





Annual Work Plan 2017

United Nations Development Programme

Country: Timor Leste

Project Title:

Building Shoreline Resilience of Timor-Leste to Protect Local Communities

and Their Livelihoods

Implementing Entity:

UNDP

Responsible Partners:

Ministry of Agriculture and Fisheries (MAF)

Project Brief Description

Climate change is causing Timor-Leste to become hotter and drier, with increasingly variable rainfall —water, soils, and coastal areas are all sensitive to these changes. Riverine and catchment runoff from the country's mostly steep terrain, with increasing deforestation and poor agricultural and catchment practices, causes significant soil erosion, increased incidence of landslides and flash flooding. This results in sedimentation of rivers and streams, and major impacts on riverine and coastal water quality, as well as the compromised health of coastal ecosystems (such as mangroves, coral reefs and seagrasses).

These pressures from upland areas, coupled with the rapidly rising sea level, are putting coastal communities (and the ecosystems and resources upon which they depend), particularly at risk. Over the past 2 decades, mangroves, which serve as a natural defense to the sea, have been severely degraded – leaving the country's shoreline and coastal communities vulnerable to coastal inundation, erosion, salt water intrusion, and impacts of sea-borne natural hazards (e.g. waves, storm surges, and in extreme cases, small scale tsunamis).

The Government of Timor-Leste (GoTL) faces the unique challenge of responding to these climate change impacts, while addressing the needs of a least developed country (LDC) with one of the most rapidly growing populations in the world. Conservative growth rate projections estimate that the population will more than double to 2.5million over the next 30 years. With approximately 40% of the population living in coastal areas, the GoTL is seeking to minimize adverse impacts of both, climate change and rapid population growth, on shoreline resilience and the achievement of its development goals.

The Timor-Leste Strategic Development Plan (SDP) 2011-2030 clearly articulates the long-term preferred situation of preserving an ecological balance to safeguard the sustainable development of the economy. The SDP stresses, in particular, the challenges of increased risk of flooding to low-lying coastal villages, as well as food shortages in the country in general, which climate change presents. The Timor-Leste National Adaptation Programme of Action (NAPA) further emphasizes the need to specifically tailor adaptation support to those most vulnerable, particularly children and youth, and stresses the importance of reflecting those needs in the development goals and aspirations of the country.

The objective of the LDCF project is **to strengthen resilience of coastal communities by the introduction of nature-based approaches to coastal protection**. Issues of coastal areas are complex and cross-sectoral. The

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project therefore employs an integrated approach, while tailoring activities to address the specific needs, challenges and priorities of the GoTL.

LDCF funds will support inter-ministerial and intra-ministerial coordination for collaborative development planning ensuring protection of coastal areas, as well as identify and research potential revenue streams for long term sustainability. As mangroves are a vital natural defense to impacts of climate change, extensive mangrove protection and re-afforestation will be supported by the project while also addressing community pressures (i.e. felling for fuelwood) by introducing alternative mangrove-supportive livelihoods and improving public awareness about the important role of mangroves in coastal protection. Degraded coastal watersheds, particularly upland areas exert pressures on the coastline through excess sedimentation, increased runoff and flash flood causing more erosion and prolonged inundations. Such broader landscape processes for greater coastal protection will also be addressed. The project is thus structured into 3 complementary outcomes:

<u>Outcome 1</u>: Policy framework and institutional capacity for climate resilient coastal management established

<u>Outcome 2</u>: Mangrove-supportive livelihoods established to incentivize mangrove rehabilitation and protection

<u>Outcome 3</u>: Integrated approaches to coastal adaptation adopted to contribute to protection of coastal populations and productive lands

The lead partner in the project is the Ministry of Agriculture and Fisheries (MAF). As coastal management is cross-sectoral, various ministries will be engaged in implementation, as well as development partners, international and local non-governmental organizations (NGOs), civil society organizations (CSOs), academia and the private sector.

	Total allocated resources:	00.044.400
	Total allocated resources.	38,644,402
00092621	Regular Other:	
00097253	o GEF	7,000,000
	 Government 	18,000,000
5330	o In-kind	
	o Other	13,644,402
Sentember 2016	Last Year Budget	552, 882
	Current Year Budget	2,100,000
December 2019	44.7.3	21/1
	00097253	Other: 000972535330September 2016 Current Year BudgetCurrent Year Budget

Agreed by Ministry of Agriculture and Fisheries(MAF):

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Agreed by UNDP:

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Baseline: O	established pi	ement		-	_		itutional		framework	Policy	OUTCOME 1: O				Outcome	Project	Expected
Output 1.3. Technical skills (through specialized trainings), hardware (at least two sets of hydro-meteorological stations and wave gauges), methods (economic valuation and cost-benefit analysis) and solid value-chain analysis of livelihood options, and software introduced to monitor climate change induced coastal change and to plan management responses at policy levels	planning	management and adaptation	ministerial dialogue on coastal	Activity 1.1.3. Facilitate inter-	management and adaptation plan	design integrated coastal	coastal vulnerability assessment and	Activity 1.1.1. Conduct extensive		a direct contribution to the NAP)	Output 1.1. A comprehensive coastal management and adaptation plan developed a						Planned Activities
specialized trainst- st-benefit analyst-				5,000				50,000			management a		Q1				
nings), hardw ysis) and solid	I			5,000				50,000			and adaptatio		Q2	Budget Ye	Budget Year 2017		
are (at least	20,000										n plan devel		Q3	ear 2017		ar 2017	
two sets of h analysis of li	20,000										oped and bud		Q4			×10000 00	
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teorolog options								LDCF			or the en			се	Sour	ing	Fund
ts of hydro-meteorological stations and wave gauges), sis of livelihood options, and software introduced to m	Staff cost	כסוושמות מרוסוו איסו אזווסף	consultation workshops	Inter-ministerial dialogue		workshops	companies	Contractual services			nd budgeted for the entire coast of Timor-Leste (as part and		Budget Description				Planned Budget
uges), d to monitor	40,000			10,000				100,000			(as part and	(usp)	Amount				;et

		protect mangrove areas designed	Target: SOP for coordinated	SOP for Directorate under MAF
Activity 1.3.4. Develop guideline on mangroves for coastal defense, for coastal managers and policy makers, and for local communities	Activity 1.3.3. Sensitizing policy makers on the importance of mangroves and coastal wetlands (an ecosystem-based approach) in climate change adaptation	Activity 1.3.2 Training for relevant government staff and larger community on coastal protection and management	Training of experts on maintenance and utilization	Activity 1.3.1. Procurement and installation of hydro-meteorological tidal /wave gauge stations
				30,000
		5,000		5,000
	5,000	5,000		
		UNDP		UNDP
		LDCF		LDCF
Mangrove/SLM Specialist	workshop	Basic training for key government staff on integrated mangrove rehabilitation and costal management	training	Procurement
	5,000	10,000	5,000	30,000

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	Output 1.4. Forestry, Protected Areas, Aquaculture and Fisheries Directorates under the Ministry of Agriculture and Fisheries have their roles, coordination, and planning mechanisms clarified and enforced for improved management of mangrove and other critical coastal habitats (as emerges from National Adaptation Plan consultation process)	, Aquaculture and sclarified and an consultation	and Fisheries d enforced fo n process)	Directorates or improved r	under the M nanagement	inistry of of mangr	Agricult ove and	ture and Fisheries have the other critical coastal habi	eir roles, itats (as
	Activity 1.4.1.				5,000	UNDP	LDCF	Workshop	5,000
	Establish a technical working group within MAF for formulation of the SOP								
	Sub-total	85,000	65,000	30,000	25,000				205,000
OUTCOME 2:	Output 2.1. At least 1000 ha of coastal mangroves and wetlands conserved or degrade	l mangroves a	nd wetlands	conserved or	degraded ma	angrove a	reas reh	ed mangrove areas rehabilitated through natural	=
Mangrove- supportive	recruitment and restoration of hydrological regimes both in the northern and southern coasts with a direct employment of local coastal communities	logical regimes	both in the	northern and	southern coa	asts with	a direct	employment of local coas	tal
established to incentivize	Activity 2.1.1. Baseline survey on mangroves and coastal wetland	40,000				UNDP	LDCF	International consultant- Mangrove-	40,000
mangrove	inventory and assess status							SLM Specialist	
rehabilitation and protection			10,000					Workshop, Local travel and DSA	10,000
Baseline: 1,300 ha (2005)	Activity 2.1.2. Training-of-trainers programme to government staff on		35,000	30,000				Training and workshop, field mapping and	65,000
of mangrove cover	mangrove and wetland mapping, monitoring and coastal change					W 100 100 100 100 100 100 100 100 100 10		monitoring practice	
Target: 1,300	assessment							event	
ha (2005) of									
mangrove									

				areas rehabilitated using CBEMR
implementation, as well as suco development plans Output 2.2. Mangrove-supportive, diversified livelihoods/social businesses established in mangrove rehabilitation project sites, benefiting at	Activity 2.1.5. Document best practices and lessons learned to	Activity 2.1.4. Starting with 4-5 sites, protect or rehabilitate mangrove areas	Activity 2.1.3. Communities awareness, consultation and pre-EMR joint assessment and selection of suitable areas for mangrove reafforestation. Ensure women engagement and role in the rehabilitation and monitoring activities	
versified livelih				
			10,000	
		350,000	10,000	
	10,000	300,000		
	Communication	Contractual services- companies for Mangrove restoration activities	Workshop	
	10,000	650,000	20,000	

coastal adaptation adopted to contribute to	Integrated	OUTCOME 3:					Ţ		
3.1.1. Promoting agroforestry: Upscaling of successful SLM and reforestation efforts with diversity of tree species,	coastal waterways and areas	Output 3.1. Upstream watershed replantation demonstrates risk reduction, (including	Sub-total	Activity 2.2.3. Document best practices and lesson learned	investment(s), as well as basic business skills and initial investment	communities on the technical skills	Activity 2.2.2. Design and implement training programmes for	combination of CBEMR and potential livelihood options appropriate for selected site)	Activity 2.2.1. Conduct robust economic analyses to identify most viable mangrove-supportive livelihood option (identify
21,250		lantation demo	000,00		25,000				25,000
21,250	11	nstrates risk	125,000		20,000		25,000	000,01	25,000
21,250		reduction, (i	475,000		25,000		70,000		
21,250			22,380	22,380					
UNDP		iction of							UNDP
LDCF		excessiv							LDC+
International Consultant: Mangrove- SLM Specialist		reduction of excessive sediment loads) to downstream		Audio-visuals, print and communication product	Salary IP	Initial investment	Training	Consultation and workshop	consultant
85,000	is.	nstream	1,042,380	22,380	70,000	70,000	25,000	10,000	50,000

protection of coastal populations and productive	Rehabilitation and protective measures of mangroves wetland 3.1.3.Land works such as contour/swale
and productive lands	3.1.3.Land works such as contour/swale building and small scale bio-
Baseline:	engineering for reducing runoff and soil loss and providing
revenue	enhanced water-access for agricultural and agro-forestry
streams identified in	use, as well as for infiltration to
NBSAP, PPG assessment	restore springs and aquiters 3.1.4. Securing steep slopes with 'pioneer' deep root vegetation
Target: one financing mechanism established	(e.g. grasses such as vetiver), to support the establishment of slower-growing agro-forestry species, using integrated land management-approaches.
	3.1.5. Knowledge sharing/awareness
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	Output 3.2 Constal workard restoration and groundwater recharge plans developed and initiated to increase storm water	ation and gro	ייישלייין ארי	ובות מחזראים	ar develope	7	+ 100+01+	o increace ctorm water	
	absorption capacity and buffer seawater intrusion	water intrusio	on	c -	_				
	3.2.1 Train-the-trainers programme		20,000	20,000		UNDP	LDCF	Procurement, water	40,000
	on use of water level meters							monitoring equipment	
	(e.g. electric tape method,								
	as the technology is								
	available in Timor-Leste)								
	3.2.2. Monitor groundwater levels			5,000				Experts training	5,000
	3-4 times over span of a								
	year to assess groundwater							Regular water	
	quantity and quality across							monitoring	
	seasons								
	3.2.3. Educational activities on			10,000	10,000			Promotion, school and	20,000
	mangrove and wetland restoration							mass awareness raising	
	targeted to school children as a							activities	
	means of also engaging the broader								
	community in restoration and								
	monitoring activities								
	Sub-total	88,750	248,750	283,750	148,750				770,000
Project	Facilitate smooth implementation of		15,000			UNDP	LDCF	Salary Costs — IP Staff	15,000
Unit		5,000	5,000	3,000	3,540			Travel	16,540

26,540	14,540	10,000	82,620	2,100,000
Rental and maintenance-premise	Information Technology Equipment 14,540	UNDP Cost Recovery	Sub-total	
	4,000	10,000	17,540	
6,540	3,000		12,540	
10,000	3,000		33,000	
10,000	4,540		19,540	
			Sub-total	
				Total

Map