



GLOBAL ENVIRONMENT FACILITY
INVESTING IN OUR PLANET

May 29, 2018

Dear LDCF/SCCF Council Member,

I am writing to notify you that we have today posted on the GEF's website at www.TheGEF.org, a Project Identification Form (PIF) for a full-sized project proposal from World Bank entitled ***Sao Tome and Principe: São Tomé and Príncipe Additional Financing - West Africa Coastal Area Resilience Investment Project (GEF ID : 9364)***, for funding under the Least Developed Countries Fund (LDCF). This PIF has been posted for Council approval by mail. Council Members are invited to review the PIF and to submit their comments (in Word file) to the GEF Secretariat's program coordination registry at gcoordination@TheGEF.org by June 26, 2018.

Following the streamlined procedures for processing LDCF proposals, Council members are invited to approve the following decision:

*The LDCF/SCCF Council reviewed the PIF entitled **Sao Tome and Principe: São Tomé and Príncipe Additional Financing - West Africa Coastal Area Resilience Investment Project (GEF ID : 9364)** (LDCF Project Grant \$6,000,000) (Agency Fee \$570,000), posted on May 29, 2018 and approves it on a no objection basis subject to the comments submitted to the Secretariat by June 26, 2018.*

The Council finds that the PIF (i) is, or would be, consistent with the Instrument and GEF policies and procedures, and (ii) maybe endorsed by the CEO for final approval by the GEF Agency, provided that the final project document fully incorporates and addresses the Council's and the STAP reviewer's comments on the PIF, and that the CEO confirms that the project continues to be consistent with the Instrument and GEF/LDCF/SCCF policies and procedures.

The final project document will be posted on the GEF website for information after CEO endorsement. If the GEF CEO determines that there has been a major change to the present scope and approach since PIF approval, the final project document shall be posted on the web for Council review for four weeks prior to CEO endorsement.

In accordance with this decision, if the Secretariat has not heard from you in writing by June 26, 2018 we will assume that you approve the PIF.

Sincerely,

Naoko Ishii

Chief Executive Officer and Chairperson

Copy to: Country Operational Focal Point, Alternates, GEF Agencies, STAP, Trustee



WORLD BANK PCN STAGE/GEF DATA SHEET¹

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: Least Developed Countries Fund

For more information about GEF, visit TheGEF.org

PROJECT INFORMATION

Project Title:	São Tomé and Príncipe - Additional Financing - West Africa Coastal Area Resilience Investment Project		
Country(ies):	São Tomé and Príncipe	GEF Project ID: ²	9364
GEF Agency(ies):	WB (select) (select)	GEF Agency Project ID:	TBC
Other Executing Partner(s):	Ministry of Infrastructure, Natural Resources and Environment	Submission Date:	2018-05-21
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"/>		
Name of parent program (if applicable):	non applicable	Project Agency Fee (\$):	570,000

A. INDICATIVE FOCAL [AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES](#)³:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	GEF Project Financing (\$)	Co-financing (\$)
(select) CCA-1 (select)	LDCF	3,100,000	7,700,000
(select) CCA-2 (select)	LDCF	2,600,000	500,000
(select) CCA-3 (select)	LDCF	300,000	200,000
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
(select) (select) (select)	(select)		
Total Project Cost		6,000,000	8,400,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To strengthen the resilience of targeted communities and areas in Sao Tome Principe					
Project Component ⁴	Financing Type ⁵	Project Outcomes	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
1.Strengthening the Policy and Institutional Framework (aligned with Comp 2 WACA)	Inv	Early Warning systems to reduce exposure of fishermen and coastal communities to extreme events Safety at sea system reduces disappearances at sea during extreme weather events	LDCF	2,600,000	500,000
2. Strengthening National Physical and Social Investments (aligned with Comp 3 WACA)	Inv	Coastal adaptation measures reduce flooding exposure for target communities Technical capacities strengthened to identify, prioritize, implement and monitor adaptation measures	LDCF	3,150,000	7,700,000
	(select)		(select)		
	(select)		(select)		

¹ This Data Sheet replaces the GEF PIF.

² Project ID number will be assigned by GEFSEC.

³ When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

⁴ This LDCF project is an Additional Financing to GEF WACA project (P162237) and is aligned with its component structure.

⁵ Financing type can be either investment or technical assistance.

	(select)	Participatory adaptation processes and climate-informed spatial plans strengthened in coastal communities	(select)		
	(select)		(select)		
	(select)		(select)		
	(select)		(select)		
	(select)		(select)		
	(select)		(select)		
Subtotal				5,750,000	8,200,000
Project Management Cost (aligned with WACA Cp 4- PMC) ⁶			LDCF	250,000	200,000
Total Project Cost				6,000,000	8,400,000

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

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

Sources of Cofinancing	Name of Cofinancier	Type of Cofinancing	Amount (\$)
Recipient Government	District Governments	In-kind	1,400,000
Donor Agency	EC - Global Climate Change Alliance	Grants	1,000,000
GEF Agency	IDA (P161842)	Grants	6,000,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			8,400,000

D. INDICATIVE TRUST FUND RESOURCES (\$) REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY(IES) AND THE PROGRAMMING OF FUNDS ^{a)}

Trust Fund	Country Name/Global	Focal Area	Programming of Funds	GEF Project Financing (\$ (a)	Agency Fee (\$ (b) ^{b)}	Total (\$) c=a+b
LDCF	São Tomé e Príncipe	Climate Change	(select as applicable)	6,000,000	570,000	6,570,000
(select)		(select)	(select as applicable)			0
(select)		(select)	(select as applicable)			0
(select)		(select)	(select as applicable)			0
(select)		(select)	(select as applicable)			0
(select)		(select)	(select as applicable)			0
Total Grant 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. PPG AMOUNT REQUESTED BY AGENCY(IES), FOCAL AREA(S) AND COUNTRY(IES) FOR MFA AND MTF PROJECTS⁷

Project Preparation Grant amount requested: \$0	PPG Agency Fee:
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⁶ 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.

⁷ Fill in this table only if PPG is requested. PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$100k for PF up to \$3 million; \$150k for PF up to \$6 million.; \$200k for PF up to \$10 million.; \$300k for PF above \$10 million. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

Trust Fund	GEF Agency	Country/Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁸ (b)	Total c = a + b
(select)	(select)		(select)	(select as applicable)	0	0	0
(select)	(select)		(select)	(select as applicable)	0	0	0
(select)	(select)		(select)	(select as applicable)	0	0	0
Total PPG Amount					0	0	0

MFA: Multi-focal area projects; MTF: Multi-trust fund projects

⁸ 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 BENEFITS⁹

Provide the expected project targets as appropriate. – **Not Applicable**

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 _{2e} 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>

⁹ 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.



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PROJECT TYPE: Full-sized Project

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**PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE**

Report No.:

Project Name	São Tomé and Príncipe - Additional Financing - West Africa Coastal Area Resilience Investment Project
Region	Africa
Sector	Flood Protection (80%) General agriculture, fishing and forestry sector (20%)
Project ID	TBD (linked to P162337)
Borrower(s)	São Tomé and Príncipe
Implementing Agency	Directorate General of Environment, Ministry of Infrastructure, Natural Resources and Environment
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD
Date PID Prepared	March 25 th , 2018
Estimated Date of Appraisal Authorization	October, 2018
Estimated ESMF Date	Not Applicable (the project will use safeguards framework developed for the WACA baseline project)

I. Key development issues and rationale for Bank involvement

São Tomé and Príncipe context

The Democratic Republic of São Tomé and Príncipe (STP) is an archipelago comprised of two main islands and four islets located in the Gulf of Guinea 350 km off the west coast of Africa. The country is one of Africa's smallest nations with a total area of 1,001 km² and a population size of 199,910 (2016). The country's Gross National Income per capita is US\$1,720 (2016). São Tomé and Príncipe ranked 142/188 in the 2016 UNDP Human Development Index.

STP's economy is fragile and has suffered considerably from the food, energy and financial crises that have exacerbated inflation and negatively affected household incomes especially among the most vulnerable population groups – in particular Angolares artisanal fishers, descendants from runaway Angolan slaves who have inhabited São Tomé since 1540, and have preserved their distinct attachment to the sea. The nation's limited productive base has substantially increased the country's vulnerability to exogenous shocks, and constrains its adaptation capacity. In view of its small size, isolation, limited capacity to achieve sustainable development, Least Developed Country (LCD), and Small Island Developing State (SIDS) status, São Tomé and Príncipe is considered to be highly vulnerable to the effects of climate variability, climate change and sea level rise by both the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel on Climate Change's (IPCC).

Coastal Management in São Tomé and Príncipe

The archipelago is of volcanic origin, with an uneven sea floor. As such, most fishing areas are distant from the coast. Within the artisanal, 12-mile zone, fishers travel often a considerable distance from the coast. Fishing is practiced by artisanal fishermen using techniques adopted 50 years ago: using dug-out canoes of which two-thirds are paddled or have make shift sails limiting fish catches to coastal areas. The small fleet of motored fishing boats which allows for mid-range coastal fishing was hit hard by the fuel

price increase, thus affecting the price of fish which provide 70 percent of protein intake in the country. The fishing industry is considered key to poverty alleviation and essential to the nation's health and welfare. Current estimates indicate that artisanal fisheries employ 20% of the nation's workforce and represent one of the main employment opportunities in rural areas. There are approximately 5,000 people working directly in the fisheries sector with an additional 18,000 indirectly.

Rising abruptly from the seafloor, the coast of São Tomé is particularly vulnerable to coastal erosion. In the past, most pressures seem to have been caused by anthropogenic factors such as cultural practices (e.g. the Angolares' habit of constructing close to the seashore), weak spatial planning and uncontrolled coastal development, and sand mining. However, in recent times, the Government has banned sand mining, and the NAPA consultations indicate a growing community awareness that in certain Angolares communities (e.g. Ribeira Afonso, Sta. Catarina, Malanza), the risk has increased due to a combination of flash river flooding, more intense coastal storms, and persistent cultural habits.

Climate change historical and projected

STP's Second National Communication to the UNFCCC forecasts increases in temperature of from 1 to 2° C by 2050 coupled with a decrease in precipitation of about 15 percent. IPCC scenarios also predict an increase in temperature of up to 2°C by the middle of the 21st Century for the STP region, with increased variation in precipitation patterns, longer dry seasons, increased flooding and dry fog.

It should be noted that irregular storm surges and wave action have intensified over the last decade over the coast of São Tomé leading to loss of houses and fishing assets for communities where adaptation actions had not yet taken place. Hence, protection measures accompanied by managed population retreat are urgently needed in these communities.

The São Tomé and Príncipe Nationally Determined Contribution estimates that with sea level rise of 0.13-0.43 m, some 15-20 % of the houses in Praia Melão, 30% of those in Malanza, 35% in St. Catarina, and 40% in Ribeira Afonso would be inundated. The study of High Resolution Coastal Change Maps for São Tomé and Príncipe indicates losses of similar magnitudes in the 6 additional communities, under projected sea level rise and storm surges conditions.

Also, based on the climate projections and the expected increase in aerosol concentration, more fog, and windy conditions are expected, increasing the risks for coastal fishermen. Stronger wind trends are likely to increase the transport of aerosols from mainland Africa, causing potential increase of atmospheric moisture near the surface, and also a lower temperature near the surface compared with the one in altitude, causing humidity to accumulate in surface layers (Figure 1).

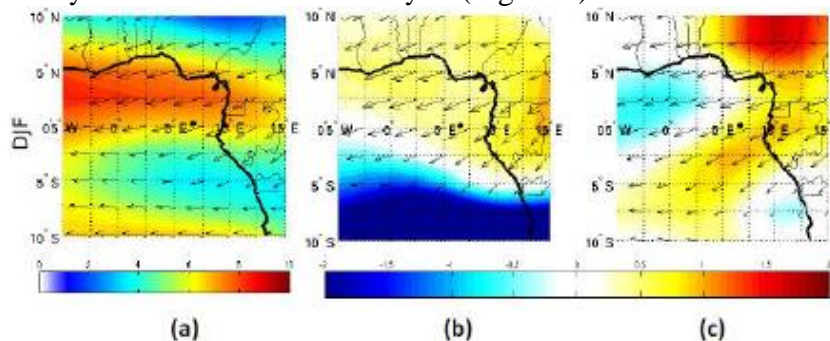


Figure 1: Seasonal Average Winds at 700hPa for the 1980s, 1990s and 2000s. Colors indicate wind speed and difference in wind speed between current and previous decade. Arrows indicate average wind speed and direction for that decade, from the first adaptation project.

Losses of lives at sea have coincided with the January to March season, where decadal changes in wind and aerosol concentrations have been observed (Figure 2).

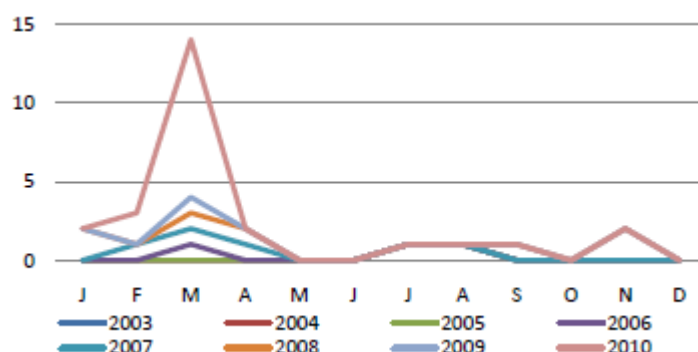


Figure 2: Fishers reported lost at sea by Harbor Department, São Tomé and Príncipe (2003-2010), from the Parent project PAD.

Consistency with National adaptation strategies

In 2007, STP released its National Adaptation Program of Action (NAPA), identifying 22 urgent and immediate climate change adaptation priorities. Studies conducted during preparation of the NAPA documented that STP has experienced the following phenomena: (i) temperature increases; (ii) decrease in rainfall and subsequent decrease in river-flow and water supply; (iii) deaths of artisanal fisherman and loss of fishing equipment due to increased fog, strong winds and increased turbulence at sea (disrupting traditional navigation and safety-at-sea practices); (iv) destruction of fishing vessels along harbors and beaches due to increased storms; (v) increase in women's poverty due to loss of their husbands' lives and fishing equipment; (vi) longer dry seasons leading to drought conditions which, followed by torrential rains, lead to landslides, flooding, groundwater contamination; (vii) increasing coastal erosion leading to loss of houses and infrastructure and isolation of local communities and (viii) decreased tourism.

The São Tomé and Príncipe's Nationally Determined Contribution (September 2015) identifies again the “*protection of coastal communities and artisanal fishermen*” as one of its two top adaptation priorities (amongst 27 identified). The NDC further states 5 short-to-medium term adaptation actions, of which action (II) “*Reduce the number of people living in vulnerable areas at risk, by providing housing in safer areas*” drive the design of Component 2; and actions (IV) *Introduce radar reflectors on board all fishing vessels by 2025, reducing the number of accidents at sea* and (V) *Train and equip fishermen with means to enable safe fishing and train them in the proper use of fishing gear*, are reflected in the design of Component 1.

The project is also fully consistent with São Tomé and Príncipe's Second Poverty Reduction Strategy (2012-16), which emphasizes mainstreaming of climate change issues in the countries' policies as a key strategic action. The first phase of the project¹ further helped inform STP's Second National Communication (2012). The latest World Bank Country Partnership Strategy (for fiscal years 2014-18) identifies social protection and vulnerability as a key results area, and within it, the need to increase the

¹ This proposal is considered the second phase of the WB-GEF adaptation to climate change project (P111669) which closed in December 2017.

adaptive capacity of coastal communities and reduce the potential loss of assets and livelihoods. The proposed project is part of the World Bank's Africa Climate Business Plan.

Links to and implications of the World Bank Adaptation to climate change Project

The initial adaptation to climate change project (P111669) was funded by a US\$4.1 million grant from the GEF Least Developed Country Fund (GEF/LDCF). It was approved on May 31, 2011, became effective on September 22, 2011 and closed on December 31, 2017. The components of the project were (i) Coastal Early Warning System and Safety at Sea, and (ii) Coastal Protection for Vulnerable Communities. The project performance was rated satisfactory with strong impacts on the ground and in particular through establishing a robust enabling system in STP.

The early warning system for coastal areas has improved substantially following collaborative agreements between the National Meteorological Institute, communications agencies, and members of the National Council for Disaster Response and Preparedness (CONPREC), to disseminate more frequent weather forecasts to coastal communities. A marine meteorological station and a meteorological studio have also been installed for the first time in São Tomé and Príncipe, and a system of SMS-based alerts developed.

The number of fishermen lost at sea due to storms has been reduced to less than 1 per year over the last 5 years after the introduction of the safety at sea program from a baseline of 4.8 lives lost per year (the original end-project target was 2 per year). In recognition of the need to continue to reinforce better risk behavior, and in view of the fact that the number of artisanal fishers had been under-estimated at appraisal, the distribution of basic safety equipment and training in safety at sea was expanded to cover an estimated 70 percent of the artisanal fishers (1,750 people), and a process of registration of artisanal canoes was engaged.

Coastal and flood control works have been carried out in Ribeira Afonso, Santa Catarina and Malanza (in São Tomé Island) and in Praia Burra (Príncipe). The initial project has also helped assisting with participatory risk plans, helping the communities identify a safer adjacent expansion area which will be targeted as the location of future social infrastructure, with plots reserved for households presently located in high risk areas and willing to relocate there voluntarily. Thus, the project has piloted a combination of protection (through coastal defenses, reinforcement of embankments, and vegetative belts), accommodation (drainage improvements) and population retreat measures.

There are clear indications that these measures have helped pilot communities cope with recent storm surges and river flooding, relative to non-project coastal villages. However, there is a need to continue to accompany the process of population retreat, and to reinforce changes in behavior - such as regular cleaning of the drains, and preservation of green belts. In addition, the succession of high tides that have affected São Tomé and Príncipe since 2014 make it urgent to scale up interventions to other vulnerable coastal communities.

II. Current Baseline Scenario

In response to the government request to scale-up the results of the first phase, the World Bank prepared a second phase² for the adaptation to climate change activities in São Tomé and Príncipe. To leverage

²A project proposal for second phase designed as an additional financing to the P111669 submitted in 2016 was technically cleared by the GEF for Council approval, but put on hold due to limited availability of LDCF resources. As a result of the time lag, the proposal is now adjusted with minor changes to be aligned with the regional project.

knowledge and finances, the activities have been designed to be aligned with the regional project WACA resilience investment project (WACA – ResIP P162337), while continuing to seek additional finances to cover the remaining identified gaps. This parent project covers 6 countries (Benin, Côte d’Ivoire, Mauritania, São Tomé and Príncipe, Senegal and Togo), and has four components: one regional, to strengthen the regional integration, to support regional and international institutions to enhance country dialogues and collaboration with other regional organizations and encourage regional and transboundary initiatives; and three components which will be implemented at the national levels.

The overall WACA budget is US\$ 221.7 million, among which US\$ 9.3 million would be dedicated for the national activities in STP (US\$ 2.7 million grant from the national IDA allocation, US\$ 5.3 million grant from the regional IDA funds, US\$ 1.1 million grant from the International water window from the GEF and US\$ 0.2 million in-kind contribution from STP government). LDCF resources will be linked to the STP national component of the WACA and bring new co-financing resources to support specific activities (see co-financing section later).

LDCF additional financing rationale and analysis

The proposed project has been designed as an additional financing (AF) to allow for scale-up of the impacts of the first adaptation to climate change project. The baseline project, WACA³, will emphasize on the development of safer relocation areas to provide incentives for the population not to settle in the most at-risk areas, but additional investments are needed to restore the natural ecosystems so that they could play their original role to offer protection from tides and surges; and to develop them to promote community-based sustainable income generating activities, such as tourism and sustainable fisheries.

Without this additional financing, through WACA, São Tomé and Príncipe would continue to support participatory coastal adaptation in the four initial pilot communities and would scale it up to other 3 communities, but would not be able to expand it to all of the most vulnerable coastal communities already identified in the different district. The process of helping the pilot communities expand into safer areas may be shortchanged if the to-be voluntary vacated areas would not be restored and properly planned and used for sustainable and resilient uses. Principles of safety at sea would have been introduced amongst coastal fishermen - with an immediate observable impact - but with uncertain sustainability due to the time required to change risky behavior.

The proposed AF would enable São Tomé and Príncipe to further institutionalize and implement risk-informed spatial planning and adaptation processes in the four pilot communities, while scaling up the approach to cover eight other highly vulnerable coastal communities - and so covering all districts of São Tomé and Príncipe. It would also help to improve the early warning and safety at sea amongst artisanal fishers, and thus ensure that lives can continue to be saved over the long term.

Given that such activities represent a natural complement to the baseline WACA project’s activities, AF seems the most appropriate option to maximize development outcomes. The project will enable a faster and more cost-effective response to the client’s request to sustain and scale-up the results of the earlier climate adaptation project. The responsible agency, Directorate General of Environment, Ministry of infrastructure, Natural Resource and Environment, has demonstrated its strong commitment, and has proved to be a competent counterpart agency, as shown by the initial project’s satisfactory track records. There would be no change to the key implementation arrangements put in place.

³ WACA resilience investment project (as the baseline), was recently approved by the WB board and will allow for an integrated and cohesive approach in STP. There are no significant changes to the project scope and design.

The AF is expected to serve as a replicable model for the implementation of solutions tailored to the needs and the contexts of the Small Islands States, to adapt to climate change and build resilience to disaster risk in their coastal areas. Being part of the Small Island States Resilience Initiative (SISRI), the experiences will be shared amongst the communities of practitioners working for the governments of the SIDS around the world. Therefore embedded within the WACA, the AF is expected to generate and share good practice lessons not only across communities and districts but also the overall region in managing the process of population retreat to the safer expansion areas and institutionalizing a process of adaptation pathways. The proposed LDCF alternative would also focus on the exit strategy by establishing links with the emerging social protection and national public works programs, and ensure that Government-funded public investments provide the right incentives for continuing community expansion into safer adjacent areas.

III. Proposed objective(s)

The Project Development Objectives would remain unchanged from the parent project:

To strengthen the resilience of targeted communities and areas in coastal Western Africa.

The main outcomes indicators would be as follows:

- Early warning system reduces loss of lives and canoes during extreme weather events
- Percentage of beneficiary artisanal fishermen using mandatory safety at sea equipment
- Reduction of household exposed to coastal risks

IV. Preliminary Description

The LCDF project will focus on the CCA (Climate Change Adaptation) programs of GEF Programming Strategy, covering the three strategic objectives “(i) *Reduce the vulnerability of people, livelihoods, physical assets and natural systems to the adverse effects of climate change* (ii) *strengthen institutional and technical capacities for effective climate change*; (iii) *Integrate climate change adaptation into relevant policies, plans and associated processes.*”. It will be in line with three GEF programming priorities, coastal zone management, Disaster Risk Management and Small Islands Developing States.

The components of the baseline WACA project as indicated below are (i) Component 1- strengthening regional integration, (ii) Component 2- Strengthening the Policy and Institutional Framework, (iii) Component 3- Strengthening National Physical and Social Investments, and (iv) Component 4- Project Coordination. The proposed Additional Financing of US\$6.0 million using LDCF resources will lend support to WACA components 2, 3 and 4 with activities as below.

Component 1. Strengthening Regional Integration: No LDCF support

Component 2. Strengthening the Policy and Institutional Framework (LDCF- US\$2.6 million)

Coastal Early Warning System (estimation LDCF US\$ 1.3 million). The Additional Financing would fund only relatively minor gaps and upgrades of the system with focus on STP. This is likely to include:

- Specialized long-term training (6-12 months) for marine meteorologists on storm surge modeling, at a center of global expertise. This is becoming critically important due to the impact of the recent spring tides and storm surges, which are likely to be exacerbated by sea level rise.

- Capacity building on data analysis, to better integrate observations into predictions, and capitalize in the data acquired through the observation network and,
- Two additional marine meteorology stations in the southern part of the São Tomé island and along the shoreline of the island of Príncipe, or a system of buoys, to improve the coverage of the observation network for storm surge monitoring and early warning

Safety at Sea (estimation LDCF US\$ 1.3 million). The Additional Financing would expand the scope of the Safety at Sea Program of the Adaptation Project to cover the majority of the 3500 artisanal fishers⁴, with an emphasis on:

- Acquisition and installation of minor safety, search and rescue and communications equipment (with an emphasis on ensuring sustainable suppliers and promotion of fishermen associations for maintenance of the safety devices such as the GPS);
- Continuous training and peer-to-peer exchanges amongst fisher groups to demonstrate best practices, and discourage risky behavior;
- Reinforced monitoring of safety at sea incident and registration of canoes, and
- Regulatory support

Component 3. Strengthening National Physical and Social Investments (LDCF- US\$3.15 million)

The additional financing would enable the adaptation process to be consolidated in the four pilot villages - Ribeira Afonso, Malanza, Santa Catarina and Praia Burra - and extended to other eight vulnerable coastal communities - Iô Grande, Praia Melão, Praia Gamboa/Loxinga/Cruz, Pantufo and Micoló in São Tomé Island, and Praia Abade in Príncipe.

Coastal protection and coastal communities resilience strengthening (US\$ 3.15 million) The Additional Financing would pay particular attention to capacity transfer, and institutionalization of the participatory adaptation processes piloted by the initial project. It is expected to include:

- Medium-scale coastal adaptation activities (both structural and ecosystem based);
- Small-scale community-based adaptation (including maintenance of drainage and revegetation).
- Capacity building in ecosystem-based approaches for adaptation to climate change
- Soft measures aimed at changing risk behavior – such as promoting agreements between community groups and the districts on responsibilities for canal cleaning and routine maintenance;
- Support to coastal ecosystem restorations to strengthen resilience
- Exchanges of experiences and dissemination of lessons learned.

The participatory adaptation measures would be closely linked with the Government's emerging social protection program and WACA's investments, to ensure complementarity and sustainability. The links are expected to be reinforced through (a) better targeting, by using newly developed poverty maps to ensure that the most vulnerable communities and households are identified (e.g. women-headed

⁴ Based on the last estimation from the Department of Fisheries, a previous report in 2014 accounted for 2991 fishermen (source: General census of fishery float, artisanal, semi industrial, enterprises and services linked to fisheries, Department of Fisheries, 2014)

households, the elderly, and the handicapped). For these highly vulnerable households, who may wish to move to adjacent safer areas but lack the means to do so, the project may consider assisting them with materials and labor costs to reconstruct their housing in the expansion areas, or to build a social/group housing for the elderly; (b) social registry, by integrating the most vulnerable households in the national registry of beneficiaries for social programs, so they may receive Government-sponsored livelihood and health assistance; (c) linking adaptation to livelihood assistance, by encouraging structural and vegetative adaptation measures in ways that also generate livelihood benefits, through cash-for-works; and (d) ensuring the maintenance of adaptation works, by integrating it in the new national public works program (such as the community groups for maintenance of infrastructure). Promotion of local and sustainable income generating initiatives, linked to road maintenance, tourism and social protection.

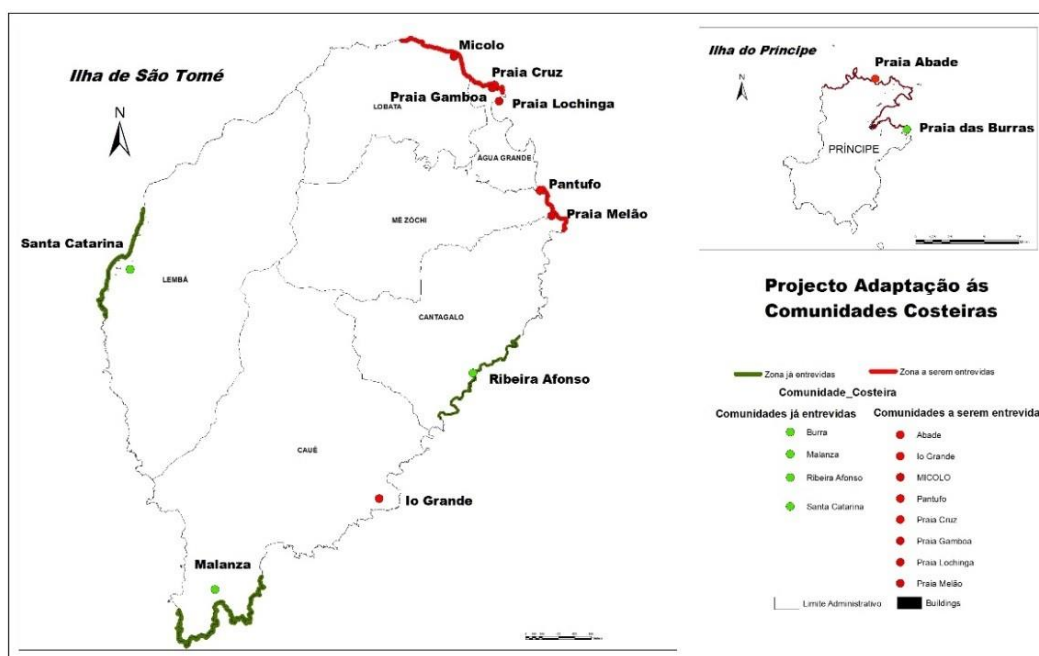


Figure 3: Communities covered by the proposal

Component 4. Project Coordination (LDCF-US\$0.25 million)

The additional financing will use the parent project management systems. During the preparation phase of the parent project, the project team agreed with the Government the option of sharing procurement and financial management functions with the central Fiduciary Agency of Projects' Administration (AFAP), to build and strengthen the national capacities.

Proposed Co-financing

While the AF will be processed linked to the baseline WACA project, it will leverage new and additional co-financing as detailed. A substantial part of the co-financing (estimated at US\$200,000 per district, or a total of US\$1.4 million) is the expected in-kind counterpart contribution from the seven participating districts, to fund maintenance activities in the target communities and social developments in the

expansion areas. Evidence from the first project indicates that this is already happening – in Malanza, for example, the Government installed electricity in the expansion area and is planning the construction of a new school. In addition, São Tomé and Príncipe has established community based risk management committees in the targeted villages, whose role is to organize maintenance activities, as well as encourage adaptation and risk reduction. The expected end result is that all districts in São Tomé and Príncipe will have gained experience from incorporation of adaptation and risk-based management into participatory local development plans, and that the model can then mainstreamed nationwide.

The European Union, through the Global Climate Change Alliance is providing technical assistance (for an estimated amount of US\$1.0 million) to the government of STP to strengthen national institutions to implement adaptation projects, but also to develop and implement adaptation plans for two districts (Lemba and Me-Zochi) which will inform investments in Santa Catarina, Praia Melao and Pantufo. These activities will primarily support the AF activities for coastal protection and adaptation.

Also, in Agua Grande District, an infrastructure project, jointly financed by IDA, the Dutch cooperation program DRIVE and the European Investment Bank, will build coastal protection works (sea wall, rock revetment and beach nourishment) for an estimated amount around US\$6 million. These activities provide geographical complementarity and contiguity in the measures taken for coastal protection and strengthening to link the rural and urban coastal segments. LDCF support will cover the green infrastructure elements in synergy with the IDA supported grey infrastructure investments.

In addition, other preparation activities which feed into the design of the project, but not counted as direct cofinancing include: (i) US\$150,000 allocation for São Tomé and Príncipe for the preparation of a multi-stakeholder, multi-sectoral coastal investment plan co-finance mission costs and helped identify and prioritize the future investments in the coastal areas of São Tomé and Príncipe, including the 10 communities of the proposed project and (ii) US\$300,000 grant for the support of the NDC implementation, to strengthen institutional capacities to mainstream climate change into sectoral investment plans and mainstream

Under the component relating to early warning and safety at sea, the last mile communication protocols designed under the first project (radar detection, community radio, and FrontlineSMS) will continue to be further developed in the proposed AF, involve minimum costs, or have operation and maintenance already funded by national agencies (e.g. ICT companies, Coast Guard, Port Authority).

Project coordination

In addition to the WACA baseline project of this proposal, several LDCF-financed projects dedicated to the building of climate resilience in São Tomé and Príncipe, are currently under implementation or under preparation as below.

- Strengthening the adaptive capacity of most vulnerable Sao Tomean's livestock-keeping households' (GEF ID: 4274, AfDB) – on-going;
- 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) (GEF ID: 5184, UNDP) – on-going
- Strengthening Climate Information and Early Warning Systems in Sao Tome and Principe for Climate Resilient Development and Adaptation to Climate Change (GEF ID: 5004, UNDP) – on-going
- Strengthening Resilience and Adaptive Capacity to Climate Change in São Tomé and Príncipe's Agricultural and Fisheries Sectors' (GEF ID: 9113, AfDB) – concept approved

The first two LDCF projects are concentrated in inland communities. In May 2009, a joint World Bank and UNDP mission agreed with the Government on a programmatic framework for adaptation assistance to São Tomé and Príncipe, which involved a component of participatory adaptation to vulnerable coastal communities (implemented through the World Bank) and a component of adaptation in vulnerable inland areas and national capacity building (implemented through UNDP). Hence, the approaches are complementary but implemented in geographically different areas. AfDB came in a few years later, concentrating on livestock and fisheries development, two sectors where their programs were particularly active. The last AfDB project (GEF ID: 9113) focuses on fisheries infrastructure development and reinforcement, and is thus complementary to the proposed project. The proposed project will draw synergies with these ongoing activities.

Gender issues

65 percent of direct beneficiaries of this project are expected to be women. By reducing loss of lives at sea, the project will help prevent a high proportion of widows, who are commonly left destitute. The project will also look at ways to further promote the targeting and differential involvement of women in the adaptation investments, e.g. by building on the GIME (Groups of maintenance of infrastructure) or on the community risk management committees.

V. Safeguard Policies that might apply

This AF embedded within the WACA Project will be developed under the overall WACA framework, which has developed two environmental and social safeguards instruments, namely an Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) in compliance with the core requirements of the triggered safeguards policies: OP/BP 4.01 (Environmental Assessment) and OP/BP 4.12 (Involuntary Resettlement). RPF documents outline the principles and procedures for resettlement and establishes standards for identifying, assessing and mitigating negative impacts of program supported activities. In addition, RPFs will guide the preparation and implementation of RAPs for each individual sub project that triggers the involuntary resettlement policy. National activities in STP would be Category B and any relevant updates for the AF will be prepared and reviewed before project appraisal.

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	[x]	[]	
Natural Habitats (OP/BP 4.04)	[x]	[]	
Pest Management (OP 4.09)	[]	[x]	
Physical Cultural Resources (OP/BP 4.11)	[]	[x]	
Involuntary Resettlement (OP/BP 4.12)	[x]	[]	
Indigenous Peoples (OP/BP 4.10)	[]	[x]	
Forests (OP/BP 4.36)	[]	[x]	
Safety of Dams (OP/BP 4.37)	[]	[x]	
Projects in Disputed Areas (OP/BP 7.60)*	[]	[x]	
Projects on International Waterways (OP/BP 7.50)	[]	[x]	
Piloting the Use of Borrower Systems to Address Environmental	[x]	[]	

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

VI. Tentative financing

Source:	(\$m.)
BORROWER/RECIPIENT	1.4
Global Environment Facility (GEF)	6.0
European Union- Global Climate Change Alliance	1.0
IDA – P161842 (associated parallel)	6.0
Total	14.4

VII. Contact point

Contact: Nicolas Desramaut
Title: Senior Disaster Risk Management Specialist
Tel: +1 (202) 473-8872
Email: ndesramaut@worldbank.org
Location: GEN07/ World Bank / 1818 H Street, Washington DC, United States of America

VIII. For more information contact:

The World Bank, 1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>