency of the project with:
B.1 Is the project consistent with the National strategies and plans or reports and assessements under relevant conventions? (yes ☒ /no☐). If yes, which ones and how: NAPAs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.:

The proposed interventions build and are closely aligned with the recommendations of the first (2005) and second (2012) national communication and the NAPA (2007). The NAPA has identified and ranked identified nine (9) priority sectors, among which food security, terrestrial ecosystems, fisheries, early warning and disaster management, education and capacity building and energy related priorities, which this project will deal with. Indeed, the project will contribute to strengthen capacity to face to the current and long term climate challenges for the RAP economic growth and development by improving the knowledge and understanding of the climate change, enhancing the individual and institutional capacity for managing the climate risks, strengthening the climate resilience of the communities' livelihoods and assets and improving access to clean and affordable energy. These priority adaptation option and measures take into account Sao Tome and Principe's PAN/LCD and NBSAP, the national climate change strategy, the PRSP 2, the RAP FYP, the UNDAF and UNDP CPD and other development strategies and plans.

PART III: approval/endorsement by gef operational focal point(s) and GEF agency(ies)
A. Record of Endorsement[15] 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)*
Lourenco MONTEIRO DE JESUS	Director of Environmental Education and Statistics	MINISTRY OF PUBLIC WORKS AND NATURAL RESOURCES	APRIL 11, 2015

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies[16] 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
Adriana Dinu, Executive Coordinator, UNDP/GEF		03/__/2015	Henry Rene Diouf	+251929016785	henry.rene.diouf@undp.org

[15] 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.
[16] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

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.