



**PROJECT IDENTIFICATION FORM (PIF)**

**PROJECT TYPE: Full-sized Project**

**TYPE OF TRUST FUND: LDCF**

**PART I: PROJECT IDENTIFICATION**

<b>Project Title:</b>	Strengthening Community Resilience to Climate Induced Natural Disasters in the Dili to Ainaro Road Development Corridor, Timor Leste		
<b>Country(ies):</b>	Timor Leste	<b>GEF Project ID:</b>	5056
<b>GEF Agency(ies):</b>	UNDP	<b>GEF Agency Project ID:</b>	5108
<b>Other Executing Partner(s):</b>	Ministry of Social Solidarity, Ministry of Public Works, Ministry of Agriculture and Fisheries, Ministry of Trade, Industry and Environment	<b>Submission Date:</b>	August 3, 2012
		<b>Resubmission I</b>	Sept 21, 2012
		<b>Resubmission II</b>	Jan 31, 2013 Feb 11, 2013
<b>GEF Focal Area (s):</b>	Climate Change Adaptation	<b>Project Duration (months):</b>	48
<b>Name of parent program:</b>	N/A	<b>Agency Fee (\$):</b>	498,750
<b>For SFM/REDD+ <input checked="" type="checkbox"/></b>			

**A. FOCAL AREA STRATEGY FRAMEWORK:**

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Indicative grant amount (\$)	Indicative co-financing (\$)
CCA-2	2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses	2.2.1: Adaptive capacity of national and regional centres and networks strengthened to rapidly respond to extreme weather events	LDCF	2,200,000	11,843,220
CCA-2	2.3: Strengthened awareness and ownership of adaptation and climate risk reduction processes at local level.	2.3.1: Targeted population groups participating in adaptation and risk reduction awareness activities	LDCF	2,800,000	59,700,000
Sub-total				5,000,000	71,543,220
Project management cost				250,000	7,183,560
<b>Total project cost</b>				<b>5,250,000</b>	<b>78,726,780</b>

**B. PROJECT FRAMEWORK**

**Project Objective:** Critical economic infrastructure for sustained human development protected from climate induced natural hazards (flooding, landslides, wind damage) through better policies, strengthened local DRM institutions and investments in risk reduction measures within the Dili to Ainaro development corridor.

Project Component	Grant type	Expected Outcomes	Expected Outputs	Trust Fund	Indicative Grant Amount (\$)	Indicative co-financing (\$)
1. Enabling improved climate and disaster risk management	TA	Knowledge and understanding of local drivers of climate induced natural disasters enhanced, and consequent impacts on economic infrastructure better understood and available to policy makers, planners and technical staff (this Outcome is national in scope).	1.1 National training and knowledge hub established and providing services for at least 200 district officials, DDOC/DDMC members and community facilitators in: climate risk and vulnerability assessment, damage and loss assessment, contingency planning, formal and informal EWS systems, climate related planning and budget management.  1.2 National DRM policy and institutional roles extended to address climate change and disaster risk reduction measures, including assessment methods, institutional and implementation modalities, functional and technical capacities and M&E systems.	LDCF	900,000	2,400,000

2.Strengthened climate and disaster risk planning, budgeting and delivery	INV	Subnational DRM institutions able to assess, plan, budget and deliver investments in climate change related disaster prevention, linked to critical economic infrastructure and assets in the Dili to Ainaro development corridor.	2.1 Capacities of district and sub-district Disaster Management Committees and District Disaster Operation Centres strengthened to plan, budget and deliver climate induced disaster prevention financing in at least two districts (eg. for resilient shelter, improved grain storage and seed replacement, windbreaks, storm drains, small scale flood protection) benefitting at least 5,000 households.  2.2 Community to district level EWS systems for climate induced extreme events designed, tested and installed, with related capacities provided (contingency planning) for at least 5,000 vulnerable rural households, with a focus on women.		1,300,000	9,443,220
3.Investments in climate resilient community based adaptation measures	INV	Community driven investments implemented to reduce climate change and disaster induced losses to critical infrastructure assets and the wider economy.	3.1 Community level climate change vulnerability and risk assessments carried out within the Dili to Ainaro road corridor covering at least 35 Sucos, informing district and sub-district level planning, prioritization and budgeting, with a specific focus on gender, linked to WB hazard assessments. Estimate cost is USD 150,000.  3.2 Community level watershed management measures designed and implemented to reduce direct physical impacts of high intensity rainfall events (flooding and landslides) in climate vulnerable hotspots along the Dili to Ainaro development corridor, covering at least 50,000 hectares outside of the WB road project RoW. Measures to include: reforestation of degraded lands; contour stone walls; farm ponds, check dams and percolation ponds; seasonal behaviour and agricultural behaviour change.	LDCF	2,800,000	59,700,000
Sub-total					5,000,000	71,543,220
Project management cost)					250,000	7,183,560
<b>Total project costs</b>					<b>5,250,000</b>	<b>78,726,780</b>

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

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
National Government	Ministry of Social Solidarity, National Directorate for Disaster Management	In kind	10,226,780
National Government	Ministry of Agriculture and Fisheries, National Directorate for Forestry	Parallel	3,000,000
GEF Agency	UNDP	Parallel	1,500,000
MDB	World Bank – Road Climate Resilience Project	Parallel	60,000,000
MDB	World Bank – DRM project	Parallel	4,000,000
<b>Total Co-financing</b>			<b>78,726,780</b>

#### D. GEF RESOURCES REQUESTED BY AGENCY, FOCAL AREAS AND COUNTRY

GEF AGENCY	TYPE OF TRUST FUND	FOCAL AREA	Country name/Global	Project amount (a)	Agency Fee (b)	Total c=a+b
UNDP	LDCF	CCA	Timor Leste	5,250,000	498,750	5,748,750
<b>Total GEF Resources</b>				<b>5,250,000</b>	<b>498,750</b>	<b>5,748,750</b>

## PART II: PROJECT JUSTIFICATION

### A. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

#### A.1.1 THE GEF FOCAL AREA STRATEGIES:

This project is in line with LDCF/SCCF focal area Objective 2 to “increase adaptive capacity to respond to the impacts of

climate change, including variability”. A related outcome includes strengthening the adaptive capacity of DRM related institutions and individuals at all levels to climate induced risks, by strengthening awareness and ownership of CCA/DRR issues at local level and community level.

#### **A.1.2 FOR PROJECTS FUNDED FROM LDCF/SCCF: THE LDCF/SCCF ELIGIBILITY CRITERIA AND PRIORITIES:**

Consistent with the Conference of Parties (COP-9), the proposed project will implement priority interventions addressed in Timor Leste’s NAPA, therefore satisfying criteria outlined in UNFCCC Decision 7/CP.7 and GEF/C.28/18. It will address urgent and immediate climate change adaptation needs and leverage additional co-financing resources from bilateral and other multilateral sources. The Government requests the LDCF to finance the additional costs of achieving sustainable development imposed on Timor Leste by the impacts of climate change and natural disaster risks. It is country-driven, cost-effective, and focused on immediate needs of vulnerable people, especially women. It will contribute to building community resilience to climate induced natural disasters through measures to promote a better understanding of the drivers of climate change/DRR linkages, institutional strengthening within nascent DRM/DRR structures and related policy outcomes. It will include on the ground measures for immediate benefit to vulnerable rural communities within the Dili-Ainaro development corridor. It will apply complementary measures to secure long term benefits in this development corridor through the introduction of investments in watershed and ecosystem management to support critical economic infrastructure. It will use a different Ministry and institutional structure to the first LDCF grant, which focuses on integrating climate change risk considerations into district and sub-district planning, but will be complementary to this project. The project focus is fully aligned with the scope of expected interventions as articulated in the LDCF programming paper and decision 5/CP.9. As climate impacts fall disproportionately on the poor, the project recognizes the link between adaptation and poverty reduction (GEF/C.28/18, 1(b), 29).

#### **A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS:**

The Government of Timor Leste has published its Strategic Development Plan (2011-2030) which sets out an agenda for action with a focus on promoting Social Capital, Infrastructure Development and Economic Development. The Strategy addresses challenges associated with “the higher risk of floods, forest fires and food shortages as a result of more extreme weather conditions caused by climate change” (SDP, p54). Existing rural development challenges, such as low food production and consumption rates that are common among the majority of the rural population, are highlighted in the SDP as areas which influence the capacity of rural populations to recover from natural disaster events. Crop failure or difficult weather can lead to near starvation for many families (SDP, p 46) requiring specific strategies to build stronger capacities at district level to provide response and recovery. Specific zones vulnerable to fire, drought and river flooding are identified in the SDP. A comprehensive approach to Disaster Risk Management (DRM), it is acknowledged, necessarily implies an approach that includes strengthening rural development and livelihoods. Furthermore, the need for measures to address environmental and disaster related risks to the country’s two Regional Development Corridors (North and South) is identified with specific spatial planning response recommended. The SDP maps closely to the National Adaptation Plan of Action (2010) and the NAPA objectives are embedded within the SDP, thereby becoming integral with the Government’s vision for the future development of the country. One of the national development targets for 2020 is that “70% of National Adaptation Programmes of Action under the United Nations Framework Convention on Climate Change will have been implemented”.

A National Policy on Disaster Risk Management has been prepared by the Ministry of Social Solidarity, with support from UNDP and Oxfam, and approved by the Council of Ministers in March 2008. The policy acknowledges that climate induced disasters can have a significant impact on economic and social infrastructure and that measures are required to save human lives and property, including a range of prevention measures. Key priorities include measures to: identify risk zones; create early warning systems to rain and drought; conduct training and capacity development in disaster risk management; and provide inter-sectoral coordination in response to natural disasters. The policy proposes a fairly comprehensive framework for disaster risk reduction based on the Hyogo Framework of Action (2005), which includes a strong focus on building resilience through measures to promote sound environmental management, promote livelihoods and poverty alleviation, investments in physical measures as well as improved planning, and strengthening networking and partnerships. The Hyogo Framework also recognizes the importance of sustainable ecosystems in reducing disaster risks. Clearly this policy framework is an ideal, requiring a continuing investment in strengthening DRM institutions and capacities in order to achieve its set targets. Significantly, it recognizes that involvement of the most vulnerable is critical and that at risk communities should be “*actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks in order to reduce their vulnerabilities and enhance their capacities*”.

The SDP (2011-2030) recognises that Timor Leste does not yet have the core infrastructure necessary to support economic development and to connect people with each other and the world. Building and maintaining this infrastructure is a central pillar of the SDP including roads and bridges in order to connect communities, promote rural development, industry and tourism, and provide access to markets. As stated in the SDP “*The road network is deteriorating, with most roads in poor condition and requiring repair or re-building. Around 90% of national roads are either in poor or very poor condition with only 10% in fair condition. Over 90% of*

*district roads are in poor condition. Road construction and maintenance in the interior of Timor-Leste is particularly challenging due to mountainous terrain and because of high levels of mud and water” (SDP, p71).*

Timor Leste completed its NAPA process in 2010, led by the Ministry of Economy and Development. The NAPA document was presented to (and approved by) the Council of Ministers in 2011. The NAPA identifies and ranks 8 priority sectors, including natural disasters ranked priority 4, forests and ecosystems ranked priority 5 and physical infrastructure ranked priority 7, together with a 9<sup>th</sup> priority on national institutional capacity for climate change. The ranking exercise was carried out by a national level multi-disciplinary team based on the working group structure that was established to support the overall process. This proposed project is fully in line with the NAPA priorities and is specifically linked to those linked with Disaster Management, Physical Infrastructure and National Institutional Capacity, as follows:

- Priority 4: Natural Disasters – *the project will support institutional development for DRM structures at sub-national level helping to engender greater understanding of the drivers of climate induced natural disasters while also introducing improved use and climate risk information and development of appropriate early warning systems.*
- Priority 5: Forests, Biodiversity and Coastal Ecosystem Resilience – *the project will promote the use of targeted measures to improve watershed management to secure long term sustainability of critical economic infrastructure (within the Dili to Ainaro Development Corridor).*
- Priority 7: Physical Infrastructure – *the project will strengthen understanding on how to maintain critical economic infrastructure through measures to promote resilience to climate change, closely linked to priority 5 above.*
- Priority 9: National Institutional Capacity – *the project will build on and strengthen the mandate of the NAPA working groups and inter-disciplinary team which includes government officials, NGOs, the private sector and development partners, to improve national coordination, engagement and knowledge sharing.*

The Ministry of Trade, Industry and Environment (MTIE) has developed several other important policy documents which contribute to the country’s emerging policy for environment and sustainable development, including: a biodiversity decree law, decrees and draft regulations on protected area establishment and management, and environmental impact assessment and pollution licensing. The Ministry has also initiated its first National Communication to the UNFCCC and developed Timor Leste’s first piece of comprehensive environmental legislation – the Basic Environmental Law – which was endorsed by the Council of ministers in April 2012, building on Article 61 of the national constitution.

## **B. PROJECT OVERVIEW:**

### **B.1. DESCRIBE THE BASELINE PROJECT AND THE PROBLEM THAT IT SEEKS TO ADDRESS:**

**Problem:** The development benefits to local people of critical economic infrastructure in the Dili to Ainaro corridor are increasingly at risk from climate change and disaster related impacts, including localised flooding, landslides and strong winds.

Local communities in the Dili to Ainaro development corridor are already experiencing highly unpredictable weather events, including high intensity rainfall, extended drought and dry periods and variable seasonal timings. Recent climate change projections for Timor Leste<sup>1</sup> suggest that these trends are likely to continue in the future and potentially intensify, including: increasing surface air temperatures; increasing intensity and frequency of extreme heat events; increasing intensity and frequency of extreme rainfall events; and gradual increases in mean sea levels. These factors translate to a range of disaster related hazards and risks for vulnerable, natural resource dependent, rural communities. Local consultations carried out during the NAPA process (2010) revealed some of these effects, as summarised in Table A below. The reported impacts of climate induced disasters include landslides and flooding from rapid rainfall run-off, damage to homes and public infrastructure (particularly roads and bridges), reduced access to markets and related loss of income.

The Government is investing heavily in transport infrastructure as a basis for securing the country’s long term development goals. This investment recognises both the challenging physical environment that it is situated in as well as increasing climatic variability of recent years. For this reason, investments in key arteries (East-West and North-South) are building in greater physical redundancy into designs and maintenance schedules (with support from WB, ADB and JICA). However these measures tend to be limited to the existing Rights of Way (RoW) and their immediate vicinity. By contrast many of the challenges of sustaining the value of these investments in the longer term require consideration of the wider landscape, for example through watershed management measures that can help to move and filter surface water ‘through’ rather than ‘over’ the soil profile. At this point such measures are only being considered in a very piecemeal way. Within the Dili to Ainaro Road Corridor there is no strategy in place to link wider landscape management to road infrastructure management. Consequently existing landscapes can present an additional hazard to infrastructure maintenance rather than acting as a buffer protecting this infrastructure from disaster events. This undermines the Government’s ability to secure the necessary social and economic benefits to bring vulnerable communities out of poverty in a way that is sustainable in the long term.

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<sup>1</sup> Climate Change in the Pacific: Scientific Assessment and New Research, Vol 2, Country Reports, Timor Leste.

Existing disaster management programmes, including the Government’s national disaster management response, are largely focused on establishing of institutional structures for DRR in Timor Leste supplemented by only ad hoc disaster response measures, as and when extreme events occur. UNDP’s DRM capacity development support programme focuses on national policy objectives and institutional coordination issues, as well as some capacity development at the district level. However these measures provide a partial response only to climate induced disaster events, which will require a much more significant investment in capacity development at local levels as well as both hard and soft prevention measures at community level. For example, District Disaster Management Committees (DDMCs) in the Dili to Ainaro corridor currently operate to a large extent based on the level of personal commitment of the individuals involved. Part of the reason for this is that there are very limited budgetary resources allocated annually for the work, and this means that District Administrator and other senior officials do not prioritise the issue above other responsibilities that they have<sup>2</sup>. Existing CBDRR type initiatives (on the ground) are being delivered by NGOs, such as CARE, CRS, CVTL, Oxfam and others. However these investments do not yet apply a climate-risk based approach (ie. there is no over-riding imperative on assessing the potential risk of climate change to natural systems as well as the opportunities that exist in taking a more strategic approach). The introduction of new thinking based on climate risk and resilience offers an opportunity for these baseline initiatives to be strengthened and reoriented towards the protection of economic assets and livelihoods from climate related risks.

**Table A: Summary Climate Change Parameters and Impacts drawn from the Timor Leste NAPA document (2010)**

PARAMETERS	CHANGES	IMPACT
Temperature	Overall increase without significant variability across the seasons Extreme temperature events are expected to increase in intensity and length	Increased incidence of respiratory infections, heatstroke, dehydration and sunburn. Increased demand for electricity and consumption. Increased incidence of fires, decreased air quality and related injuries.
Rainfall	An increase in mean rainfall values expected Dry season expected to become drier Extreme rainfall events expected to increase in intensity and decline in frequency	Increased incidence of water and vector borne disease Landslides damaging and blocking access to homes and public infrastructure. Displacement due to flooding Loss of access to markets and household income.
Tropical cyclones	Expected to decrease in frequency and length of event, but expected to be more intense in their nature	Damage to livelihoods and assets and potential loss of life, although overall risk not likely to increase

#### Underlying causes:

Local communities in Timor Leste are vulnerable to recurrent natural disasters, even in the absence of climate change impacts, as most are poor and remotely located. The government has low capacity to inform, proactively take actions to minimize risks and to undertake post-disaster assistance effectively. A recent disaster risk assessment of the country produced by the UNDP DRM project acknowledges that many other factors contribute to the vulnerability of local communities, such as the steep terrain where many rural communities live and cultivate, the high level of deforestation and erosion in upper catchments and the rapid discharge from seasonal rivers and streams. Forest fires frequently occur as a result of uncontrolled burning linked to the breakdown of traditional land management practices. In many cases floods and landslides occur with the minimum of warning and far too rapidly to allow workable early warning systems to function effectively. These land management type causes are linked to a combination of the erosion of traditional management practices and controls (tara bandu) with limited incentives being put in place to replace these traditions.

Beyond these physical factors, low income and remote communities do not have the resources necessary to meet basic building quality (roofing materials, quality of brick and rendering) so that dwellings, public buildings and other physical infrastructure are often extremely vulnerable to natural disaster events. National and district roads and bridges, which provide vital links into affected areas, are subject to rapid degradation due to a combination of environmental factors, insufficient investment in operation and maintenance, while prevailing codes, standards and practices do not take into account the need for additional climate resilience measures.

While there are a few examples of communities that have been able to establish an organised response to extreme weather events through basic communication and coordination measures, the majority have not. A level of simple contingency planning is beginning to be rolled out across the country, but in the main local DRM planning is weak, underfunded and does not put sufficient emphasis on preparedness and prevention. At the national level, the country’s ability to transmit important weather forecasting (short term to seasonal) remains underdeveloped and un-automated, despite some attempts made in recent years to

<sup>2</sup> AusAid. Functional and Organisational Review of National Directorate of Disaster Management, Review Report, June 2012.

strengthen national capacities to work with regional networks such as RIMES<sup>3</sup>. NDMD officials also receive alerts through mobile short text messages and emails from the regional network of the UNESCO-affiliated Inter-Governmental Oceanographic Commission, BOM Australia for climatology and cyclones, Japan Meteorology Agency, USGS for all types of hazards, Inter Ocean Group and Indonesian Meteorology Geophysics and Climatology. These alerts are transmitted manually through district and regional focal points.

### **Long-term solution and barriers to achieving it:**

The long term solution that this project will contribute to is “critical economic infrastructure in the Dili-Ainaro development corridor will be more resilient to climate induced natural disasters, through prevention and preparedness measures that will help to secure the medium to long term development benefits of vulnerable local people.” Some of the visible barriers to achieving this long term solution are:

- *limited climate and disaster information and knowledge to inform policy and practice on disaster management related to climate change* - currently all planning levels (including rural communities) have very limited access to weather related information and would benefit from improved delivery of seasonal forecasts with some probabilistic assessment of risks to crops and assets that can inform preparedness measures. Consequently they are dependent on traditional knowledge which is necessarily derived from historical experience;
- *poor capacities of national and local DRM and sectoral institutions to plan and budget for climate induced losses to local assets and livelihoods, particularly in relation to gender dimensions* - informational and regulatory barriers exist with respect to the suitability of existing codes, standards and practices for the design, construction and maintenance of cost effective physical measures, which can provide protection against disaster events. Many rural communities, at risk from catastrophic local flooding and landslides, would benefit from the design and implementation of specific measures to protect their property and potentially save lives. Institutional and management barriers exist with regard to the way in which DRM is operationalized at local level with insufficient coordination between key sectors and a narrow focus on the use of available grants to fund recovery measures only.
- *low community capacities and involvement in preventing extreme climate induced losses to local livelihoods and economy* - local communities are not yet able to develop accurate (localized) risk assessments which can contribute to the preparation of specific physical and contingency plans which, if implemented, can ensure that assets are better protected from flooding and landslides and community members are aware of the basic procedures and do's and don't's in the face of an emergency. There are also significant gender dimensions to the development of effective risk assessment and contingency planning that are not yet well enough understood in the Timor-Leste context;
- *poor integration of climate resilient potential of local forests and watersheds to protect critical economic infrastructure* - the allocation of available resources in Timor Leste is more focused on physical infrastructure and less on maintaining the natural systems that can help to protect and sustain vital physical and economic infrastructure in the long term. The Department of Forestry has one of the lowest development budgets across government. It does not provide sufficient incentives for local communities to carry out appropriate land management in critical watersheds at risk from climate induced disaster events.

### **Baseline Project(s) that the project will build on:**

The government's national budget for disaster management together with UNDP's DRM support programme (total indicative co-financing of approximately USD 12 million) provides the baseline for this project. These activities are helping to establish Timor Leste's policy and institutional response to natural disasters, but the ability of these structures to respond to the real needs of vulnerable communities will become progressively weaker over time, not stronger, without an additional focus on measures proposed under Components 1 and 2.

The World Bank is investing in the upgrade of critical economic infrastructure in the Dili to Ainaro road corridor, together with complementary DRM related measures (total indicative co-financing of approximately USD 65 million). While the additional risks to this infrastructure from climate related disasters are being factored into the design and works within the RoW of the main road, and some of its branch roads, wider measures to managed climate and disaster risks both to assets and related livelihoods are yet to be designed. These additional risks will be addressed through a joint approach to be implemented through the WB-DRM component and the proposed LDCF grant.

The national forestry budget (indicative co-financing of USD 3 million) provides the baseline vehicle for addressing underlying issues associated with communal management of natural resources and the starting point for the introduction of targeted watershed management measures in the vicinity of the Road Climate Resilience Project. While this baseline investment should promote more equitable and environmentally sustainable management of natural systems, there is a strong likelihood that it will

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<sup>3</sup> Regional Integrated Multi Hazard Early Warning System

fail to recognize and use these key assets as a buffer against increasing climate risk to key economic assets without the additional measures proposed under Component 3.

Title: Government of Timor Leste National Budget on Disaster Management  
Co-financing: USD 10,226,780

National budgetary resources provided through the National Directorate for Disaster Management cover recurrent costs such as salaries for government staff and running costs of national and district level offices, and related equipment goods and services. A proportion of the funding is allocated to a few major capital development projects as well as multiple smaller capital investments. About half of the budget is allocated to payments to disaster affected persons, capital grants for compensation and recovery as well as the provision of shelter kits and other relief items to affected communities. A small portion of these funds are transferred to the districts as discretionary grants to be administered locally.

Title: UNDP Strengthening Disaster Risk Management in Timor Leste  
Co-financing: USD 1,500,000

The Strengthening Disaster Risk Management program is developing national DRM capacity both at national and district levels, but the community level elements are unfunded. The bulk of the available resources is supporting a national risk and vulnerability assessment together with mainstreaming DRM into national planning. The program includes a regional element on strengthening national capacities in seasonal weather forecasting linked to the Regional Integrated Multi-Hazard Early Warning System (RIMES) facility, which is based at the Asian Institute of Technology in Bangkok. The program builds on a previous phase which resulted in the development of the national DRM policy (2008) and establishment of the National Directorate for Disaster Management. While the current program is helping to establish and implement elements of the national DRM framework, it does not take into account climate change as a key driver of disasters and does not cover community based measures to specific hazards such as increased flooding, landslides and heat waves which are increasingly pressing and exacerbate existing food security concerns. Strong winds are also becoming an additional risk area in recent years with the potential to damage crops and property.

Title: World Bank Road Climate Resilience Project  
Co-financing: USD 60,000,000

The World Bank's Road Climate Resilient Project (RCRP) was approved on May 17, 2011 and became effective on August 30, 2011, with an initial grant of USD 20 million. The Project Development Objective (PDO) is to deliver sustainable climate resilient road infrastructure on the Dili-Ainaro corridor, with three main components: A. Climate Resilient Road Infrastructure (US\$15.13 million); B. Climate Responsive Maintenance and Emergency Planning (US\$6.88 million); and C. Project Support and Training (US\$0.99 million). An additional loan of USD 40 million is being prepared for negotiation and approval by March 2013 which will extend the road all the way to its end point at Ainaro and support feasibility studies for the following additional segments: Aileu-Gleno, Aitutu-Same-Aiasa, Aitutu-Hatubulico-Mt. Ramelau and Ainaro-Cassa. Additional investments under a potential Phase 3 may include these branch roads, but this investment is not yet being considered as part of the co-financing for this proposal. All of this investment will be carried out within the road RoW.

Title: World Bank Disaster Risk Management Project  
Co-financing: USD 4,000,000

The World Bank is in process of securing additional resources for Disaster Risk Management in the Dili to Ainaro development corridor from 2014-2016. The overall development objective of this project is to reduce the risks that Timor Leste faces from natural disasters and climate change risks and help minimize the losses that result to its infrastructure assets and livelihoods. Specifically the project aims to: (a) understand better the natural disaster risks faced by the Dili-Ainaro corridor, the link roads and the districts (of Ainaro, Aileu, Ermara and Manufahi) through which the road passes, and communicate the risk to sensitize decision makers for evidence based planning and investment; (b) develop national and sub-national capacity for managing disaster risks including mainstreaming DRM in national, sub-national and sectoral strategies; (c) demonstrate effective risk management practices to make assets and livelihoods more disaster & climate resilient in the districts covered by the RCRP project. This project is being prepared in parallel with and alongside the proposed LDCF project and will apply the same project management structures and arrangements. Specific tasks will be aligned between the two projects so as to ensure no overlap and to maximize effectiveness.

Title: Government of Timor Leste, National Budget on Forestry  
Co-financing: USD 3,000,000

The government is promoting forest conservation and management generally in Timor Leste, working with local NGOs to carry out and promote reforestation activities, including firewood tree plantations (mainly Casuarina), eucalypt nurseries and mangrove reforestation.

**B.2. Incremental/Additional cost reasoning: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) AND THE ASSOCIATED Global environmental benefits TO BE DELIVERED BY THE PROJECT:**

**Component 1: Enabling Improved Climate and Disaster Risk Management**

**Outcome: Knowledge and understanding of local drivers of climate induced natural disasters enhanced, and consequent impacts on economic infrastructure better understood and available to policy makers, planners and technical staff.**

**Baseline:** The UNDP supported Strengthening DRM project (USD 1.5 million) has been conducting a national disaster risk assessment providing data and information for the formulation of a national DRM strategy and action plan, to help decision makers at all levels: (a) better understand the disaster related risks; (b) set priorities for action; and (c) allocate resources for DRM programmes and activities in various sectors and districts. The scope of this assessment is broader than natural disaster related risks and, within this wider scope, does not specifically differentiate between climate change related natural disasters as opposed to those occurring as a result of existing variability. Therefore the problem remains very much framed in terms of historical climate data and trends. This is caused by the climate change information and knowledge issues identified in the analysis of barriers, applying to all planning levels. The UNDP DRM project also includes the development of a national DRM information portal to host and disseminate knowledge products nationally. The existing cadre of the Government professionals working on DRM, both at national and sub-national levels, have not been exposed to climate change issues in the context of their functions and responsibilities. Analytical approaches to understanding the nature and potential effects of climate induced natural disasters have not been provided to these staff. Skills in economic analysis of climate and disaster related risks are also weak which affects the overall allocation of resources to DRM programs. Furthermore the project stops at the district level and associated DRM committees and Disaster Operations Centres. No support is being provided to sub-district, Suco and community level stakeholders in carrying out DRM contingency and operational planning, as well as related investments in preparedness. Through its own DRM project (currently under preparation) the World Bank is planning to carry out a hazard risk assessment in Ainaro, Aileu, Ermera and Manufahi districts, corresponding to the Dili to Ainaro development corridor (USD 1 million approx.). This will build on the UNDP supported national risk assessment resulting in the preparation of more detailed and location specific hazard maps together with risk assessments for selected catchments in the Dili to Ainaro corridor. The main focus of this analysis will be on landslide risk based on a combination of historical trends and existing data. Emerging capacity and knowledge is being established within the Ministry of Trade, Industry and Environment's (MTIE) National Directorate for International Environment, through the LDCF1 project as well as other adaptation initiatives funded by AUSAID and the EU. At this point these capacities are latent, although some existing information is already available which could be used by the project, such as in the design and delivery of vulnerability assessment. The Directorate is also the repository of all data collected during the 2010 NAPA formulation process.

**Additionality:** LDCF resources will be used to provide applied technical training in best practice disaster risk reduction and climate adaptation methods through establishment and operation of a knowledge and training hub for the national cadre of DRM/DRR experts and practitioners. This will include approximately 40 district officials from all districts, all DDOC/DDMC members and the country's network of more than 100 community based facilitators. A staged programme of training backed up by practical advice will be put in place. Key areas will include: community based climate vulnerability assessment, identification and design of CBDRR/CBA investments, application of basic project appraisal tools, contingency planning for climate induced natural disasters, development community-based information systems. Participants in this programme will be encouraged to build their knowledge and understanding of significant contextual factors also, such as the importance of conserving natural systems in strengthening community resilience to natural disasters. This work will be closely linked to Output 3.1 whereby newly trained individuals will participate in the design and delivery of proposed community climate change vulnerability and risk assessments which will influence the allocation of resources for community watershed management and the provision of strengthened EWS. As a result of strengthened knowledge and training DRM decision makers and technical staff will be able to assess the level of climate risk that they are living with and prioritise the types of investments necessary to reduce this risk to acceptable levels. This knowledge will need to engage and be provided to all levels within the current institutional framework for DRM, starting with the Directorate for National Disaster Management but equally other key stakeholders at the national, district and sub-district levels, including the National Directorate for International Environment within MTIE. LDCF resources will also allow this analysis to inform the improvement existing DRM policies, including the national DRM strategy and action plan through adjustments to better reflect climate change risks. Existing assessment methods, institutional and implementation modalities, functional and technical capacities and M&E systems may need to be revised and improved. A review of DRM institutional roles through institutional and human capacity assessments will be carried out leading to proposals to designate new functions and responsibilities in climate risk analysis. LDCF resources will be used to develop advocacy, learning and knowledge projects which might include the following topics: assessment the economic viability of community based DRM solutions; how to carry out community based vulnerability assessments for DRM; how to



develop community driven ecosystem based adaptation. The national information portal on DRM currently being developed with support from UNDP will provide an important conduit for these products. To the extent practical, the approach to generating these resources will follow an ‘experimental design’ method, whereby interventions on the ground financed under other outcome areas are tracked over their lifetime with comparisons made against control sites – locations that have not benefitted from project related interventions.

## **Component 2: Strengthened climate and disaster risk planning, budgeting and delivery**

**Outcome: Subnational DRM institutions able to assess, plan, budget and deliver investments in climate change related disaster prevention, linked to critical economic infrastructure and assets in the Dili to Ainaro development corridor.**

**Baseline:** Existing national DRM policies and institutions provide an overarching framework to address national disasters, but planning and budgeting capacities remain weak, particularly at district and sub-district levels. For example the Ministry of Public Works may implement flood protection works as part of their normal programme while the Forestry Department may undertake reforestation as part of its work. But these activities are not coordinated with the NDMD Focal Points in the districts and they are not part of an overall integrated national DRR programme. Climate variability and change, as a key driver of natural disasters, is also not factored into related decision making. For example Department of Environment staff at district level that have knowledge of climate risks and how to assess vulnerability (the LDCF-1 project will build competencies in this area for all national staff), do not frequently attend District Disaster Management Committee meetings nor provide technical support and information to officials at this level. District Disaster Operations Centres currently being established to strengthen operational capacities to execute DRM planning, inevitably tend towards a disaster response approach in the absence of any understanding the nature of vulnerability to climate induced disasters. The baseline investment for this component comes largely from national DRM budgetary resources, most of which are spent on recurrent costs including staff salaries and fuel (USD 9 million approx. over 4 years). Presently about USD 10,000 per year of this amount is allocated to each district for operations, provided in tranches. Additional funding administered centrally is allocated to cover payments for disaster affected persons, capital grants as compensation for lost assets, as well as shelter kits and other relief items for immediate response. Therefore there is nascent capacity in place to improve DRM, but it lacks the resources, organisation and orientation to be able to effectively address climate change induced drivers.

**Additionality:** Understanding how climate variability and change can affect natural disasters provides an important opportunity to shift emphasis more towards upstream disaster prevention thinking and approaches – an approach which will serve the country well in future years, particularly if it is well understood and applied at sub-national levels of government. With additional LDCF resources existing Disaster Risk Management institutions (DDMC/DDOC) and their core staff at district and sub-district levels will be provided with incentives to integrate climate risk management approaches into existing planning and budgeting processes. Building on skills acquired under Component 1 DRM staff, including district and sub-district focal points and community coordinators, will be able to assess climate change and disaster risks, identify cost effective investments to strengthen community resilience and channel necessary resources to where they most need to go. The driver of this planning work will be the provision of additional grants for DRM within the Dili to Ainaro development corridor, which will act as a top up to existing baseline funding for disaster response already provided (approx. USD 10,000 per district per annum). This will have the effect of raising the profile of climate change and disaster risk issues and related spending, as well as building long term capacity in administering higher levels of associated funding. Up to USD 50,000 additional resources per district per annum will be made available against a positive list of prevention type measures, to be agreed with local villages. These investments will be outside of the WB road ROW and could include: erosion and flood control works (such as slope stabilization measures and wind breaks); climate resilient shelter construction (such as warehouses and evacuation routes for community level emergency relief); improved grained storage and replacement seed distribution; routine drainage and channel clearance works. Work on EWS will also be carried out under this component to assess existing district and local level disaster response communication systems that are being operated in a few localities, in order to determine suitability for wider application. This work will actively involve the communities at risk, build in required capacities, facilitate public education and awareness of risks, and disseminate information simply and in a timely manner. This element will ensure that a suitable system can be evolved, tested and installed in Timor Leste covering approximately 5,000 households at risk from climate induced natural disasters.

## **Component 3: Investments in climate resilient community based adaptation measures**

**Outcome: Community driven investments implemented to reduce climate change and disaster induced losses to critical infrastructure assets and the wider economy**

**Baseline:** Baseline resources for this component are derived primarily from the road climate resilience project which provides the central investment in the Dili to Ainaro development corridor but which, as previously explained, limits its climate resilience activities to the road RoW only (USD 54 million). For most of the alignment this covers an area of no more than 25m on either side of the centre line of the existing road. Within this zone a range of engineering measures are envisaged (both

structural design and bio-engineering based) to provide stability in face of the additional risk of localised landslips and high intensity surface and sub-surface water flows. Measures will include: (i) improved roadside slope stabilization through additional retaining structures and bio-engineering works; (ii) improved longitudinal and transverse drainage; (iii) strengthening and improvement to damaged and scoured road shoulders; (iv) pavement repairs ranging from localized patching and edge repair, through rehabilitation where the structure has been completely compromised; and, (v) road safety improvements in populated areas such as improvements to footpaths and pedestrian crossings. These will be complemented by strengthened operations and maintenance to include performance based maintenance contracting, as well as an emergency planning and response system. However, as previously indicated, experience has shown that despite the additional measures proposed for climate resilience within the RoW, the zone of risk in fact extends way beyond into the adjacent watersheds that drain towards the road. In these areas actions to improve watershed management tend to be piecemeal and are not specifically targeted towards promoting the sustainability and longevity of physical infrastructure. Further baseline resources for this component are drawn from the Department of Forestry's national budget for re-forestation and plantation activities (USD 3 million approx.). This budget, although limited, does provide some basis for the implementation of additional and targeted measures to strengthen watershed management along the road corridor. In addition a number of national and international NGOs provide community support programmes at sub-district (sucu) and village (aldeia) levels which are investing in land and water management, contributing towards improved watershed management. There is an awareness of climate risks embedded within much of this work however the linkages are not yet explicitly or systematically made.

**Additionality:** With additional LDCF resources community based climate vulnerability and risk assessments will be carried out in the Dili to Ainaro corridor to assess the likely nature, intensity, frequency and extent and impact of climate change induced disasters. This work will draw from the experience of the LDCF-1 project but will operate in different districts (Aileu and Ainaro). The risk information will be collated and analysed at district, sub-district and village levels (at least 35 Sucos) with the objective of identifying specific hotspots and orientating proposed watershed management investments also to be provided under this component. These assessments will complement the WB planned hazard risk assessments, which will be top down and based mainly on secondary sources, by extending the analysis to include additional risk factors such as floods, strong winds, cyclones, and forest fires using a bottom up community risk assessment approach. Figure 1 provides an example of the scale of some of these watersheds. These are approximately 5km x 5km - a manageable size where the direct results on the roads of each watershed would be clearly measurable. Interventions in Watershed A for example would affect the road between two points (indicated by black stars). Interventions in Watershed D would affect the road at a single point (indicated by the black arrow) which is a potential hotspot. Guided by the community risk assessments, LDCF resources will be used to design and implement investments watershed management, both physical measures to improve soil and water management within climate vulnerable watersheds along the Dili to Ainaro road corridor, as well as non-physical measures such as public awareness activities, land use planning, and data sharing. Physical measures that could be considered, based on an initial assessment of the area, include:

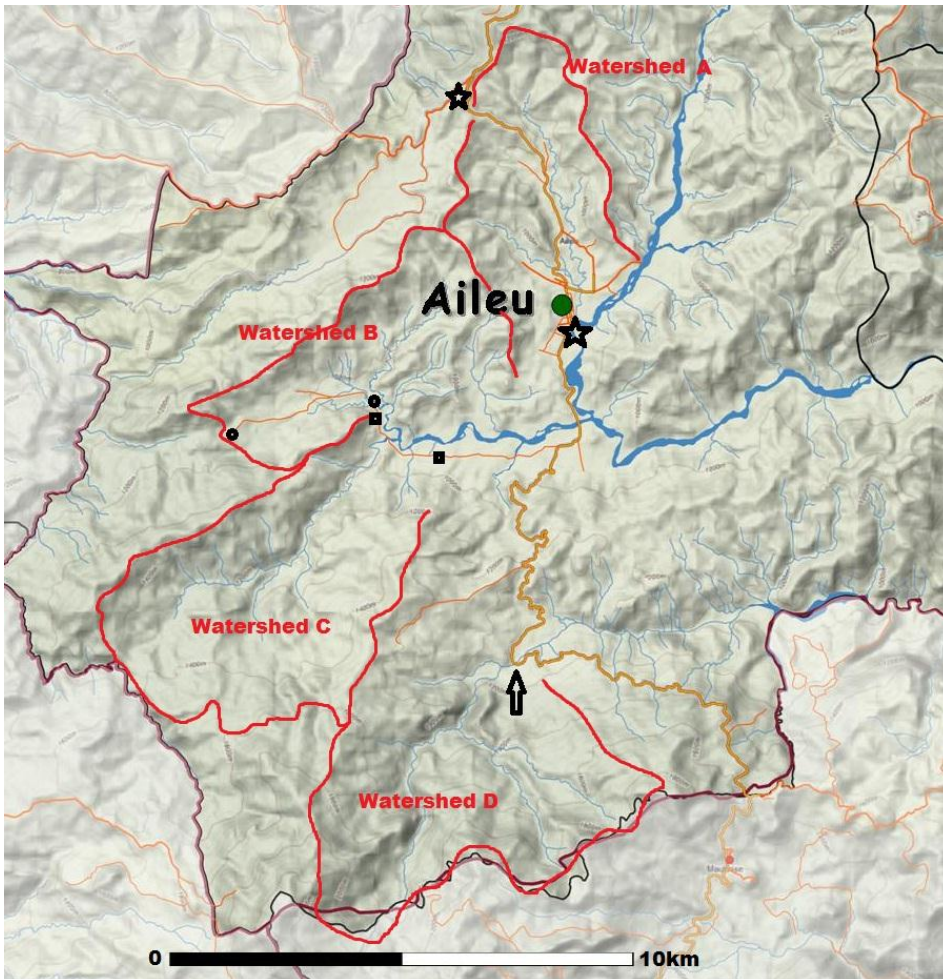
- reforestation of degraded lands – mass tree planting and tree husbandry initiatives coupled with sustainable harvesting and coppicing practices.
- contour stone walls, contour trenching, vegetative barriers – construction/planting of simple barriers to overland flow of water in strategic locations on hillsides.
- improved animal husbandry schemes - restriction of grazing of goats, sheep and cattle on sloping lands however this will require extensive socialisation of new systems of land and animal management and may require the introduction of different types of livelihood options.
- agricultural behavioural change – moving farmers away from slash and burn farming towards settled, terraced agriculture will reduce the amount of bare land created (prone to erosion) each season while allowing forests to mature.
- seasonal behaviour change – identification of wet season related activities which lead to degradation of land and ecosystems and identifying alternative wet season options (this could include construction works or mining/quarrying which lead to rain associated run-off problems).
- farm ponds, check dams and percolation ponds - providing reservoirs for water to reduce over land flow and increase absorption and aquifer replenishment.

The approach taken will be to start with well tried and tested approaches that communities are familiar with, such as slope stabilization, channelling of flood waters, strengthening of small scale river embankments. The measures will be closely aligned with planned works to be carried out under the proposed WB DRM project as well as on-going works carried out both by the Department of Forestry and related NGO programmes (CARE, CRS, CVTL).

This component will also analyse the underlying incentives governing the effective management of community held natural resources, recognising that the benefits of watershed management generally accrue over the long term. While willingness to pay for improved land management tends to be relatively low in many contemporary assessments carried out in the Asia region, such studies have not attempted to directly link watershed management to cost reductions in the maintenance of road infrastructure. The Road Climate Resilient Project places a strong emphasis on performance based maintenance within the RoW by contracting out maintenance services. A similar approach could be applied for local communities willing to sustain improved

watershed management measures over the long term (5-10 years) thereby guaranteeing these communities direct benefits which can be attributed to the road itself. This could be based on the World Bank’s existing *Community Participation in Procurement* modality. A monitoring programme will be put in place to measure the effects of these measures against control sites and a system of payments to reward performance.

**Figure 1: Small scale watersheds adjacent to Road Climate Resilience Project, Aileu District**



The immediate **adaptation benefits**

The immediate benefits of the project will be that local authorities and vulnerable rural communities are more aware of the nature and level of risk associated with climate induced natural disasters, specifically to critical economic infrastructure, and are better prepared to respond to such events when they occur. National structures for disaster management and the communities that they serve will have improved access to climate change information and related risks. Greater competencies will be developed within the cadre of DRM practitioners to use this information to identify climate risk. Increased local investments will be provided in climate resilient infrastructure solutions at the micro level and small watershed level. The effect of these investments will be to secure more coordination and a net transfer of responsibilities, resources, knowledge and skills from national to local levels, in the face of current and future climate induced natural disasters.

**B.3. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS, INCLUDING CONSIDERATION OF GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS. AS BACKGROUND INFORMATION, READ [Mainstreaming Gender at the GEF.](#)**

Measures to strengthen community resilience to climate induced disasters, including improving the quality and supply of information, strengthening capacities in assessment and planning, and the delivery of grants to help to protect lives, livelihoods and assets to localized flooding and disaster events (including flooding and erosion, and landslides), are aimed at helping to sustain local economies in face of mounting climate related risk. Without the proposed LDCF grant fragile local economies and the critical infrastructure upon which they depend, will be at increasing risk with the potential for recent gains in poverty reduction, as well as other critical MDGs, to be wiped out. The investments to be made with LDCF resources will help to

ensure that existing physical assets can be sustained in the longer term and continue to deliver the many social and economic benefits that they already provide (access to clean energy, access to clean water, access to markets, irrigation, protection of land and dwellings), that household incomes are protected, and that income earners and households can more rapidly recover in the case of unavoidable disaster events occurring. The total number of households directly benefitting overall from LDCF resources will be around 10,000 representing more than 50,000 people. The total land area subject to improved watershed management affording increase protection against the effects of climate change induced disasters will be at least 50,000 ha, with a focus on the most climate vulnerable hotspots along the Dili to Ainaro road corridor. It is anticipated that these measures will help to sustain the longevity of the very significant sums being spent on the national road investments and help to secure a projected EIRR of 18% or more, over the long term.

Women are affected differently by climate change than men, and quite often more severely. A recent assessment of an existing AusAid funded disaster risk reduction programme has highlighted the fact that gender and other social concerns are routinely under evaluated. More comprehensive capacity assessment and development is recommended to cover these areas, both for NDMD staff and some of the key NGOs working on DRM/DRR, pointing also to the need to connect up national practitioners with relevant international expert networks. Gender stereotyping remains prevalent, according to the analysis, with many individuals confusing vulnerability analysis with gender analysis. The gender integration process will start with project formulation which will need to take into account the gender differentiated impacts of climate induced disasters, and carry through from the informational and assessment elements of the project under Outcome 1 to the technical capacity development elements under Outcome 2. Specifically Outcome 1 will focus on delivering a much more clear analysis of the gender related elements of vulnerability to climate related risks. These assessments will, in turn, influence the grant supported investments to be made under the remaining outcomes. As has frequently been noted, particularly where rural infrastructure is implied, taking into account the specific needs of women can be the determining factor in ensuring the utility and longevity of those investments. This means that women need to be more involved in the planning process as well as decision making over investments. The participation of women and men with equal voice will be integral to the approaches taken to facilitate discussions on climate risks and addressing these risks, in line with the principles underlying UNDP's gender equality strategy as well as the GEF's own guidance and standards (Mainstreaming Gender at the GEF, 2008).

**B.4. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MEASURES THAT ADDRESS THESE RISKS**

Risk	Level I – Importance P – Probability I = low	Mitigation
Political - Timor Leste is still a young nation and its political cycle, which includes both presidential and national assembly elections on a 4 year cycle, remains relatively vulnerable to unrest and major disruption.	I – 2 P – 2	While this remains a prevailing issue in Timor Leste, the political system and process is maturing. The last occasion of major politically induced conflict was in 2006. Since then the country has been through 2 election cycles that have been peaceful. The current style of coalition politics is likely to continue for the foreseeable future which, in itself, provides the main mitigation to this particular risk. On the downside coalition government has, in the past, led to bureaucratic inertia. This factor cannot be discounted and is hard to mitigate, yet infinitely more favourable than wider political instability.
Institutional – The lead government agency for this project, the Directorate for National Disaster Management, has a mandate for DRM but its role is not yet widely recognised across government. The relevance of DRM/DRR issues to other sectors is not always fully appreciated.	I – 3 P – 3	The 2008 National Disaster Management policy establishes the National Directorate as the lead agency within government on DRM but, given its limited size and reach at sub-national level, establishes the principle that most related activities need to be implemented through the larger sectoral ministries, and with the support of district administrations. Thus the National Directorate provides direction, coordination and political support for DRM in Timor Leste, but cannot implement national policy on its own. The proposed LDCF grant will help to raise visibility of the National Directorate role among other concerned government agencies, in particular the Ministry for Commerce, Industry and Environment but equally the Ministry of Agriculture, and Ministry of Public Works.
Institutional – the Ministry Commerce, Industry and Environment, which is the lead ministry on climate change, is not used to working closely with the Ministry of Social Solidarity (Directorate for Disaster Management) which could lead to coherence and implementation risks.	I – 3 P – 2	The Ministry of Trade, Industry and Environment is already the lead agency with responsibility for Timor Leste's first LDCF grant and is gradually assuming its role and responsibilities as the main coordinator on climate change. In many ways its role on climate change is the mirror to the National Directorate of Disaster's role in DRM. There is increasing understanding at the higher levels within MTEI that, when it comes to climate change adaptation, many channels needed to be established in parallel through several key sectors is climate risks are to be addressed. In this sense it is not currently behaving as an agency that wishes to retain all resources or responsibilities for CC. At the same time there remain constraints to effective coordination which relate to management style and capacities, as well as political context mentioned above. This is an on-going structural issue that the LDCF grant will have to work within. Outcome 2 will help to address this particular constraint among other capacity development issues that have been identified.

Risk	Level I – Importance P – Probability 1 = low	Mitigation
Technical and Policy – DRM/DRR issues remain primarily in disaster response mode and there is less understanding of the way in which more prevention based approaches can be put in place. Prevention measures are closely linked to many other wider development concerns (such as livelihoods and food security) and therefore not always perceived to be a genuine DRM concern.	I – 4 P – 2	The focus on response versus prevention is endemic in the field of DRR/DRM globally. Given that Timor Leste’s DRM policy and institutional framework has only recently been established it is highly likely that it will continue to operate primarily in response mode for the foreseeable future. However climate change, as a DRM issue, does provide a unique opportunity to gradually shift the emphasis towards more upstream resilience building measures. The proposed LDCF grant is very much in this mode and will support a range of measures to promote forward planning and resilience through greater awareness of CCA/DRR risks, improved quality and supply of information, measures to diversify livelihoods away from those most vulnerable to natural disasters and capacity development in DRM planning.
Organisational – With limited grant management capacity within government, part of the implementation of the LDCF grant will very likely need to be through international NGOs. While these organisations have a proven track record in delivery successful programmes on the ground, there is a risk of reduced coherence of activities within the broader CCA-DRM policy and institutional framework.	I – 4 P – 3	If INGOs are engaged by UNDP to support implementation of elements of the project, particularly Outcome 3, this will only be done at the express wish of the GoTL based on the track record of each INGO. The Govt has already indicated which INGOs it has confidence in and only these would quality to act as a responsible party for this project. Most are relatively large well known organisations and experienced with issues of coordination, maintaining government ownership and strengthening the country’s long term capacities. Therefore this risk will be managed primarily through the appropriate selection of INGOs.
Financial – the proposed district level grants for DRM investments (up to USD 50,000 per year) will help to incentive a more focused and strategic approach to DRM at sub-national level and to empower focal points and this level. However there is a risk that this increase in focus will be lost once the project comes to an end and the additional grants are no longer available.	I – 5 P – 3	A key policy reform element to be addressed under both Outcomes 1 and 2 will engage the Ministry of Social Solidarity and Ministry of Finance on supporting delegation of both tasks and resources to sub-national level, so that a larger proportion of national budgetary resources for DRM are transferred to the districts for discretionary use. This is already the direction of travel with regard to this issue and LDCF resources are being used to speed up the process by strengthening capacities to prioritise, delivery and monitor the use of these funds.

**B.5. IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROJECT INCLUDING THE PRIVATE SECTOR, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:**

STAKEHOLDER	RELEVANT ROLES
Directorate for National Disaster Management (Ministry for Social Solidarity)	Within the context of the National Vision for the Management of Disasters Risks, MSS has the leading and cross-sectoral coordination role in defining policy on disaster management at all levels. MSS had established NDMD that engages all levels of society; promotes the integration of disaster management in different government development programs; improves disaster risk management in all sectors at all institutional and operational levels; achieves financial sustainability through the use of greater resources; and preserves natural environment to guarantee peace for all Timorese people.
Ministry of Public Works	Leads the GoTL’s road infrastructure development programmes and houses a joint PMU for ADB, JICA and World Bank supported road infrastructure investments.
National, District and Suco Disaster Management Committees	Provides cross sectoral coordination at different levels of government, usually chaired by the most senior government representative at each level. The Committees also include local community representatives, and CSO/NGOs.
Directorate for National Environment Affairs (Ministry of Trade, Industry and Environment).	This newly created Ministry was formerly the Ministry of Economy and Development. The Directorate for National Environment Affairs has responsibility for overall coordination and implementation of the NAPA process in Timor Leste, providing a forum for discussion of common issues between CCA projects, as well as access to relevant information, tools and guidelines. Commonalities in approach between the first NAPA project and the proposed second LDCF project mean that some of the tools and approaches being applied will be able to be used in both cases, in particular vulnerability assessment tools as well as some of the training modules to be delivered to local administration staff and community stakeholders.
Directorate for Forestry (Ministry for Agriculture and Fisheries)	The department for protection and forest resource management under the Directorate for Forestry is responsible for mangrove conservation. Currently they are working on community based mangrove conservation initiatives and also community campaigns and education. The directorate has district offices (98 staff in the districts).
National and District Disaster Operations Centres	Newly established at national level and in two districts so far. The Operation Centres are designed to provide an on the ground operational presence to provide immediate support in the case of a disaster event. The Centres may also function as training centres for the network of Suco level community facilitators in preparedness and response.
District and Sub-District Administrations	Over the past decade the Government of TL has been increasingly investing in the capacity of the country’s 13 districts and 65 sub-districts to carry out development planning and service delivery. While full administrative decentralization remains some years away, the districts and sub-districts already play a vital role in supporting the delivery of sectoral strategies and plans. They are also responsible for budget planning and implementation of increasing levels of local development funds (PDIP), albeit still less significant in total amounts than national sector budgets.
Community groups	Partake in community level hazard, vulnerability and risk assessment, identifying priorities for disaster risk reduction and climate change adaptation, as well as implementation and monitoring of the CBDRR and CBA, policies, strategies, activities and outputs at community and local levels.

Development partners	The World Bank is providing the government of Timor Leste with grants, loans and technical assistance in supporting climate resilient national road infrastructure within the Dili to Ainaro development corridor. This includes complementary grants to support DRM and rural development activities in order to promote a holistic 'beyond just roads' approach .
International NGOs	The most recognized INGOs involved in DRM/DRR include Oxfam, Care International and Catholic Relief Services. These organisations provide outreach and support to local communities either directly or through partnerships with local CSOs/NGOs.
National NGOs	CVTL (Cruz Vermelha de Timor Leste) is the best known national NGO with knowledge and experience of DRM/DRR issues. Other national NGOs tend to be very localized working within a single district of sub-district.

## **B.6. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

The proposed LDCF grant will be aligned closely with the existing UNDP DRM programme and the primary ownership of the proposed LDCF grant is with the Ministry of Social Solidarity (MSS), specifically the National Disaster Management Directorate (NDMD). The existing project board for the UNDP DRM programme will be used for this project. The PB is co-chaired by MSS and UNDP with the additional membership of the National Directorate for Civil Protection of the State Secretariat for Security. An NGO representative from the community based DRM working group is included as an observer. The PB will need to be expanded to include other key government partners, including MTIE which has policy leadership on climate change and MAF, the Directorate for Forestry, which leads on watershed management, and the Ministry of Public Works.

A Project Management Unit staffed with a Project Manager, administrative, financial management and M&E capacities within the National Directorate for Disaster Management will be put in place. The PM will report to the PB through a National Project Director (NPD), and equally to the UNDP Deputy Country Director, with guidance from the existing international Senior Technical Adviser on DRM. The NPD, acting as overall Project Coordinator, will be appointed by the MSS Minister to monitor and facilitate project implementation and ensure maximum coherence across MSS strategic plans and priorities, as well as other involved Ministries.

The delivery of Outcome 1 activities and outputs (Climate Information and Knowledge) will be closely coordinated with several existing initiatives in order to support complementarity and long term sustainability. The World Bank is preparing its own DRM support project which will include a risk assessment focussing on landslide incidence in the Dili to Ainaro road corridor. This will help to identify hotspots to direct the targeting of additional climate vulnerability assessment to be provided under Outcome 1 as well as the implementation of community assessments and direct measures under Outcome 3. The food security vulnerability analysis and mapping system (VAM) supported by WFP, which is owned by the Ministry of Agriculture and Fisheries, will also be utilised and built upon. The VAM is a recognised methodology widely applied in developing countries which include policy, institutional, technical and human resource elements. A number of international NGOs (Oxfam and CRS) have built up considerable experience in community vulnerability analysis. For example Oxfam carries out participatory research on climate induced food security issues. There are existing formal and informal forums in place for the transmission of this knowledge and learning which the project will need to be aware of and tap into. Developing a working institutional structure and coordination strategy to ensure necessary linkages will be a key PPG task. For example, given the amount of existing community based vulnerability assessment work that has already been carried out in recent years through national and international NGOs, it will be important to carry out an initial scoping of this work in advance of proposing any additional studies at community level.

The Directorate for International Environment Affairs within MTIE has a mandate for supporting the overall implementation of Timor Leste's NAPA. Therefore all subsequent NAPA projects, including this proposed project as well as the ADB regional CCA initiative and Timor Leste's first LDCF project, will need to coordinate with the Directorate and can expect to receive relevant information, expertise and guidance, to be delivered through a continuation of the existing NAPA working group structure. This applies to climate vulnerability, risk analysis and appraisal tools to be developed under Component 1, as well as the proposed training materials under Component 2 (climate science, community based vulnerability assessment, economic analysis). The first LDCF project, while similar in terms of the types of interventions on the ground, will operate in different districts to this project (Ermera, Liquica and Baucau) and will also apply an entirely different entry point, working through the Ministry of State Administration which oversees local governance and decentralisation processes. Some of the analytical work to be compiled within the MTIE under the first project will be useful for the second project and for this reason it is particularly important that MTIE is engaged at the level of the project board, as well as at a technical level.

An important element of Component 1 entails the establishment of a knowledge and training hub for DRR practitioners, particularly focusing on district, sub-district and community level practitioners. The long term sustainability of this proposed output area will require both the mobilisation of additional resources from a third party during the implementation phase of the project, and equally a commitment from within the Ministry of Social Solidarity's (MSS) sector planning and budgeting to cover recurrent costs. While it is difficult to pre-judge the likelihood of a budget allocation being made at this early stage in the

life of a project, the MSS has prioritised the need for a knowledge and training hub which it sees as integral to the successful operationalizing of its national DRM policy. It will also provide in-kind financing to establish the training hub. The estimated recurrent costs of maintaining a functioning hub are likely to be of the order of USD 35-45,000 per annum including a full time manager, administrative assistant, related office and vehicle costs. Furthermore the proposed approach is in line with a recently completed AusAid funded functional and organisational review of NDMD (2012) which recommended more sub-national capacity development. This review was carried out within the framework of a wider public sector capacity development programme which could act as a key vehicle for promoting the proposed project's capacity development objectives.

Component 3 will largely be aligned with the World Bank supported Road Climate Resilient Project (RCRP). And existing PMU and management structure for the road implementation is already in place based in the Ministry of Public Works. This team has already informed the design of this PIF and will continue to be a key point of contact and information sharing during the course of the PPG and project implementation phase. The risk assessment work to be carried out under the WB DRM grant and additional community risk and vulnerability assessment under the LDCF project will be prepared in collaboration with the road project PMU and specialists as the final identification of hotspots and sites for implementation of watershed management measures agreed in advance. The WB DRM grant will focus mainly on expanding the hazard assessment within the Dili-Ainaro road corridor which will be completed by community level assessments to be carried out with SCCF resources under Component 3. The WB DRM will also support capacity development for officials in loss and damage assessment, prepare standards and guidance for climate resilient transport infrastructure, undertake skills development to create a labour force able to maintain critical economic infrastructure, and support livelihoods activities. Furthermore it will provide community based DRM investments linked to Component 2. These investments have not yet been scope out in detail but it is highly likely that the two projects will work in separate sucos for this element, while encouraging joint learning and knowledge sharing. Then WB DRM programme will enter into detailed design phase in parallel with the LDCF project, with common project management arrangements.

There are a number of other ongoing initiatives, particularly at sub-district and village level, relating specifically to Outcome 3 which could act as a means of spreading project outcomes more widely. National and international NGOs carry out land management based interventions at community level throughout the country (in addition to CARE and CRS). For example Oxfam is implementing an AusAid CCA programme at community level in all 11 districts involving sustainable land use planning, terracing, development of water supply systems and climate resilient agricultural activities through farmer field schools (e.g. development of seed and food banks, alternative cropping and community savings and credit). IOM is implementing a Phase 2 community based DRR project in 10 sub-districts working through local churches. A livelihoods based approach is being applied as a basis for strengthening broad based resilience to natural disasters and shocks. Further work will be required during the PPG phase to establish a suitable coordination structure at national and district levels between the proposed project and these ongoing initiatives, once target districts have been selected.

The UNDP Crisis Prevention and Recovery Unit (CPR), supported by a chief technical adviser on DRM, will provide project assurance functions at the country office level, conducting regular monitoring to ensure progress on all project outputs and to capture key implementation lessons learned. Monitoring and evaluation will be carried out in accordance with UNDP standard policies and procedures, with results shared with the PB at least once a year. The CPR unit assurance functions are part of the standard UNDP-GEF overarching oversight and assurance provided for all GEF funded or GEF managed projects.

### **C. DESCRIBE THE GEF AGENCY'S COMPARATIVE ADVANTAGE TO IMPLEMENT THIS PROJECT:**

UNDP Timor Leste has been playing a leading role in supporting the development of the GoTL's institutional and policy response disaster management and disaster risk reduction over the past decade. Beginning in 2002 UNDP supported the development of Timor Leste's first DRM policy process, culminating in Council of Minister approval of the National Disaster Risk Management Policy in 2008. Subsequent to this UNDP initiated a further support programme on the development of institutional and operational systems for DRM, with funding from the European Union. The focus of this support was on helping to activate the National DRM policy by strengthening linkages between national, district and sub-district tiers, working initially in two districts.

UNDP remains one of the GoTL's principal partners on DRM/DRR with an additional and ongoing support programme located within the National Directorate for Disaster Management (Ministry of Social Solidarity), including a full time senior DRR adviser. This adviser has been heavily involved in discussions between the Government and UNDP on the preparation of this LDCF grant application. This has allowed important learning from past experience of the DRM/DRR sector in Timor Leste to be reflected, in particularly a recent AusAid funded evaluation indicating that much sub-district level activity, while relevant, has remained piecemeal, un-coordinated and in some cases unsustainable. DRR activities have not been implemented within a measurable framework including baseline analysis and clear monitoring of change over time. This individual is backed up with an additional DRR programme officer within the Country Office as well as a climate specialist and a Regional Technical Adviser at the UNDP regional Centre in Bangkok.

UNDP has long standing experience in the infrastructure sector including identification, design, contracting and implementation phases, together with measures to make these investments responsive to local needs. With funding from the Governments of Japan, Portugal and Australia, UNDP managed over USD 50 million in emergency infrastructure rehabilitation projects under the UNTAET since early 2000. The first phase of projects, valued at \$27,480,000, was approved and agreed to in July 2000. The second phase of emergency assistance provided to East Timor by the Government of Japan consisted of six new projects, the value of which was US\$19,271,000. Subsequently, under the UNMIT period, UNDP implemented “The Improvement to Markets in the Eastern Districts” (AIM) project between January 2005 – February 2008. This project was in support of the National Development Plan to rehabilitate and reconstruct five bridges linking the eastern districts of Viqueque and Lautem. Furthermore, as part of the COMPASIS project, UNDP has implemented “Rehabilitation of Small Rural Infrastructure Project”. 7 infrastructure projects were implemented in the district of Oecusse including: Malelat small bridge constructions, Construction of Community Primary School- Bana-Afi, Noa ana, Lela-Ufe irrigation system retaining wall construction, Paddy field bona Usi-taco Irrigation system retaining wall constructions, Kabana Suni-ufe construction of 5 community wells and Lamase, Bene-ufe, construction of 5 community wells. Finally, the Local Governance Support Programme (LGSP), which began in 2007 and supports local government bodies with greater responsibilities for planning, budgeting, and implementation of infrastructure and service delivery, has implemented (in 2012 alone) 195 infrastructure projects costing US\$6,296,000.00 in 12 of the 13 districts nationally.

UNDP is equally well positioned in relation to strengthening the land management and ecosystem integrity. UNDP was the main counterpart to Government helping to develop the country’s first national biodiversity policy process and document – the National Biodiversity Strategy and Action Plan (NBSAP) which was approved by the Council of Ministers in February 2012 as well as the National Adaptation Programme of Action (NAPA), approved in August 2011. UNDP has also implemented, together with the Ministry of Agriculture and Fisheries (Directorate for Forestry,) a Sustainable Land Management (SLM) project from 2008-2010. The goal of the project was to ensure that the agricultural, forest and other terrestrial land uses of TL are sustainable to support productive systems that maintain ecosystem productivity and ecological functions while contributing directly to the environmental, economic and social well-being of the country. One of the outputs was the National Action Plan to Combat Land Degradation (NAP) in Timor Leste.

**C.1. INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:**

The UNDP co-financing is approximately USD 1.5 million derived from its ongoing Strengthening Disaster Risk Management in Timor Leste programme.

**C.2. HOW DOES THE PROJECT FIT INTO THE GEF AGENCY’S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROJECT IMPLEMENTATION:**

The UNDAF (2009-2013) focuses, under Outcome 2, on vulnerable groups, IDPs and disaster prone communities (including women and youth). UNDP is mandated to play an active role in this area. The UNDP Timor Leste Country Programme Document (2009-2013) under Outcome 7 focuses on developing policies, mechanisms and institutional capacities to prevent, reduce and mitigate natural disasters. Under Outcome 6 UNDP supports the implementation of climate change adaptation strategies, including the integration of environmental and disaster management approaches. Furthermore, Outcome 3 promotes strengthened livelihoods approaches for vulnerable communities including the sustainable management of natural resources. As the country office and UN system gears up for the post 2013 programming cycle, climate change adaptation issues are likely to remain a high priority with UNDP as the lead agency supporting government in this area.

The UNDP Country Office is sufficiently well resourced to provide the oversight necessary to support the GoTL in implementing this LDCF funded programme. Over the past five years UNDP has been working closely with the Ministry for Social Solidarity in developing an overarching policy and institutional framework for disaster management in Timor Leste. The proposed LDCF grant will engage both the Conflict Prevention and Recovery Unit and Poverty Reduction and Environment Unit, as well as the Deputy Resident Representative for programmes. The CPR team has 5 professional and support staff while the environment and climate change team has 5 professional and support staff. There is also a senior DRM adviser embedded within the National Director for Disaster Management responsible for the Strengthening Disaster Risk Management Project. The procurement team has 4 full time analysts. A regional technical adviser on adaptation based in Bangkok will provide ongoing implementation oversight and support throughout the project, as well as the UNDP lead adviser on adaptation, also resident in Bangkok. At the HQ level the project is supported by senior advisers on DRR and CCA linked to a cross practice team which focuses on defining and strengthening the natural synergies that exist between these two practice areas.




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

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):**

NAME	POSITION	MINISTRY	DATE (MM/DD/YYYY)
Mr. Joao Soares	GEF Operational Focal Point	Ministry for Trade, Industry and Environment	28 January 2013

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

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date	Project Contact Person	Telephone	Email Address
Adriana Dinu Officer-in-Charge UNDP/GEF		Feb 11, 2013	Keti Chachibaia Climate Change Adaptation Advisor	+66 (2) 304 9100	keti.chachibaia@u ndp.org