

### REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: Full-sized Project TYPE OF TRUST FUND:LDCF

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### **PART I: PROJECT INFORMATION**

Project Title: Economy-wide integration of climate change adaptation and DRM/DRR to reduce climate vulnerability							
of communities in Samoa.							
Country(ies):	Samoa	GEF Project ID: <sup>1</sup>	5417				
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5264				
Other Executing Partner(s):	MNRE and MoF	Submission Date:	8 Aug 2014				
		Resubmission Date:	9 Sept 2014				
GEF Focal Area (s):	Climate Change	Project Duration(Months)	72 months				
Name of Parent Program (if	N/A	Project Agency Fee (\$):	1,109,064				
applicable):							
➤ For SFM/REDD+							
➤ For SGP							
For PPP							

### A. FOCAL AREA STRATEGY FRAMEWORK<sup>2</sup>

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
CCA-1	Outcome 1.1	Output 1.1.1	LDCF	557,428	4,075,100
CCA-1	Outcome 1.2	Output 1.2.1	LDCF	9,801,862	71,587,442
CCA-1	Outcome 1.3	Output 1.3.1	LDCF	604,369	4,413,980
CCA-2	Outcome 2.2	Output 2.2.1	LDCF	804,638	5,874,671
CCA-3	Outcome 3.1	Output 3.1.1	LDCF	554,639	4,048,807
	-	Total project costs		12,322,936	90,000,000

### **B. PROJECT FRAMEWORK**

Project Objective: This project will establish an economy-wide approach to climate change adaptation in Samoa, aimed for efficient integration and management of adaptation and DRR/DRM into national development planning and programming, and enhancing the resilience of communities' physical assets and livelihoods across Samoa, to CC and natural disasters.

	Grant	pajorea esse	s and fivelinoods across Sam	Trust	Grant	Confirmed
<b>Project Component</b>	Type	<b>Expected Outcomes</b>	<b>Expected Outputs</b>	Fund	Amount (\$)	Cofinancing
						(\$)
1. Strategic integration of climate change adaptation and disaster risk management in national policy frameworks and development planning	TA	1.1. Policy Strategies/Institutional Strengthening: Climate change adaptation and DRM mainstreamed in relevant policies, sectoral strategies, sub-national strategies <sup>3</sup> and budgeting	1.1.1. Climate change adaptation mainstreamed into development and sectoral plans.  1.1.2. Institutional and operational frameworks for coordination of climate	LDCF	788,638	15,765,849
through an economy- wide approach		processes through enhanced coordination of government institutions 1.2. Public finance	change adaptation strengthened.  1.2.1. MoF and MNRE		100,000	1,999,124

<sup>&</sup>lt;sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>&</sup>lt;sup>2</sup> Refer to the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when completing Table A.

<sup>&</sup>lt;sup>3</sup> Sub-national strategies include district/village strategies and a strategy for Apia GEF5 CEO Endorsement Template-February 2013.doc

		management at the national and village level: Capacity to access, manage, implement and monitor use of climate change funds is enhanced	climate change units – as well as NGOs and village governance structures – have enhanced capacity to manage climate finance.			
2. Enhance resilience of communities as first responders of climate change-induced hazards	Inv	at the national and village level  2.1. Protection of communities' physical assets and livelihoods: Increased resilience, and decreased exposure and susceptibility of communities to climate change and natural disasters by protection of household and community assets and promoting resilient livelihoods	2.1.1. Integrated Watershed Management Plan for Greater Apia following "Ridge-to-Reef" approach.  2.1.2. Hard and soft measures for protection of community assets.  2.1.3. Sustainable microenterprises for youth and women on agro-businesses with a sustainable and resilient value chain approach to promote	LDCF	9,997,492	58,139,920
		2.2. CCA/DRM plans and implementation: Increased adaptive capacity of communities for implementation of effective risk management and protection of household and community assets.	diversified livelihoods.  2.2.1. Building on the work of DMO, village plans designed and implemented to develop the capacities of 100 communities to prepare, respond, recover and manage CC risks.		500,000	2,812,463
3. Monitoring and evaluation and knowledge management	TA	and community assets  3.1. Knowledge about CCA and DRM is captured and shared at the regional and global level	3.1.1. Knowledge management strategy developed, including national awareness campaigns and information sharing through existing international platforms and new multimedia platforms.  3.1.2. M&E system established to strengthen institutional coordination	LDCF	350,000	6,996,933
		Proj	and enhance the effectiveness of the interventions on adaptation with an economy wide approach.  Subtotal ect management Cost (PMC) <sup>4</sup>	LDCF	11,736,130 586,806	85,714,289 4,285,711

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<sup>&</sup>lt;sup>4</sup> PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

### C. SOURCES OF CONFIRMED COFINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Cofinancing	Cofinancing Amount (\$)
Other Multi-lateral	NZAID, AusAID, EU, World Bank, ADB	<b>Grant</b>	<mark>26,000,000</mark>
Agency(cies)			
National Government	Ministry of Finance	Grant	62,000,000
Other Multi-lateral	Enhanced Integrated Framework	Grant	2,000,000
Agency(cies)			
<b>Total Co-financing</b>			90,000,000

### D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY<sup>1</sup>

	Type of	Type of Country Name/			(in \$)	
GEF Agency	Trust Fund	Focal Area	Global	Grant	Agency Fee	Total
	II ust I unu		Global	Amount (a)	$(b)^2$	c=a+b
UNDP	LDCF	Climate Change	Samoa	12,322,936	1,109,064	13,432,000
Total Grant Resources			12,322,936	1,109,064	13,432,000	

In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table.

#### F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component Grant Amount (\$)		Cofinancing (\$)	Project Total (\$)	
International Consultants	200,000	2,129,483	2,329,483	
National/Local Consultants	375,000	2,738,795	3,113,795	

### G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

### PART II: PROJECT JUSTIFICATION

### A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF<sup>5</sup>

No significant changes in alignment with the project design of the original PIF have been made. The following summarizes the most significant changes in terms of the project's outcomes/outputs and co-financing activities:

While the wording of the project Outcomes have been altered to make them more specific, they remain based on the same underlying principles. In addition, revisions to the outputs that were proposed in the original PIF have been made to fit specific needs outlined in consultations held during the PPG. These needs relate primarily to priorities expressed by the Government of Samoa as well as various NGOs. These consultations were used to refine the outputs in order to achieve the desired developmental outcomes in accordance with the original PIF. These revisions are presented in the table below.

<sup>&</sup>lt;sup>2</sup> Indicate fees related to this project.

For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

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Output as written in PIF	Output revised during the PPG
1.1.1. Climate change adaptation strategies developed for	1.1.1. Climate change adaptation mainstreamed into
transport, water management, land management, urban planning	development and sectoral plans.
and energy, and integrated into relevant sectoral plans	
1.1.2. Management arrangements of existing and on-going	1.1.2. Institutional and operational frameworks for coordination
CC/DRR/DRM/adaptation programmes are revised	of climate change adaptation strengthened
1.2.1. Capacity on climate finance is built on MoF, CC units,	1.2.1. MoF and MNRE climate change units – as well as NGOs
and CDC secretariat, as well as within the village governance	and village governance structures – have enhanced capacity to
structure	manage climate finance
2.1.1.Post-cyclone infrastructure reconstruction activities	2.1.1. Integrated Watershed Management Plan for Greater Apia
aligned with "building-back-better" standards and updated	following "Ridge-to-Reef" approach
management plans, regulations, and codes (including household	
assets, houses, community buildings, roads, coastal	2.1.2. Hard and soft measures for protection of community
infrastructure, water shed management, etc.), implemented using	assets.
best available technology and building household-level	
capacity <sup>6</sup>	
2.1.2. Development of micro-businesses (business incubators for	2.1.3. Sustainable micro-enterprises for youth and women on
youth/women; business hubs for youth; etc.) on agro-food,	agro-businesses with a sustainable and resilient value chain
manufacture and tourism with a sustainable and resilient value	approach to promote diversified livelihoods.
chain approach, to promote diversified livelihoods	
2.2.1. Building on the work of DMO, village plans designed and	2.2.1. Building on the work of DMO, village plans designed and
implemented to develop the capacities of 200 communities to	implemented to develop the capacities of 100 communities to
prepare, respond, recover and manage CC risks	prepare, respond, recover and manage CC risks
3.1.1. Knowledge management strategy developed and	3.1.1. Knowledge management strategy developed, including
implemented, including awareness campaigns, with a regional	national awareness campaigns and information sharing through
reach, (feed into R2R programme)	existing international platforms and new multimedia platforms

A number of outputs, originally written into the PIF, were removed during the PPG phase. These are presented in the table below. Removal of these outputs was a result of recommendations by the Government of Samoa as they expected to be addressed under other programmes in future.

Outputs removed during the PPG
1.1.3. Existing coordination mechanisms among MNRE, MoF,
MWTI, DMO and other relevant ministries and agencies are
strengthened to enhance operational efficiency and coordinated
responses to increasing impacts of CC
1.2.2. Climate change fiscal framework developed to optimize
the utilization of CC funds
2.2.2 Community-based financial mechanisms or relief
programmes designed to optimize funds to provide immediate
financial support after eventual natural shocks to reduce
financial burden placed on displaced families.
3.1.2. Results on the ground and information are shared in a
systematic way through the existing international platforms and
new multimedia platforms

Original Output 2.1.1 was reformulated as two new outputs. This is a result of the Government of Samoa's prioritization of the Greater Apia Urban Area for post-cyclone reconstruction efforts following the "build back better" approach to protect community assets. The reformulation is presented below.

Output as written in PIF	Output reformulated during the PPG

<sup>&</sup>lt;sup>6</sup> This output was reformulated into 2 outputs. See below. GEF5 CEO Endorsement Template-February 2013.doc

- 2.1.1.Post-cyclone infrastructure reconstruction activities aligned with "building-back-better" standards and updated management plans, regulations, and codes (including household assets, houses, community buildings, roads, coastal infrastructure, water shed management, etc.), implemented using best available technology and building household-level capacity
- 2.1.1. Integrated Watershed Management Plan for Greater Apia following "Ridge-to-Reef" approach
- 2.1.2. Hard and soft measures for protection of community assets.

The indicative co-financing in the PIF totalled US\$ 183,000,000. This estimate was made based on discussions with relevant co-financing initiatives, particularly the National Recovery Plan and the WB-funded Samoa Agriculture Competitiveness Enhancement Programme, at the time the PIF was formulated. Further consultation with relevant initiatives during the PPG phase allowed for new initiatives to be included as co-financing, as well as the recommendation to remove the WB-funded programme. The co-financing figure from NRP was adjusted to reflect the actual amount available. The total value of co-financing from NRP has consequently changed. Further, the Government of Samoa requested that the community livelihoods interventions build on the Trade Sector Support Programme – funded by the Enhanced Integrated Framework – in order to promote the climate-resilience of that initiative. The Public Finance Management Reform Programme was identified as an additional co-financing initiative through which climate change concerns can be mainstreamed into public finance management and national M&E of developmental objectives. The co-financing contribution of the National Recovery Plan was reduced from the amount identified in the PIF based on progress that has already been made under that plan towards post-cyclone reconstruction. The total co-financing for the LDCF project has been adjusted to US\$ 90,000,000.

The additionality of LDCF resources, as related to the baseline initiatives included in the proposal is clearly explained in the project documents and is in line with what was proposed at PIF stage.

A.1 <u>National strategies and plans</u> or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc.

There have been no significant changes in alignment with relevant national strategies and plans since the original PIF. The proposed LDCF project remains aligned with:

- United Nation Framework Convention on Climate Change (UNFCCC);
- Samoa's National Adaptation Programme of Action (NAPA);
- Samoa's Millennium Development Goals (MDG);
- Strategy for the Development of Samoa (SDS, 2012–2016);
- GoS' Climate Public Expenditure and Institutional Review (CPEIR); and
- "Pacific Islands Ridge-to-Reef National Priorities Integrated Water, Land, Forest and Coastal Management to Preserve Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods" programme.

For additional information on the proposed LDCF project's alignment with national strategies please refer to Section 2 of the attached UNDP Project Document.

A.2. GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

There have been no changes in the GEF focal areas or eligibility since the original PIF.

The proposed LDCF project is consistent with LDCF objectives CCA-1 "Reduce vulnerability to the adverse impacts of climate change", CCA-2 "Increase adaptive capacity to respond to the impacts of climate change" and CCA-3 "Promote transfer and adoption of adaptation technologies". Specific contributions to these objectives are described below.

- Outcome 1.1 will support mainstreaming of climate change adaptation into policies, strategies and budgeting processes. This is aligned with LDCF Objective CCA-1, Outcome 1.1: "Mainstreamed adaptation in broader development frameworks".
- Outcome 2.1 will support reconstruction of infrastructure according to "build back better" standards. This is aligned with LDCF Objective CCA-1, Outcome 1.2: "Reduced vulnerability in development sectors".

- Outcome 2.1 will support the diversifying of livelihood strategies to build the climate resilience of community livelihoods. This is aligned with LDCF Objective CCA-1, Outcome 1.3: "Diversified and strengthened livelihoods and sources of income".
- Outcome 2.2 will support the development and implementation of Village Disaster Risk Management Plans for 100 communities. This is aligned with LDCF Objective CCA-2, Outcome 2.2: "Strengthened adaptive capacity to reduce risks to climate-induced economic losses".
- Outcome 2.1 will support the uptake of household-level technology for enhancing access to more secure livelihoods. This is aligned with LDCF Objective CCA-3, Outcome 3.1: "Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas".

### A.3 The GEF Agency's comparative advantage:

No significant changes have been made since the PIF. Further details have been added to the relevant section of the UNDP Project Document outlining UNDP's experience and success in assisting the Government of Samoa to access funding for climate change adaptation.

For additional information on the GEF Agencies' comparative advantage please refer to Section 2.3 of the UNDP PD.

### A.4. The baseline project and the problem that it seeks to address:

The problem that the project seeks to address has not changed from the PIF. The problem that the project seeks to address is that climate change is expected to result in losses to lives, livelihoods and assets for local communities in Samoa. The solution to this problem is to adopt an economy-wide approach to climate change adaptation in Samoa. This will allow for increased integration of climate change adaptation and disaster risk management into national development planning and programming across all sectors. In addition, the climate resilience of local communities – including their physical assets and livelihoods – will be strengthened through: i) protection of community assets and economic infrastructure; ii) promotion of climate-resilient livelihoods; and iii) development of community-level disaster risk management plans.

The National Recovery Plan is the main baseline project upon which the project will build. This has not changed from the PIF. The project will contribute towards climate-proofing of the National Recovery Plan by implementation of climate-resilient measures to reduce the vulnerability of reconstructed economic infrastructure and community assets. The project will also reconstruct community assets such as houses and water supply following the "build back better" principle to demonstrate climate-resilient approaches to reconstruction.

In addition, two new baseline projects were identified. The Trade Sector Support Programme is supporting the expansion of agricultural value chains for coconut and cocoa. The project will build on this initiative in order to promote resilient livelihoods through the diversification and strengthening of sustainable value chains. Furthermore, the Public Finance Management Reform Programme was identified as a baseline project. The project will build on this initiative by integration climate change concerns into public finance management and national M&E of developmental objectives. See Section 2.4 of the attached UNDP Project Document for further details on the baseline projects.

A. 5. <u>Incremental /Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global environmental</u> benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The additional cost reasoning has been updated since the original PIF. The revised additional cost reasoning is described below.

# COMPONENT 1. STRATEGIC INTEGRATION OF CLIMATE CHANGE ADAPTATION AND DISASTER RISK MANAGEMENT IN NATIONAL POLICY FRAMEWORKS AND DEVELOPMENT PLANNING THROUGH AN ECONOMY-WIDE APPROACH

**OUTCOME 1.1.** <u>POLICY STRATEGIES/INSTITUTIONAL STRENGTHENING:</u> CLIMATE CHANGE ADAPTATION AND DRM MAINSTREAMED IN RELEVANT POLICIES, SECTORAL STRATEGIES, SUB-NATIONAL STRATEGIES<sup>7</sup> AND BUDGETING PROCESSES THROUGH ENHANCED COORDINATION OF GOVERNMENT INSTITUTIONS.

At the national level, the proposed LDCF project will integrate climate change adaptation and DRM into an overall national policy for adaptation as well as within sectoral development planning. All sectoral plans will have sector-specific objectives for climate change adaptation. This will create a stronger institutional framework for climate change adaptation along with the integration of climate change considerations into budget allocations. Ongoing planning and budgeting will consequently be conducted in a more climate-resilient manner with enhanced monitoring and evaluation of climate-related initiatives (linked to Component 3).

The proposed LDCF project will strengthen national coordination of plans and projects for climate change adaptation. Strengthened coordination between the various divisions of MNRE, MoF and other government agencies will enhance overall operational efficiency. This will enable better sequencing and prioritising of activities to limiting duplication and overlap. Public expenditure and activities implemented by *inter alia* donor agencies and NGOs will be streamlined within a coherent national framework. Clear responsibilities for climate change will be allocated to government institutions to improve coordination of climate policy and programming as well as budgetary and fiscal mainstreaming of climate change activities. A report detailing public expenditure on climate change will inform strategic decision-making on climate change adaptation and DRM.

The improvements in efficiency and coordination will result in increased benefits derived from the available resources. Gaps in planning and/or implementation of activities for climate change adaptation will be identified and addressed effectively. Specific mandates will be developed for monitoring, evaluating and reporting on the implementation of interventions for climate change adaptation and DRM. This will strengthen national capacity for delivering climate-resilient benefits in an integrated manner.

**OUTCOME 1.2.** <u>Public finance management at the national and village level</u>: Capacity to access, manage, implement and monitor use of climate change funds is enhanced at the national and village level.

The proposed LDCF project will build the capacities of communities to access funding for climate-resilient development. This will build on the current suite of training offered by SUNGO and other CBOs that is supported by the PPCR. Community members will be trained on using the funding made available through initiatives such as the CSSP for local-level activities that focus on climate change adaptation. The training will focus on identifying and prioritising interventions that build climate resilience. Such interventions could include retrofitting houses following the "build back better" principle, constructing disaster shelters, installing community-level early warning systems and enhancing climate-resilient agricultural production. Communities will also be trained on management of community-level projects for climate change adaptation. This capacity development will enhance the ability of communities to leverage available funding for improving local-level resilience to climate change.

In addition, the proposed LDCF project will adapt the CPEIR methodology to provide guidelines for ongoing analysis of climate-related expenditure. This will be aligned with MoF's experience related to the PER conducted under the PFMRP. The adapted methodology will guide the compilation of a report that details *inter alia*: i) new developments in climate-related policies across all sectors; ii) recent trends in climate expenditure, building on the CPEIR; iii) new developments in international cooperation on climate change; and iv) opportunities for climate funding. The climate expenditure report will be prepared through a collaboration between MNRE – responsible for policy-related aspects – and MoF – responsible for finance-related aspects. By building capacity to analyse climate expenditure – especially

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<sup>&</sup>lt;sup>7</sup> Sub-national strategies include district/village strategies and a strategy for Apia GEF5 CEO Endorsement Template-February 2013.doc

with regard to monitoring and evaluation – across all sectors, MoF will be better able to deliver climate finance on an economy-wide scale using a programmatic approach.

The outputs and activities within Component 1 are:

### Output 1.1.1. Climate change adaptation mainstreamed into development and sectoral plans.

- **1.1.1.1** Identify entry points for integration of climate change into all sector plans. This will include a sector-by-sector review of medium- and long-term climate change risks and opportunities, based on up-to-date information on climate change projections and expected impacts for Samoa.
- **1.1.1.2** Revise all sector plans to take medium- and long-term climate change risks and opportunities into account. The revisions will include explicit budgets and M&E indicators to guide implementation of sectoral priorities for climate change adaptation. This will occur as part of GoS's schedule for sector revisions whereby all sector plans will be updated between 2014–2018.
- **1.1.1.3** Develop MNRE and MoF's human resource capacity to continuously revise sector plans based on up-to-date information on expected impacts of climate change (see Annex 4). This will occur based on the capacity assessments conducted under Output 1.1.2. and will include appointment of a Climate Change Policy Advisor to provide guidance and input into sectoral plans.
- **1.1.1.4** Finalise review of the NPCC (2007) and produce a proposed National Climate Change Adaptation Strategy to mobilise the integration of adaptation in medium- and long-term planning and budgeting processes in Samoa. This will build on the "Samoa Climate Change Policy Review & the Way Forward" report that has identified key gaps and opportunities in the current policy framework.
- **1.1.1.5** Develop concrete recommendations to align the next Strategy for the Development of Samoa (2017-2021) with the draft National Climate Change Adaptation Strategy and recommendations for sector plans.

# Output 1.1.2. Institutional and operational frameworks for coordination of climate change adaptation strengthened.

- **1.1.2.1** Conduct capacity assessments of MNRE and MoF to identify capacity gaps related to coordination of climate change activities nation-wide including those implemented by government ministries/institutions as well as development partners and NGOs (see Annex 4).
- **1.1.2.2** Create a Climate Change Unit within MNRE to improve decision-making and project management of national climate change activities (see Annex 4). This unit will provide a central point for supporting management and implementation of climate change adaptation activities across all sectors as well as those carried out by development partners and NGOs.
- **1.1.2.3** Define roles for MoF and MNRE to ensure coordinated climate policy-making, planning, and implementation in collaboration with relevant sectors. This will include specific roles for nation-wide policy-making, planning, budgeting and monitoring of adaptation activities according to national and sectoral priorities developed under Output 1.1.1.
- **1.1.2.4** Conduct periodic and ongoing stocktaking of all current and planned climate change adaptation projects, plans, reports and assessments. This will be carried out at regular intervals by the MNRE Climate Change Unit to include all new adaptation activities as new initiatives by government ministries/institutions, development partners and NGOs are planned and initiated.
- **1.1.2.5** Develop specific guidelines for CRICU functions including accounting, budgetary and fiscal mainstreaming of climate change initiatives. This will allow for centralised monitoring of the progress towards national and sectoral objectives related to climate change adaptation.

# Output 1.2.1. MoF and MNRE climate change units – as well as NGOs and village governance structures – have enhanced capacity to manage climate finance.

- **1.2.1.1** Develop guidelines for communities on management of climate change adaptation/DRM projects. These guidelines will outline approaches to prioritisation, design, proposal writing and financial management of community-based projects for climate change adaptation and DRM.
- **1.2.1.2** Train communities on managing projects for climate change adaptation and DRM following the guidelines developed through Activity 1.2.1.1. The training will equip communities to identify climate risks, prioritise adaptation actions, design adaptation interventions, develop costed project proposals, apply for funding and implement the projects. In particular, communities will be trained to manage project finances and on-the-ground activities.

- **1.2.1.3** Develop guidelines/toolkits based on the CPEIR methodology for a biennial analysis of government climate expenditure. This approach will be aligned with MoF's procedures for conducting Public Expenditure Reviews, with a focus on identifying and quantifying climate-specific expenditure.
- **1.2.1.4** Produce three biennial, CPEIR-style reports on climate change expenditure as a means for harmonising government agencies' monitoring of climate change adaptation. These analyses will occur in conjunction with MoF's Public Expenditure Reviews, following the methodologies developed in the guidelines/toolkits.

# COMPONENT 2. ENHANCE RESILIENCE OF COMMUNITIES AS FIRST RESPONDERS OF CLIMATE CHANGE-INDUCED HAZARDS

**OUTCOME 2.1.** <u>Protection of communities' physical assets and livelihoods:</u> Increased resilience, and decreased exposure and susceptibility of communities to climate change and natural disasters by protection of household and community assets and promoting resilient livelihoods.

The proposed LDCF project will guide the planning for reconstruction of infrastructure damaged during Cyclone Evan. This will serve to climate-proof the ongoing reconstruction of infrastructure under the NRP. In order to reduce the risks by flooding to the communities living in Apia, the project will develop an integrated watershed management plan that will address up- and down-stream causes and effects of climate vulnerability within all five watersheds in the Greater Apia area. The project will support complete vulnerability and adaptation assessments for the Vaisigano, Gasegase, Fuluasou, Loimata o Apaula and Fagalii Rivers. On the basis of these assessments, an integrated WMP for the Greater Apia area will be developed.

The integrated WMP will follow the "Ridge-to-Reef" principle following an integrated approach to building climate resilience and supporting community livelihoods through the inclusion of aspects such as water, land and coastal management within an overarching framework. The LDCF project will build on the work conducted by the PPCR within the three districts that constitute the Greater Apia area by integrating recommendations from the CIM-2 Plans within the integrated WMP framework. The integrated WMP will also be used to guide the implementation of downstream measures for disaster mitigation. This will build on the LIDAR mapping to be undertaken as part of the PPCR as well as a hydrological mapping exercise that is currently being undertaken for the Vaisigano River.

MNRE, with LDCF resources will support comprehensive planning and design of flood protection infrastructure. Based on the integrated WMP, appropriate options for structural (e.g. river banks, rock walls, river channelling) and non-structural (early warning systems, flood awareness) measures will be developed. These will be prioritised based on cost-benefit analyses as well as comprehensive environmental and social impact assessments. Community consultations as well as expert advice will be used to guide the selection of measures that are most socially and economically appropriate for implementation.

In addition to up- and down-stream mitigation measures, the LDCF project will increase resilience and decrease exposure and susceptibility of communities to climate change and natural disasters by climate-proofing household and community assets. The protection and reinforcement of these assets will reduce the damage caused by natural disasters. The project will provide the means for the design and reconstruction of community assets following the "build back better" principle. Communities with at-risk housing and other assets will benefit from technologies and technical assistance pertaining to climate-resilient housing, water supply and sanitation. Furthermore, community members will be engaged in the construction of these community assets as well as the flood protection infrastructure described above. These community members will also receive training on climate-resilient construction techniques. As a result, these community members will have enhanced employability after the project implementation is completed owing to their expanded skillsets. Furthermore, they will have improved understanding of climate-resilient housing that can be expected to inform future choices concerning design and construction of household assets.

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<sup>&</sup>lt;sup>8</sup> For example, through the "cash-for-work" modality. GEF5 CEO Endorsement Template-February 2013.doc

The proposed LDCF project will also promote the adoption of diversified livelihood options to enhance climate resilience at the household level. Building on the TSSP initiative implemented by MoF and WIBDI, MNRE and MWCSD will support communities to diversify livelihoods by increasing income-generating opportunities for community members with particular consideration for vulnerable groups such as women and youth. Promotion of diversified livelihoods will enhance climate resilience at the household level by increasing household income and savings. Households will have enhanced capacity to cope with and adapt to climate change as they will have the financial resources to invest in measures for climate-resilience. Households will also have more resources for recovery after disaster events.

The development of micro-businesses opportunities related to food production and manufacture will be supported to enhance linkages between supply and market, as well as increasing beneficiation of existing production. The project will review value chains for existing and new agricultural and handicrafts products to select products with the potential for enhanced commercial viability. Community members will receive training on the techniques required to improve sustainability of supply and quality of production for the identified value chains. Household members involved in training on agricultural products will receive planting materials and household processing facilities such as drying machines. Household members involved in training on handicraft production will receive equipment such as sewing machines. This will increase income-generating opportunities for community members, improving the levels of disposable income and enhancing their capacity to save. Enhanced savings will enable communities to build up a financial buffer to help them cope with and adapt to climate change in the short-, medium- and long-term.

The project will use experimental design principles to assess the project impacts on targeted groups under Outcome 2.1, focusing on the micro-enterprises developed under Output 2.1.3. The experimental design will follow a randomised control trial approach (please see Annex 15 for a more detailed description). During the household surveys conducted as part of the VDRMPs, households will be identified for tracking during project implementation. Households participating in the activities for promoting crop and handicraft value chains will be compared to households that are not involved in the value chains over the course of the project lifespan to determine benefits attributable to project interventions.

### **OUTCOME 2.2.** <u>CCA/DRM PLANS AND IMPLEMENTATION:</u> INCREASED ADAPTIVE CAPACITY OF COMMUNITIES FOR IMPLEMENTATION OF EFFECTIVE RISK MANAGEMENT AND PROTECTION OF HOUSEHOLD AND COMMUNITY ASSETS.

The capacity of communities to cope with climate-induced natural disasters will be strengthened. VDRMPs will be developed and implemented in 100 villages to support communities to act as "first responders" to climate-induced disasters. Through these disaster management plans, communities will be better able to prepare for, respond to and recover from natural disasters. This will have a direct effect on the ability of communities to reduce climate risks and minimise future losses.

Communities will directly benefit from increased community coordination and ownership of climate-induced DRM initiatives. By building community-level capacity, communities will be able to adopt a more proactive response to DRM. This will reduce the burden on GoS to coordinate disaster response. Consequently, delays in disaster response will be reduced and communities will be able to react in a timely manner. This will have a direct effect on the adaptive capacity of communities in regards to climate-induced natural disasters.

The LDCF project will coordinate closely with the work on village-level disaster planning undertaken by the PPCR and the AF project. The CIM-2 Plans will provide a framework within which the LDCF project will conduct household-level surveys to identify climate vulnerabilities. These surveys will inform the design and implementation of VDRMPs, including the provision of the necessary training to ensure that community members are aware of their roles in the event that a disaster occurs.

The outputs and activities within Component 2 are:

### Output 2.1.1. Integrated Watershed Management Plan for Greater Apia following "Ridge-to-Reef" approach.

**2.1.1.1** Conduct complete assessments of the Vaisigano, Gasegase, Fuluasou, Loimata o Apaula and Fagalii Rivers to identify the root causes of climate risks in the Greater Apia urban area. These assessments will include collection of: i) physical data such as geology and soil mapping, vegetation mapping, climate change

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- projections and hydrology; and ii) socio-economic data such as population census and land use/land tenure (see Annex 8).
- **2.1.1.2** Conduct a comprehensive vulnerability and risk assessments to identify risks posed to economic infrastructure and community assets within the Greater Apia urban area. This assessment will include analysis of the location and vulnerability of human populations and critical infrastructure as well as climate/flood risk assessments to identify threats posed to these populations and infrastructure (see Annex 8).
- **2.1.1.3** Conduct community consultations to field-truth the vulnerability and risk assessments. These consultations will assist to identify locations of vulnerable populations, community assets and economic infrastructure. In addition, these consultations will serve to prioritise structural and non-structural interventions to reduce vulnerability to climate-induced risks.
- **2.1.1.4** Develop an integrated watershed management plan detailing threats and management responses for the catchments in the Greater Apia area. This plan will be based on the assessments outline above, focusing on the prioritised structural and non-structural interventions to reduce vulnerability to threats identified by the climate/flood risk assessments (see Annexes 6 and 8).
- **2.1.1.5** Design structural flood protection measures such as check dams, retention ponds, diversion channels and riverbank stabilisation to reduce the flood risk posed to communities in the Vaisagano River catchment. This design will include feasibility studies, climate-resilient design, cost-benefit analyses, EIAs, SIAs, etc. (see Annexes 6 and 8).

### Output 2.1.2. Hard and soft measures for protection of community assets.

- **2.1.2.1** Build structural flood protection measures designed under Output 2.1.1 such as check dams, retention ponds, diversion channels and riverbank stabilisation– in the Vaisigano River catchment. These will be constructed based on the feasibility studies, cost-benefit analyses and EIAs undertaken for the integrated WMP.
- **2.1.2.2** Implement ecosystem-based approaches to watershed management. These will focus on management of upper catchment areas to reduce the risks posed by floods and other climate-induced disasters.
- **2.1.2.3** Reconstruct community assets such as climate-proof houses, drinking water supply systems, disaster shelters, evacuation routes and sanitation systems. This will be based on international best practices for climate-resilient development following "build-back-better" approaches.

# Output 2.1.3. Sustainable micro-enterprises for youth and women on agro-businesses with a sustainable and resilient value chain approach to promote diversified livelihoods.

- **2.1.3.1** Assess value chains for crops such as *misiluki*, papaya, *nonu*, *laupele* and taro. These assessments will analyse operational and productions costs, potential for development of new products and gaps/barriers to sustainability of both supply and demand.
- **2.1.3.2** Assess value chains for handicrafts such as wood carvings and *siapo*. These assessments will analyse operational and productions costs, potential for development of new products and gaps/barriers to sustainability of both supply and demand.
- **2.1.3.3** Based on the assessment in Activity 2.1.3.1, provide training to 300 women and youth on the technical skills required to supply viable value chains with agricultural products.
- **2.1.3.4** Based on the assessment in Activity 2.1.3.2, provide training to 300 women and youth on the technical skills required to supply viable value chains with handicraft products.
- **2.1.3.5** Provide planting materials, equipment and household processing facilities for women and youth to supply viable value chains with agricultural and handicraft products.
- **2.1.3.6** Design and implementation of a quasi-experimental design approach (Difference-in-Differences) to test the impact of the value chain interventions in household welfare.

### Output 2.2.1. Building on the work of DMO, village plans designed and implemented to develop the capacities of 100 communities to prepare, respond, recover and manage CC risks.

- **2.2.1.1** Conduct household surveys to map vulnerability to climate risks. This will follow the methodology successfully used by DMO in the VDRMPs developed to date and is likely to comprise an ongoing partnership with Samoa Red Cross.
- **2.2.1.2** Analyse data from household surveys to identify most vulnerable groups and communities.
- **2.2.1.3** Hold community consultations to identify localised climate risks as well as appropriate responses during and after disaster events.

- **2.2.1.4** Develop and implement Village Disaster Risk Management Plans that outline roles and actions for responding to climate-induced disasters. This will be coordinated by DMO to ensure that there is no overlap between the communities targeted under the LDCF project and those targeted by other initiatives (e.g. Samoa Red Cross, PPCR, AF).
- **2.2.1.5** Provide training on the implementation of Village Disaster Risk Management Plans. This will include informing community members of evacuation routes and disaster responses, provision of first aid training, drills for disaster events and post-disaster recovery activities.

### COMPONENT 3. MONITORING AND EVALUATION AND KNOWLEDGE MANAGEMENT

OUTCOME 3.1. KNOWLEDGE ABOUT CCA AND DRM IS CAPTURED AND SHARED AT THE REGIONAL AND GLOBAL LEVEL.

The proposed LDCF project will develop a knowledge management strategy to improve access to data and information on climate change for government institutions, particularly MNRE, MWCSD and MoF. These ministries will consequently be better able to plan and budget for climate change adaptation in sectoral budgets and plans. A comprehensive M&E framework will be created to support the coordination of knowledge and information on climate change adaptation. The development of a systematic M&E framework will enable:

- less labour-intensive monitoring;
- greater comparability of results between ministries and initiatives;
- improved tracking of progress at a national level;
- tracking changes in vulnerability to climate change to determine effectiveness of interventions;
- measuring progress on specific interventions to determine the efficiency of implementation;
- cost-benefit analysis of adaptation;
- identification of implementation gaps and additional needs; and
- sustainable and coordinated implementation of adaptation strategies.

The M&E framework will form the basis for harmonised reporting on climate change adaptation between government institutions. This would enable: i) less labour intensive monitoring; ii) greater comparability of results; and iii) improved tracking of progress at a national level. Data collected through the framework will be used to prepare the climate expenditure report (see Component 1), enabling annual monitoring and reporting on efficiency and efficacy of climate expenditure. Monitoring will focus on tracking of concrete and tangible benefits provided by adaptation interventions, rather than progress towards activities and annual expenditure. This will provide lessons learned that will be able to inform future development planning and budgeting for climate change adaptation and DRM.

The M&E framework will also feed into a centralised database on climate change adaptation and DRM. This database will build on the databases developed through NAPA projects and other initiatives, providing a central clearing house for information on climate change adaptation. The database will also provide a foundation for improved knowledge sharing. This knowledge sharing will enable government institutions to learn from past activities – both nationally and internationally – on delivery of interventions for climate change adaptation to communities. The knowledge-sharing strategy will feed into the existing GEF regional "Ridge to Reef" project, also implemented by UNDP. The strategy will also be used to guide national awareness raising and inform line ministries on climate change adaptation.

The proposed LDCF project will also raise awareness among communities on climate change adaptation and DRM. This will build community-level capacity to respond to climate change and extreme weather events. Communities will be informed on how to enhance the climate resilience of community assets and livelihoods, based on results and lessons learned from the interventions under Component 2. Particularly important for this purpose will be the results from the pilot quasi-experimental design under Output 2.1.3.

### Output 3.1.1. Knowledge management strategy developed, including national awareness campaigns and information sharing through existing international platforms and new multimedia platforms

- **3.1.1.1** Develop protocols for storage and sharing of information/data between government institutions.
- **3.1.1.2** Establish a national climate and disaster risk database that is centralised and accessible to all Ministries.

- **3.1.1.3** Develop and pilot plan for systematised uploading and monitoring of data and information generated by adaptation projects in Samoa (particularly taking into account results from the quasi-experimental design) onto regional and international platforms such as the Ridge-to-Reef programme.
- **3.1.1.4** Conduct awareness campaigns on water resources, land management, village development, climate change adaptation and DRM.

# Output 3.1.2. M&E system established to strengthen institutional coordination and enhance the effectiveness of the interventions on adaptation with an economy wide approach.

- **3.1.2.1** Review current M&E systems to identify best practices and opportunities for standardisation of reporting modalities.
- **3.1.2.2** Establish a national M&E framework with guidelines for collecting, analysing and reporting of data on water resources, land management, village development, climate change adaptation and DRM.
- **3.1.2.3** Develop a standardised reporting modality to enable harmonised monitoring, evaluating and reporting of expenditure and progress of interventions for climate change adaptation.
- A.6 Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:

While the wording of the project risks have been altered since the original PIF to make them more specific, they remain based on the same underlying principles. Additional risks and appropriate mitigation measures have been identified since the original PIF. These risks are summarized in the table below.

Description	Туре	Impact & Probability	Countermeasures / Management Response	Assumptions
Poor coordination with AF and PPCR projects reduces opportunities for collaboration and alignment with interventions under LDCF project.	Operational & Strategic	P = 2 I = 2	Develop strong coordination arrangements between LDCF project and AF/PPCR projects.  Use common members of Project Board (PB) and Technical Advisory Team (TAT) to coordinate workplans and procurement processes.  Ensure regular communications of updates between project boards.	Constant coordination between projects ensures continuous progress that is complementary and aligned.
Delays in progress of baseline projects prevent implementation of interventions under LDCF.	Operational & Strategic	P = 2 I = 2	Ensure regular communication of targets and workplans between LDCF and baseline projects.  When delays seem imminent, PB members to advocate for accelerating processes or design alternative strategies to deliver on outputs.	Constant coordination with baseline projects ensures that LDCF project can build on ongoing initiatives.
High staff turnover affects project implementation.	Operational	P = 3 I = 4	Explore a partnership between the University of the South Pacific, the Secretariat of the Pacific Community and GoS, whereby national students or new graduates can be fast-tracked into working in the project in the case of staff turnover. These students could join the project as interns or on a time-bound entry-level contract. This will not only directly contribute to the project implementation capacity, but also help build a pool of young professionals who can contribute towards future initiatives in the environment space.	Low rates of staff turnover and proper handover procedures ensure continuity. Mechanisms for recruiting new staff quickly will minimise delays.
Community participation decreases as benefits of	Organisational	P = 3	Maintain constant communication with communities concerning project	Constant communication and management of expectations

adaptation measures and project interventions are not immediately evident.		I = 4	progress, targets and expected benefits. Implement tangible and visible activities to address community priorities early during project implementation.  Manage community expectations to ensure that they are aligned with project scope.  Disseminate project findings and lessons learned through appropriate media to maintain project profile and positive community perception.	ensures continuous community involvement throughout planning and implementation.
Competing mandates and poor coordination between government agencies/line ministries disrupt project activities.	Political	P = 2 I = 3	Continuously inform policy- and decision-makers of project aims and potential synergies with other projects as well as on-going government initiatives. Demonstrate links between on-the-ground implementation and policies/strategies, with particular reference to contributions to relevant mandates of line ministries.  Engage with relevant Sector Coordination Units to ensure alignment of project with sectoral priorities.	Proper coordination between government agencies enhances and sustains project progress that is aligned with sectoral adaptation priorities.  MNRE Climate Change Unit and MoF-CRICU will ensure a programmatic approach and coordination of adaptation work.
Disaster events/ hazards destroy or delay project interventions.	Environmental	P = 2 I = 4	Maintain contact with Met Office to ensure adequate lead time when disaster is imminent. Schedule project activities during low storm risk periods to reduce likelihood of extreme climate events.  Monitoring potential extreme events and ensure coordination of preparation and responses with the national DRM framework.	Adequate monitoring of potential risks ensures that impacts of these risks are mitigated.
Land disputes amongst community members hamper implementation of adaptation interventions.	Organizational	P = 1 I = 4	Ensure adequate consultation with targeted communities throughout planning, design and implementation of project interventions.  Maintain strict adherence to approved national practices concerning community involvement.  Ensure that project activities are aligned with community priorities in a culturally and social responsible manner.	Socially sensitive approaches to project activities that are in line with approved national practices will prevent land disputes from arising.
Limited human resources in government ministries and agencies delay project activities.	Operational	P = 1 I = 3	Adequately resource the PMU including the securing of positions to be recruited for key technical support.  Ensure alignment with PPCR/AF technical assistance.  Monitor project processes to identify limitations timeously and allow for alternatives to be implemented.	Human resources in government ministries and agencies will be sufficient to ensure successful implementation of project activities.
Project interventions are not implemented in a gender- and culturally-sensitive manner.	Operational	P = 2 I = 4	Ensure that project team is sensitised to gender and cultural sensitivities.  Involve women committees and traditional authority structures in planning and implementation of project activities.	Involvement of women committees and traditional authority structures will ensure gender and cultural sensitivity of project interventions.
Insufficient political and financial support from	Political	P =2	Consistently reinforce the importance of adherence to agreed-upon roles and	Adequate political and financial support contributes to successful

line ministries and other government departments/agencies.		I = 2	responsibilities for project progress. Update governmental decision-makers of project progress in order to garner highlevel support and political will.	implementation of project interventions.
Communities and governmental stakeholders don't distinguish resilience to climate change from baseline weaknesses.	Operational	P = 1 I = 2	Maintain proactive outreach communications strategy for duration of programme, including tailored awareness raising activities linked with the assessment, consultation and planning of adaptation interventions.	Awareness-raising of communities allows them to perceive adaptation benefits of project interventions.
Unanticipated social and/or environmental impacts are caused by project activities.	Strategic	P = 1 I = 4	No interventions will be implemented unless they have adequate measures for mitigating social and environmental impacts.  Constant monitoring of design/planning to ensure adequate mitigation measures are included.	Proper design and planning of project interventions will mitigate social and environmental impacts.

#### A.7. Coordination with other relevant GEF financed initiatives

No significant deviations were made from the PIF. The project has been designed in full alignment with the portfolio of GEF projects that are currently in implementation phase. The project will align with the following GEF-financed initiatives:

- Integrating Climate Change Risks into the Agriculture and Health Sectors in Samoa (LDCF);
- Integration of Climate Change Risk and Resilience into Forestry Management (LDCF);
- Pacific Adaptation to Climate Change (LDCF);
- Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (GEF)
- Strengthening Multi-Sectoral Management of Critical Landscapes (GEF); and
- Enhancing the Resilience of Tourism Reliant Communities to Climate Change Risks (LDCF).

### B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

Stakeholders at both national and local levels will be engaged during implementation of the proposed LDCF project. During the validation mission, the plan for stakeholder engagement during project implementation was discussed and agreed upon during bilateral consultations and one-on-one meetings with relevant stakeholders as well as during the validation workshop, as presented in the table, below.

# RELEVANT PARTNERS AND STAKEHOLDERS IDENTIFIED FOR ENGAGEMENT BY PROJECT OUTCOME/OUTPUT.

Outcome	Output	Stakeholder	Key Responsibilities
Outcome 1.1. Policy	Output 1.1.1. Climate change	MNRE	Integrate climate change into
Strategies/Institutional	adaptation mainstreamed into	MoF	sector plans and budgets.
Strengthening	development plans and	Sector	Develop National Climate
	sectoral strategies	coordination	Change Adaptation Strategy.
		units	Align Strategy for the
		Other line	Development of Samoa (2017-
		ministries	2021) with the National
			Climate Change Adaptation.
	Output 1.1.2. Institutional and	MNRE	Coordinate climate policy-
	operational frameworks for	MoF	making, planning, and
	coordination of climate change		implementation.
	adaptation strengthened		Stocktake current and planned
	-		climate change adaptation

Outcome 1.2. Public finance management at the national and village level	Output 1.2.1. MOF and MNRE climate change units – as well as the private sector, NGOs and village governance structures – have enhanced capacity to manage climate finance	MoF MNRE CSOs/NGOs (e.g. SUNGO)	projects, plans, reports and assessments. Establish Climate Change Unit. Develop guidelines for CRICU functions.  Develop guidelines for community management of climate change projects. Train communities on managing finances for climate change. Develop guidelines/toolkits methodology for biennial analysis of climate expenditure. Produce three reports on climate change expenditure.
Outcome 2.1. Protection of communities' physical assets and livelihoods	Output 2.1.1. Integrated Watershed Management Plan for Greater Apia following "Ridge-to-Reef" approach.	MNRE MWCSD LTA Other ministries	Develop an integrated management plan for the Greater Apia area.  Design flood protection measures to build resilience of communities.
	Output 2.1.2. Hard and soft measures for protection of community assets	MNRE MWCSD LTA	Build flood protection infrastructure along Vaisigano River. Implement ecosystem-based approaches to watershed management. Reconstruct community assets following "build-back-better" approaches.
	Output 2.1.3. Sustainable micro-enterprises for youth and women on agrobusinesses with a sustainable and resilient value chain approach to promote diversified livelihoods.	Private sector CSOs/NGOs (e.g. WIBDI, SROS)	Assess agricultural and handicraft value chains. Train women and youth on technical skills for agricultural and handicraft value chains. Provide planting materials and household processing facilities.
Outcome 2.2. CCA/DRM plans and implementation	Output 2.2.1. Building on the work of DMO, village plans designed and implemented to develop the capacities of 100 communities to prepare, respond, recover and manage CC risks	MNRE MWCSD CSOs/NGOs (e.g. Red Cross)	Conduct household surveys and analyse data to map vulnerability to climate risks. Develop and implement Village Disaster Risk Management Plans.
Outcome 3.1. Knowledge about CCA and DRM is captured and shared at the regional and global level.	Output 3.1.1. Knowledge management strategy developed, including national awareness campaigns and information sharing through existing international platforms and new multimedia platforms (feeding into R2R programme)	MNRE MWCSD	Develop protocols for storage and sharing of information/data. Establish national climate and disaster risk database. Pilot plan systematised uploading and monitoring of data and information. Conduct awareness campaigns

		on water resources, land management, village development, climate change adaptation and DRM.
Output 3.1.2. M&E system established to strengthen institutional coordination and enhance the effectiveness of the interventions on adaptation with an economy wide approach	MNRE MoF	Establish national M&E framework for water resources, land management, village development, climate change adaptation and DRM. Develop a standardised reporting modality to enable harmonised monitoring, evaluating and reporting on climate change adaptation.

B.2 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 adaptation benefits:

#### National and local benefits

At the national level, the proposed LDCF project will enable strategic integration of climate change adaptation and DRM in national policy frameworks and sectoral development across all sectors. The direct consequence of this approach will be: i) enhanced capacity to integrate climate change adaptation and DRM into development planning; ii) stronger institutional coordination of climate change adaptation and DRM initiatives; and iii) dedicated allocation of funding for recurrent expenditure on climate change adaptation and DRM in government budgeting processes. By following an economy-wide approach to adaptation, the GoS will be better able to address national priorities for sustainable development in a climate-resilient manner. This will benefit the people of Samoa in the short-, medium- and long-term as they will be less impacted by the effects of climate change owing to climate-resilient service planning and service provision in critical sectors such as water, sanitation, agriculture and health.

The proposed LDCF project will implement prioritised "build back better" activities outlined in the National Recovery Plan (NRP). Critical infrastructure damaged by Cyclone Evan will be rebuilt following climate-resilient approaches. In addition, community and economic assets will benefit from improved watershed management including the construction of flood protection infrastructure. Consequently, these assets will be less vulnerable to climate-induced natural disasters. The NRP is contributing US\$62 million towards the proposed LDCF project as parallel investment co-financing.

The project has been designed to build on the recommendations of the Post-Disaster Needs Assessment (PDNA) regarding land-use management. At present, the population of Apia is growing as a result of urban migration. As such, it is imperative that the vulnerability of people and infrastructure in Apia to climate-induced natural disasters is reduced. For example, development along the Vaisigano River is vulnerable to flooding as a result of extreme precipitation events and coastal inundation. DRM in such areas will require integrated development planning and land-use zoning that takes climate risks into account. Activities under the proposed LDCF project include integrated watershed management planning, construction of protective infrastructure and climate-proofing of vulnerable community assets following the "build back better" approach. This will provide benefits to at least 12,000 people living within the Vaisigano watershed. Direct benefits from these interventions include: i) reduced risk of damage to public and private infrastructure/assets; ii) reduced possibility of loss of life; and iii) enhanced land value in flood-prone areas. Indirect benefits include: i) reduced losses in income/sales; ii) reduced costs of clean-ups, maintenance and repairs; iii) reduced costs of relief and response efforts; and iv) reduced possibility of health hazards. In addition to these 12,000 direct beneficiaries, the general population of Samoa will benefit from the safeguarding of critical economic assets in Apia. For example, protection of the Apia Harbour as well as critical road and bridge infrastructure in the Apia area will benefit livelihoods across both Upolu and Savai'i as there will be more reliable access to markets for agricultural and trade goods. Furthermore, protection of the Alaoa Dam will improve the reliability of the water and electricity supply, particularly during emergency periods when these are in high demand.

The proposed LDCF project will build on the recommendations of the PDNA to support livelihoods, particularly those related to agriculture. The project will promote diversified livelihoods related to agricultural and manufacturing value chains to develop resilient micro-businesses. Diversified livelihoods will improve household-level income, which will in turn promote savings and can be expected to catalyse larger investments into activities that result in improved ability to respond to and recover from climate-induced natural disasters. This will enhance the capacity of households and individuals to respond to climate-induced natural disasters and strengthen their ability to cope with and adapt to the expected effects of climate change in the short-, medium- and long-term. A total of 300 beneficiaries will receive support for agricultural livelihoods and a further 300 beneficiaries will receive support for handicraft livelihoods. This support will result in households being capacitated to add value to their products and thus receive a greater share of the profits on those products. Participants in project activities are expected to have higher levels of income that will allow them to increase savings and/or further invest in productive assets. This will strengthen their capacity to recover autonomously from eventual climate shocks as well as invest in health care, education, nutrition and other social outcomes.

### **Gender considerations**

The project has been designed with a strong focus on gender considerations<sup>9</sup>. The results of multiple consultations with Government officials, NGOs, CSOs and other stakeholders informed the design of Outputs 2.1.3 under Outcome 2.1 as well as Output 2.2.1 under Outcome 2.2 (see Annex 5). In addition, there is overall alignment of project activities with the specific needs of women and other vulnerable groups. For example, reconstruction activities will provide specific opportunities for women to be involved in skills development and gainful employment. The implementation of village-based DRM plans will cater specifically for the needs of women in disaster preparedness and response. Diversification of livelihoods will focus on gender-sensitive agriculture and handicraft opportunities. Finally, the knowledge management and M&E framework will identify successes and gaps in providing benefits for women.

The LDCF project focuses on gender equality and the use of a community-based approach. Consequently, project interventions are community-centred and gender-sensitive to promote social equity and equality. Consultation with community groups – including women and youth – will ensure that interventions take place in a culturally-appropriate manner. Benefits for local communities include *inter alia*: i) reduced vulnerability of communities to natural disasters; ii) positive effects on health; and iii) improved livelihoods. Consequently, the project is expected to have positive socioeconomic effects.

Specific involvement of women and women specific activities have been mainstreamed and are fully integrated in the proposed Project Document. They are budgeted under relevant Outcomes (Section 2.4 of the project document) and are presented in the Total Budget and Workplan (Section 4 of the project document). This equal participation of women and men is 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). Gender disaggregated indicators will be developed and used to monitor project progress. In addition to gender, the project will promote the requirements of other disadvantaged and more vulnerable groups including the elderly, children and less-abled.

### B.3. Explain how cost-effectiveness is reflected in the project design:

The proposed LDCF project has been designed with an inherently cost-effective approach. The project objective is to enhance integration of climate change adaptation and DRM into development sectoral planning as well as enhancing the resilience of communities to climate change. The project will implement measures that have been shown to be cost-effective in reducing vulnerability to climate change. These measures include: i) building capacity for integration of climate risks into planning across all sectors; ii) strengthening the climate resilience of community assets and livelihoods; iii) investing in disaster prevention and preparedness; and iv) enhancing knowledge management and awareness of climate change risks and adaptation. Alternative approaches to reducing climate

<sup>&</sup>lt;sup>9</sup> The USAID-funded project ADAPT Asia-Pacific provided additional technical assistance by making available the services of a gender and social issues specialist in the UNDP-led project design team.

vulnerability were considered during the design of the proposed LDCF project. An evaluation of their cost-effectiveness vis-à-vis that of the interventions proposed in Section 2.4 is described below.

### **Cost-effectiveness of policy-level interventions**

### Alternative: Continued focus on vulnerabilities of individual sectors to climate risks

This approach – as characterised by the implementation of various NAPA projects in Samoa – is aimed at reducing climate risks in the short term. The various government agencies would implement interventions based on their respective mandates. However, the expected effects of climate change in Samoa are likely to result in cross-sectoral impacts that would require a more integrated approach to prevention and management. For example, flooding as a result of tropical cyclones will have wide-spread implications for agriculture, infrastructure, health, water resource management, energy and transport. Facilitation of an economy-wide approach to reducing climate vulnerability will promote more sustainable and efficient management of climate risks. This would also build on the strengths of MoF's role in coordinating policy and planning across all sectors through implementation of the SDS 2012–2016. For these reasons, the actions proposed under Outcome 1.1 – relating to strengthening of national policies and institutions – and Outcome 3.1 – relating to knowledge management and M&E – have been designed to promote cross-sectoral planning for climate change adaptation. In addition, the actions proposed under Outcome 2.1 will coordinate the building of climate resilience across a number of sectors including water, housing, sanitation, agriculture and manufacturing. This economy-wide approach will allow GoS to address national priorities for climate change adaptation across all sectors in the short-, medium- and long-term.

### Cost-effectiveness of proposed flood protection measures

### Alternative: Implementation of exclusively hard adaptation measures for flood risk management

This approach would only implement "hard" infrastructure – such as dykes, levees and sea walls – to reduce the risks of floods resulting from tropical cyclones. Under this option, such infrastructure measures would be built in Apia where flood damages during the recent Cyclone Evan were greatest. However, this approach was rejected for various reasons. Firstly, hard adaptation measures are considerably more expensive and riskier than softer measures such as ecosystem management-based measures. During the development of this project proposal, a potential alternative plan for implementation of exclusively hard infrastructure in Apia only, was budgeted at US\$ 12 million by LTA (not counting feasibility studies, nor EIAs). This plan would have accounted implementation only in the lower watershed (mainly roads, bridges, and rockwalls) and would consequently reach fewer beneficiaries. After several consultations, it was recommended (and agreed by GoS) that thorough feasibility studies are performed first, stemmed from the recommendations of an Integrated Watershed Management Plan. The IWMP would use a ridge-to-reef approach so as to reduce transfer of risk up- or down-stream. This approach would not only take into account upstream and downstream measures, but also soft, ecosystem-based adaptation measures. Budget was significantly reduced while still accounting for feasibility studies and further cost-benefit analysis of the options presented in the IWRM. The IWRM is intended to propose a mix of hard and soft adaptation measures that would be thoroughly assessed and costed as part of its design. Second, hard measures often have a focus on preventing damage from disaster events rather than reducing the risk of disaster events occurring. Such adaptation measures will reduce both the risk of disaster events occurring as well as the impact of such events if they do occur. The proposed design will see upstream implementation of hard and soft measures such as reforestation and construction of check dams of degraded catchments to reduce the risk of floods to at least 12,000 beneficiaries. Along with this, the project will support implementation of downstream interventions such as diversion channels and riverbank stabilisation to protect economic infrastructure and community assets. This blended approach using both hard and soft adaptation measures is expected to prove less costly and provide protection to more beneficiaries than the exclusive implementation of hard infrastructure.

### Alternative: Nation-wide implementation of measures for flood risk management

This approach would see hard and/or soft measures for adaptation through flood risk management being implemented across various districts and in various catchments across Samoa. Such a design would see greater

geographic coverage of the proposed interventions. However, this approach was precluded in preference to design and implementation of adaptation measures for flood risk management only in the Greater Apia area. This is because the population of the Greater Apia area constitutes ~20% of the population of the entire country. In addition, loss-and-damages caused by Cyclone Evan in the Greater Apia area were 10 times greater than those occurring in all but four of the districts in Samoa. Finally, most of Samoa's economically important infrastructure occurs within the Greater Apia area. Examples of this infrastructure and the effects of flooding are described below.

- Apia Harbour. The harbour was temporarily closed as a result of debris such as tress and logs as well as sedimentation washed into the harbour during Cyclone Evan. The harbour is a critical link between the islands of Upolu and Savai'i and is one of the best-performing ports in the Pacific region.
- Alaoa Dam. This dam provided both drinking water and hydro-electric power prior to Cyclone Evan. However, the capacity of the dam to provide these services was compromised by logs and trees blocking the dam as well as the destruction of the water supply pipes. This had severe impacts on the quality of life of Samoans immediately after Cyclone Evan.

The high proportion of Samoa's population living in the Greater Apia area and the concentration of critical economic infrastructure in Apia make it more cost-effective to focus on implementation of flood protection measures here rather than spreading such measures across a number of districts.

### Cost-effectiveness on proposed livelihood diversification measures

### Alternative: Crop insurance against climate risks

Crop insurance was identified as a potential solution to compensate farmers against losses incurred owing to climate-induced natural disasters. However, such insurance mechanisms are reliant on inter alia: i) comprehensive climate monitoring systems that are explicitly linked to crop yields; ii) the ability of farmers to pay insurance premiums; and iii) the willingness and ability of government to subsidise insurance premiums. The implementation of such an insurance scheme was deemed unfeasible for Samoa. Firstly, there is insufficient capacity for climate monitoring and linking this directly to crop yields to inform if/when insurance pay-outs should occur. Secondly, the majority of farmers in Samoa are subsistence farmers with very low levels of income. As such, they would be unable to service insurance premiums and would consequently be unable to participate in insurance schemes. Finally, the GoS is not able to subsidise insurance premiums to the extent required to implement such a scheme. This is compounded by the relative immaturity of the Samoan insurance industry that would make it difficult to obtain the requisite re-insurance to render such a scheme viable. Based on this analysis, it was decided to instead focus the alternative livelihoods component on the development of business incubators through the creation of sustainable and resilient value chains for agricultural and handicraft products. This would allow farmers to increase savings and/or further invest in productive assets, thereby strengthening their capacity to recover autonomously from eventual climate shocks. As there is no financial barrier to participation – i.e. no insurance premiums – this approach is expected to reach more beneficiaries. A total of 300 individuals will receive support for agricultural livelihoods and a further 300 individuals will receive support for handicraft livelihoods.

Further general considerations for the cost-effectiveness of some of the proposed LDCF project's interventions are described below.

### Cost-effectiveness of protection of infrastructure 10

Strengthening of disaster preparedness measures have proven to be more cost-effective when compared to disaster response and reconstruction activities. <sup>1112</sup>For example, the inclusion of disaster-resilient features in the design of new construction projects is estimated to increase construction costs by 1%. In comparison, the cost of repair and

<sup>&</sup>lt;sup>10</sup> For more information on the costs and benefits involved, see Annex 6.

<sup>&</sup>lt;sup>11</sup> Kellett, J. &Peters, K. 2013. *Dare to prepare: Taking risk seriously*. Overseas Development Institute.

<sup>&</sup>lt;sup>12</sup> Shyam, K.C. 2012. Cost Benefit Studies on Disaster Risk Reduction in Developing Countries. EAP DRM Knowledge Notes. Working Paper Series No. 27.

reconstruction of damage caused by climate-induced natural disasters is estimated to be 35-40% of total construction costs13. A case study of the damage caused by Hurricane David (1979) showed that losses totalling ~4.2% of construction cost could have been avoided by investing an additional 1.9% of original construction costs in climate-resilient measures<sup>14</sup>.

The LDCF project will implement measures for integrated watershed management to reduce risks posed by flooding in the Greater Apia area. According to the PDNA (2012), the total cost of damage and losses from Cyclone Evan was estimated at US\$203 million which equates to more than a quarter of the country's GDP. This included damage to physical assets totalling ~US\$ 103 million as well as production costs and losses of an additional ~US\$ 100 million. Without implementation of appropriate counter-measures for such climate risks, economic assets are threatened by damage critical infrastructure while resources are likely to be diverted away from development spending – such as health and education – towards disaster response and reconstruction efforts. This project will reduce such risks by protecting critical economic and community assets from climate-induced disasters. This will include upstream, "soft" interventions to address the root causes of vulnerability. There is growing evidence of the cost-effectiveness of such investments15. An economic analysis of adaptation measures compared the costs and benefits of "soft" interventions, "hard" interventions and a combination of both approaches. The analyses demonstrated that "soft" interventions are twice as cost-effective as "hard" interventions (benefit-to-cost ratios of US\$10.50 versus US\$4.80), while strategies that combined these approaches were likely to reduce losses resulting from disaster by 25% with a benefit-to-cost ration of US\$4.30–8.00<sup>16</sup>.

Investments into project interventions will contribute to safeguarding long-term socio-economic development. In particular, critical economic as well as household infrastructure will be protected from climate-induced disaster events. Improved management of watersheds in the Greater Apia area will reduce the vulnerability of major transport corridors – such as the east–west corridor over the Leone Bridge – and other commercial links to climate risks. This will enhance the resilience of economic activity by maintaining connectivity and access to markets. In addition, it will enhance the safety and welfare of communities as they will have improved access to government services such as health care and support for post-disaster recovery. As detailed in the Samoa Infrastructure Vulnerability Assessment Report (Annex 6), the design of flood-protection measures derived from the recommendations in the IWMP will have to include an appropriate cost-benefit analysis before any construction activity is conducted.

### **Cost-effectiveness of strengthening value chains**

Supporting growth in the agricultural sector has been shown to be more than twice as effective in poverty alleviation when compared to growth in other sectors<sup>17</sup>. Investments in agriculture are more cost-effective for increasing household-level income than comparable investments in roads and other infrastructure18. Supporting value chains – agricultural and otherwise – will improve efficiency and strengthen linkages between producers, processors and buyers. This more efficient organisation of value chains will allow greater benefits to accrue to primary producers, while at the same time improving reliability and quality of supply to buyers and consumers. Analysis of value chains will link suppliers to markets and strengthen the ability of the suppliers to produce

<sup>14</sup> Vermeiren, J., S. Stichter, and A. Wason. 2004. *Costs and Benefits of Hazard Mitigation for Building and Infrastructure Development: A Case Study in Small Island Developing States*.

Available at http://www.preventionweb.net/files/1177\_CDMPCostsandBenefits.pdf. Accessed on 12 Dec 2013.

<sup>&</sup>lt;sup>13</sup> Pereira, J. 1995. *Costs and Benefits of Disaster Mitigation in the Construction Industry*. Caribbean Disaster Mitigation Project.

<sup>&</sup>lt;sup>15</sup> Jones, H.P., D. G. Hole & E. S. Zavaleta. 2012. Harnessing nature to help people adapt to climate change. *Nature Climate Change* 2: 504-509.

<sup>&</sup>lt;sup>16</sup> Rao N.S. et al. 2013. An economic analysis of ecosystem-based adaptation and engineering options for climate change adaptation in Lami Town, Republic of the Fiji Islands. SPREP Technical Report. Apia, Samoa.

<sup>&</sup>lt;sup>17</sup> Ligon, E. & Sadoulet, E. 2007. *Estimating the Effects of Aggregate Agricultural Growth on the Distribution of Expenditures*. Background Paper for the World Development Report.

<sup>&</sup>lt;sup>18</sup> Oehmke, J.F. 2012. *Impacts of USAID-supported Agricultural Programs on Household Income Growth and Cost-Effectiveness for Poverty Reduction*. USAID Policy Brief.

commodities according to exact product specifications. Raising the productivity and income of value chain actors will allow producers to develop high-return production systems and use their livelihood assets more optimally. Consequently, small-scale producers will have greater capacities for increasing the amount of produce they can supply at the requisite levels of quality. Where quality of products is of particular concern, improved access to processing technology provides a cost-effective means for compensating <sup>19</sup> as processors are able to supply final products rather than raw materials. For these reasons, strengthening of value chains is considered to be one of the most effective approaches for addressing poverty <sup>20</sup>.

A "rapid economic diagnosis" of the agriculture sector in Samoa was conducted, as part of the project preparatory phase (see Annex 10), to better inform the approach selected to introduce alternative livelihoods. The diagnosis revealed the need and opportunity for strengthening value chains supported by new technologies to promote income generation from agricultural products. It was stated that in the absence of incentives to produce surplus for the market, prevailing circumstances have induced households to gear production towards meeting the subsistence needs of the family unit, in particular if there is cash available from remittances. The prevailing low level of technology compounded by the limited availability of credit may have consolidated both the atomization of market participation and the fragmentation of land use. The overall result has been the amplification of agricultural holdings into operations geared towards home consumption alone. Hence, GoS has recognized the need to address the gap in promoting income-generating activities for households based on diversification of agricultural products.

### C. DESCRIBE THE BUDGETED M &E PLAN:

The M&E budget is presented in the table below.

Type of M&E activity	Responsible Parties	Budget US\$	Time frame
		Excluding project team staff time	
Inception Workshop and Report	<ul><li>Project Manager</li><li>UNDP CO, UNDP CCA</li></ul>	Indicative cost:10,000	Within first two months of project start up
Initial development of M&E following experimental design	<ul><li>Project Manager</li><li>UNDP CO, UNDP CCA</li></ul>	Indicative cost:11,572	Within first 6 months of project start up
Measurement of Means of Verification of project results.	UNDP CCA     RTA/Project Manager     will oversee the hiring     of specific studies and     institutions, and     delegate responsibilities     to relevant team     members.	To be finalised in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and</i> <i>implementation</i> ARR/PIR	<ul> <li>Oversight by Project         Manager</li> <li>Project team</li> <li>Project manager and</li> </ul>	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans Annually
	team UNDP CO UNDP RTA UNDP EEG		·
Periodic status/progress	<ul><li>Project manager and</li></ul>	None	Quarterly

<sup>&</sup>lt;sup>19</sup> World Bank. 2008. *Growth and poverty reduction in agriculture's three worlds.* World Development Report 2008: Agriculture for Development.

Devaney, P.L. 2011. Global Agricultural Value Chains: Sustainable Growth as a Means for Sustainable Development. Community Development Investment Review, Federal Reserve Bank of San Francisco. GEF5 CEO Endorsement Template-February 2013.doc

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
reports	team	X 11 11 11 10 000	
Mid-term Evaluation	<ul> <li>Project manager and team</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost:40,000	At the mid-point of project implementation.
Community consultations at mid-term for M&E experimental design	<ul> <li>Project manager and team,</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost:10,000	At the mid-point of project implementation.
Final Evaluation	<ul> <li>Project manager and team,</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost :40,000	At least three months before the end of project implementation
Community consultations at endline for M&E experimental design	<ul> <li>Project manager and team,</li> <li>UNDP CO</li> <li>UNDP RCU</li> <li>External Consultants (i.e. evaluation team)</li> </ul>	Indicative cost:10,000	At least three months before the end of project implementation
Project Terminal Report	<ul> <li>Project manager and team</li> <li>UNDP CO</li> <li>local consultant</li> </ul>	0	At least three months before the end of the project
Audit	<ul><li>UNDP CO</li><li>Project manager and team</li></ul>	\$20,539	Yearly
Visits to field sites	<ul> <li>UNDP CO</li> <li>UNDP RCU (as appropriate)</li> <li>Government representatives</li> </ul>	For GEF supported projects, paid from IA fees and operational budget	Yearly
TOTAL indicative COST Excluding project team staff time and UNDP staff and travel expenses		US\$ 244,806	

The project will use experimental design principles to assess the project impacts on targeted groups under Outcome 2.1, focusing on the micro-enterprises developed under Output 2.1.3. The experimental design will follow a randomised control trial approach (please see Annex 18 for a more detailed description). During the household surveys conducted as part of the VDRMPs, households will be identified for tracking during project implementation. Households participating in the activities for promoting crop and handicraft value chains will be compared to households that are not involved in the value chains over the course of the project lifespan to determine benefits attributable to project interventions.

The primary goal of the intervention is to improve household welfare in order to build resilience to climate-induced disasters. This is based on the hypothesis that the technical training and involvement in sustainable value chains will lead to improved enterprise outcomes, allowing participants to invest in household welfare. This is likely to include: i) re-investment in ongoing production; ii) improved health; iii) investment in education; iv) increased savings; and v) investment in household and/or enterprise assets.

The household surveys will form the baseline assessment, i.e. before any project activities take place. This survey will collect important demographic and socio-economic data including outcome variables of interest such as income, child and family health indicators, enterprise profits and asset holdings. During the Mid-Term Review of the project, these data will again be collected and evaluated to inform ongoing adaptive management of project activities. During the Final Terminal Evaluation, an endline survey will be conducted. This will allow evaluators to estimate the impact that the project interventions had on the target groups.

### 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): ): (Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Taulealeausumai Tuifuisaa	Chief Executive Officer	Ministry of Natural	04/04/2013
Laavasa Malua		Resources and Environment	

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

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Adriana Dinu UNDP – GEF Executive Coordinator and Director a.i.		Sept. 9, 2014	Claudia Ortiz Regional Technical Specialist	66 (0) 2304 9100 Ext.5092	claudia.ortiz@undp.org

#### ANNEX A: PROJECT RESULTS FRAMEWORK.

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: *Outcome 3.1.1:National capacities and institutional mechanisms strengthened for effective disaster response; plans in place capturing community and CSO participation* 

Country Programme Outcome Indicators: Strengthening Gender Responsive Disaster Risk Reduction and Mitigation Programmes in Communities and Amongst Civil Societies.

Primary applicable Key Environment and Sustainable Development Key Result Area: 3. Promote climate change adaptation.

#### LDCF Strategic Objective and Program: LDCF Climate Change Adaptation

CCA-1: Reducing Vulnerability: Reduce vulnerability to the adverse impacts of climate change, including variability, at local, national, regional and global level.

CCA-2: Increasing Adaptive Capacity: Increase adaptive capacity to respond to the impacts of climate change, including variability, at local, national, regional and global level.

CCA-3: Adaptation Technology Transfer: Promote transfer and adoption of adaptation technology.

#### LDCF Expected Outcomes:

Outcome 1.1: Mainstreamed adaptation in broader development frameworks at country level and in targeted vulnerable areas.

Outcome 1.2: Reduced vulnerability in development sectors.

Outcome 1.3: Diversified and strengthened livelihoods and sources of income for vulnerable people in targeted areas.

Outcome 2.2: Strengthened adaptive capacity to reduce risks to climate-induced economic losses.

Outcome 3.1: Successful demonstration, deployment, and transfer of relevant adaptation technology in targeted areas.

#### LDCF Outcome Indicators (AMAT):

Indicator 1.1.1: Adaptation actions implemented in national/sub-regional development frameworks.

Indicator 1.2.15: % of targeted population benefitting from improved flood management through implementation of hard and soft measures for protection of community assets.

Indicator 1.3.1: Households and communities have more secure access to livelihood assets.

Indicator 2.2.1: No. and type of targeted institutions with increased adaptive capacity to reduce risks of and response to climate variability.

*Indicator 3.1.1:* % of targeted groups adopting adaptation technologies by technology type (% disaggregated by gender).

v G	Indicator	Baseline	Targets End of Project	Source of verification	Risks and Assumptions
Project Objective <sup>21</sup> :	<ol> <li>Increased capacity</li> </ol>	<ol> <li>Capacity for national</li> </ol>	1. By the end of the project, GoS will	Capacity scorecard	Risk: Competing mandates and poor
Establishment of an	within GoS for	coordination of climate	have sufficient capacity for effective	assessment of officials	coordination between government
economy-wide approach	coordination of cross-	change adaptation and	coordination of cross-sectoral actions	within the MoF-CRICU	agencies/line ministries disrupt project
to climate change	sectoral actions for	DRM is presently	for climate change adaptation (Level 5:	and MNRE-Climate	activities.
adaptation in Samoa,	climate change	limited (Level 3:	Fully developed capacity).	Change Unit at MTR	Assumption: Proper coordination between
aimed for efficient	adaptation, including	Partially developed		and FTE.	government agencies enhances and sustains
integration and	planning, budgeting,	capacity).			project progress that is aligned with sectoral
management of	implementing and				adaptation priorities. MNRE Climate Change
adaptation and DRM into	monitoring and				Unit and MoF-CRICU will ensure a
national development	evaluating.				programmatic approach and coordination of
planning and					adaptation work.
programming and	2. Integration of climate	2. Integration of climate	2. The Strategy for the Development of	2. Endorsed Strategy	
enhancing the resilience	change adaptation and	change adaptation and	Samoa 2017–2021 will include key	for the Development of	Risk: Limited human resources in
of communities' physical	DRM into the Strategy	DRM in the Strategy for	performance indicators for climate	Samoa 2017–2021 that	government ministries and agencies delay
assets and livelihoods	for the Development of	the Development of	change adaptation for outcomes relating	includes climate change	project activities.
across Samoa, to climate	Samoa 2017–2021.	Samoa 2012–2016 is	to agriculture, community development,	adaptation/DRM.	Assumption: Human resources in
change and natural		limited.	water and sanitation, transport and		government ministries and agencies will be

<sup>&</sup>lt;sup>21</sup> Objective (Atlas output) monitored quarterly ERBMand annually in APR/PIR GEF5 CEO Endorsement Template-February 2013.doc

					00.1
disasters.			climate and disaster resilience.		sufficient to ensure successful implementation of project activities.
					Risk: High staff turnover affects project implementation.  Assumption: Low rates of staff turnover and proper handover procedures ensure continuity. Mechanisms for recruiting new staff quickly will minimise delays.
					Risk: Insufficient political and financial support from line ministries and other government departments/agencies.  Assumption: Strong political will and financial support will contribute to successful implementation of project interventions.
Outcome 1.1 <sup>22</sup> (equivalent to activity in ATLAS): Policy Strategies/ Institutional Strengthening: Climate change adaptation and DRM mainstreamed in relevant policies, sectoral strategies, sub-national strategies <sup>23</sup> and	1.1.1. Sector plans that include specific budgets for adaptation actions [adapted from AMAT 1.1.1]  1.1.2. Formulation and endorsement of National Climate Change Adaptation Strategy.	1.1.1. At present, 4 sector plans do not include climate change adaptation.  1.1.2. There is presently no National Climate Change Adaptation Strategy.	1.1.1. All 15 sector plans are formulated to include climate change adaptation and are approved by the end of the project.      1.1.2. A National Climate Change Adaptation Strategy is formulated and endorsed by the end of the project.	1.1.1. Updated and approved sector plans.  1.1.2. Formulated and endorsed National Climate Change Adaptation Strategy.	Risk: Competing mandates and poor coordination between government agencies/line ministries disrupt project activities.  Assumption: Proper coordination between government agencies enhances and sustains project progress that is aligned with sectoral adaptation priorities. MNRE Climate Change Unit and MoF-CRICU will ensure a programmatic approach and coordination of adaptation work.
budgeting processes through enhanced coordination of government institutions.					Risk: Limited human resources in government ministries and agencies delay project activities.  Assumption: Human resources in government ministries and agencies will be sufficient to ensure successful implementation of project activities.
					Risk: Insufficient political and financial support from line ministries and other government departments/agencies.  Assumption: Strong political will and financial support will contribute to successful implementation of project

All outcomes monitored annually in the APR/PIR.It is highly recommended not to have more than 4 outcomes.
 Sub-national strategies include district/village strategies and a strategy for Apia
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					interventions.
Outcome 1.2 (equivalent to activity in ATLAS): Public finance management at the national and village level: Capacity to access, manage, implement and	1.2.1. Increase in number of community- managed projects for adaptation to climate risks.	1.2.1. Few community- managed projects for adaptation to climate risks.	1.2.1. At least 20 community-managed projects for adaptation to climate risks.	1.2.1. Review of successful implementation of community-managed projects funded by CSSP and other initiatives.	Risk: Community participation decreases as benefits of adaptation measures and project interventions are not immediately evident.  Assumption: Constant communication and management of expectations ensures continuous community involvement throughout planning and implementation.
monitor use of climate change funds is enhanced at the national and village level.	1.2.2. Improved monitoring of government expenditure on climate change adaptation.	1.2.2. No monitoring of public expenditure on climate change adaptation.	1.2.2. MoF-CRICU and MNRE-CCU have improved capacity to monitor expenditure on climate change adaptation.	1.2.2. Review of CPEIR-style reports of public expenditure on climate change adaptation. Capacity assessments of MoF-CRICU and MNRE-CCU on monitoring of expenditure on climate change adaptation.	Risk: Communities and governmental stakeholders don't distinguish resilience to climate change from baseline weaknesses.  Assumption: Awareness-raising of communities allows them to perceive adaptation benefits of project interventions.
Outcome 2.1 (equivalent to activity in ATLAS): Protection of communities' physical assets and livelihoods: Increased resilience, and decreased exposure and susceptibility of	2.1.1. Number of people benefitting from improved flood management through implementation of hard and soft measures for protection of community assets. [AMAT 1.2.15].	2.1.1. No people benefit from improved flood management from climate-resilient flood protection measures introduced in Vaisigano River catchment for protection of community	2.1.1. At least 12,000 people benefit from improved flood management from climate-resilient flood protection measures introduced in Vaisigano River catchment for protection of community assets (6,000 male and 6,000 female).	2.1.1. Review of infrastructure design to verify climate resilience. Site visits to verify implementation of climate-resilient flood protection measures.	Risk: Poor coordination with AF and PPCR projects reduces opportunities for collaboration and alignment with interventions under LDCF project.  Assumption: Proper coordination between government agencies enhances and sustains project progress that is aligned with sectoral adaptation priorities.
communities to climate change and natural disasters by protection of household and community assets and promoting resilient livelihoods.	2.1.2. Number of people with increased income – compared to the control group – as a result of diversified livelihood practices and more secure access to livelihood assets, disaggregated by age and gender	assets.  2.1.2. No difference in income between targeted and control groups owing to diversified livelihoods and secure access to livelihood assets.	2.1.2. At least 600 beneficiaries adopting diversified livelihoods have demonstrable increases in income compared to the control group owing to more secure access to livelihood assets (400 women irrespective of age and 200 youth irrespective of gender).	2.1.2. Household surveys conducted at baseline (prior to implementation of interventions), MTR and TE/endline.	Risk: Delays in progress of baseline projects prevent implementation of interventions under LDCF.  Assumption: Constant coordination with baseline projects ensures that LDCF project can build on on-going initiatives.  Risk: Community participation decreases as benefits of adaptation measures and project interventions are not immediately evident.  Assumption: Constant communication and management of expectations ensures continuous community involvement throughout planning and implementation.
	2.1.3. Number of people adopting household-level processing facilities transferred to targeted groups –	2.1.3. No people have adopted and utilised household-level processing facilities to support diversified livelihoods	2.1.3. At least 600 beneficiaries participating in project interventions adopt and utilise household-level processing facilities to support diversified livelihoods (400 women irrespective of age and 200 youth	2.1.3. Household surveys conducted at baseline (prior to implementation of interventions), MTR and FTE/endline.	Risk: Disaster events/ hazards destroy or delay project interventions.  Assumption: Adequate monitoring of potential risks ensures that impacts of these risks are mitigated.

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	disaggregated by age and gender [adapted from AMAT 3.1.1]		irrespective of gender).		Risk: Land disputes amongst community members hamper implementation of adaptation interventions.  Assumption: Socially sensitive approaches to project activities that are in line with approved national practices will prevent land disputes from arising.
					Risk: Project interventions are not implemented in a gender- and culturally-sensitive manner.  Assumption: Involvement of women committees and traditional authority structures will ensure gender and cultural sensitivity of project interventions.
					Risk: Communities and governmental stakeholders don't distinguish resilience to climate change from baseline weaknesses.  Assumption: Awareness-raising of communities allows them to perceive adaptation benefits of project interventions.
					Risk: Implemented interventions are not climate resilient.  Assumption: Proper design and planning of project interventions will ensure climateresilience.
					Risk: Unanticipated social and/or environmental impacts are caused by project activities.  Assumption: Proper design and planning of project interventions will mitigate social and environmental impacts.
Outcome 2.2 (equivalent to activity in ATLAS): CCA/DRM plans and implementation: Increased adaptive capacity of communities for implementation of	2.2.1. Number of villages covered by Village Disaster Risk Management plans to reduce risks of and respond to climate variability [adapted from AMAT 2.2.1]	2.2.1. No Village Disaster Risk Management Plans implemented by the project.	2.2.1. At least 100 Village Disaster Risk Management Plans implemented by the project.	2.2.1. Consultations with community members in villages covered by Village Disaster Risk Management Plans.	Risk: Community participation decreases as benefits of adaptation measures and project interventions are not immediately evident.  Assumption: Constant communication and management of expectations ensures continuous community involvement throughout planning and implementation.
effective risk management and protection of household and community assets.					Risk: Communities and governmental stakeholders don't distinguish resilience to climate change from baseline weaknesses.  Assumption: Awareness-raising of communities allows them to perceive

Outcome 3.1 (equivalent to activity in	3.1.1. Increased capacity of government staff to	3.1.1. Low capacity of government staff to	3.1.1. By the end of the project, key officials from MNRE-CCU and MoF-	3.1.1. Consultations with government	adaptation benefits of project interventions.  Risk: Project interventions are not implemented in a gender- and culturallysensitive manner.  Assumption: Involvement of women committees and traditional authority structures will ensure gender and cultural sensitivity of project interventions.  Risk: Communities and governmental stakeholders don't distinguish resilience to
ATLAS): Knowledge about CCA and DRM is captured and shared at the regional and global level.	access information on climate and disaster risks as well as M&E on climate change adaptation.	access information on climate and disaster risks as well as M&E on climate change adaptation.	CRICU will have sufficient capacity for accessing information on climate and disaster risks as well as M&E on climate change adaptation (Level 5: Fully developed capacity).	officials on use of national climate database and M&E framework on climate change adaptation. Capacity scorecard	climate change from baseline weaknesses. <u>Assumption</u> : Awareness-raising of communities allows them to perceive adaptation benefits of project interventions. <u>Risk</u> : Insufficient political and financial
				assessment of officials within the MoF-CRICU and MNRE-Climate Change Unit	support from line ministries and other government departments/agencies.  Assumption: Strong political will and financial support will contribute to successful implementation of project interventions.

#### ANNEX B: RESPONSES TO PROJECT REVIEWS.

### **Comments received from GEF Council Member: Germany**

Comment 1: Germany commends the ambitious project proposal and its objective of establishing an economy-wide approach to climate change adaptation in Samoa. One of the most critical and urgent activities of unequivocal benefit to the Samoan people is the planned further development and scaling up of the implementation of the Community Disaster and Climate Risk Management (CDCRM) programme, as mentioned in paragraph 48 of the PIF.

Response 1: Outcome 2.2 is focussed on the development of community-level Disaster Risk Management plans for 100 communities. This includes a detailed household-level survey in order to pinpoint specific vulnerable community members at risk from climate-induced disasters such as storm surges and cyclones with resultant flooding. The household surveys will form the basis for development and implementation of DRM plans at the village level, enabling these communities to act as "first responders" during disaster events.

Comment 2: We very much appreciate the focus on community level activities that aim to increase resilience to climate change and natural disasters by protecting community and household assets. One intervention mentioned is capacity building in the area of climate financing at the community level. However, it remains somewhat unclear on what foundation these "community-based financial mechanisms or relief programmes" will be built. The PIF does mention the idea of introducing climate risk financing and climate risk sharing through insurance. However, we recommend explaining in the final project document how this approach will be applied to the community level.

Response 2: During the PPG phase, it was requested by the Government of Samoa that the resilience-building of communities would focus on three main aspects, *viz.* protection of assets (under Outcome 2.1), diversification of livelihoods (under Outcome 2.1) and upscaling of community-based DRM plans. This was prioritised over the "community-based financial mechanisms or relief programmes", as there is not yet a basis upon which these could be built. This would have also been a new concept for communities and it was recommended to place more emphasis on building resilience of current livelihood strategies. Communities will also receive capacity building for enhanced access to climate financing through *inter alia* the Civil Society Support Programme and the GEF Small Grants Programme under Outcome 1.2.

Comment 3: We appreciate that the project plans to coordinate with or build upon adaptation work of partners, including German Development Cooperation. Synergies might exist with the "Adaptation to Climate Change in the Pacific Region" programme, the implementation of which is supported by GIZ on behalf of the German Federal Ministry for Economic Cooperation and Development, e.g. with the new measure in Samoa that aims to mainstream adaptation in the fishery sector. We recommend identifying opportunities for exchange and possible cooperation with the above mentioned German-supported programme.

Response 3: The project will be promote the integration of adaptation into all economic sectors through supporting the economy-wide approach that the Government of Samoa has adopted. This will include revision of the Agriculture Sector Plan 2011-2015 – under which fisheries falls – with a view to mainstreaming climate change adaptation into the development of the next Agriculture Sector Plan. This will build on the work of all programmes related to building climate resilience within fisheries and the broader agriculture sector in Samoa.

Comments received from STAP on Programmatic Approach parent project "R2R – Pacific Islands Ridge to Reef National Priorities "Integrated Water, Land, Forests, and Coastal Management to Preserve Biodiversity, Ecosystem Services, Store Carbon, Improve Climate Resilience and Sustain Livelihoods"

UNDP welcomes the STAP comments on the parent programme of the proposed LDCF project. The comments that refer to adaptation benefits are addressed below:

Comment 1: Clarity and Emphasis on Ecosystem-Based Adaptation. Even though there is mention of some EBA activities such as mangrove planting/restoration, greater detail on ecosystem-based adaptation and the way in which EBA will promote resilience to climate change would be helpful. In particular, what is important is not just implementation of ecosystem based adaptation approaches but assessment of how these approaches compare to engineered approaches (e.g., shoreline hardening) i.e., when/where it makes sense to implement EBA. It will be important to show the cost/benefit of EBA compared to engineering approaches to help make the case for nature-based adaptation. Given that many of the activities in the program target national and regional decision-makers, this is of importance.

Response 1: This LDCF project does not focus on pure EBA interventions, but rather, will invest also on hard adaptation interventions (i.e., flood protection infrastructures along Vaisigano River). However, as these interventions will have, and must take into account, ecosystem related effects, the measures which may be implemented will be carefully selected and analysed in the context of the development of a climate-sensitive Integrated Watershed Management Plan, which is to be completed during the project. Implementation of hard and soft adaptation measures will not commence until after the IWMP is completed. Moreover, assessment of options will be based on cost-benefit analyses, feasibility studies, and environmental-impact assessments which have been budgeted under this project. Further, the quasi-experimental design component of this project will also make it possible to extract evidence-based lessons on best practices and lessons in terms of which measures work best to reduce vulnerability in targeted communities.

Comment 2: Connecting community-based adaptation to national and regional planning processes. An initial reading of the child PIFs does not reveal strong connections between the variety of resilience-oriented community level activities and national adaptation planning. Ideally, the vulnerability/adaptation priorities identified by communities should be communicated to and addressed at the national level and vice versa. These connections will strengthen the mainstreaming of adaptation.

Response 2: Component 1 of this LDCF project aims to address the specific issue of integrating climate risks and mainstreaming adaptation into planning of different sectors (i.e., the "economy-wide" approach for integrating adaptation in planning). Specifically, at the national level, the GoS will use LDCF resources to integrate climate change adaptation and DRM into an overall national policy for adaptation as well as within sectoral development planning. This will help Samoa to create a stronger institutional framework for climate change adaptation along with the integration of climate change considerations into budget allocations. A proposed National Climate Change Adaptation Strategy (NCCAS) will be developed by MNRE in alignment with the recommendations outlined in the ongoing Samoa Climate Change Policy Review and Way Forward (being completed in 2014) and in consultation with all relevant stakeholders including the MoF. The NCCAS will form the foundation of the National Adaptation Plan process in Samoa by outlining mechanisms for integrating climate change adaptation into national and sub-national development planning. In addition, the NCCAS will formulate a long-term national adaptation implementation strategy. Development of the NCCAS will take into account the NAP Guidelines produced by the UNFCCC. In addition, MNRE and MoF will coordinate the integration of climate change adaptation and DRM into the next Strategy for the Development of Samoa (2017-2021) as well as sectoral planning for all 15 sectors. Explicit consideration of climate change in on-going

planning and budgeting will support climate-resilience of all aspects of Samoa's planning and budgeting for recurrent expenditure.

Comment 3: Stronger linkages with current initiatives. There are a number of past and current initiatives in Micronesia and Melanesia related to climate change adaptation. It will be important for the program to leverage the knowledge base and networks built through these interventions. Two examples of significant initiatives closely related to the proposed Ridge to Reef program are (supported by the Governments of Australia and Germany respectively): "Building the resilience of communities and their ecosystems to the impacts of climate change in the Pacific" and "Building the resilience of communities and their ecosystems to the impacts of climate change in Micronesia and Melanesia".

Response 3: It has been noted during the development of this project that it is critical that its results and lessons are shared with larger regional networks. Hence, since PIF development, GoS requested that this project be designed in close collaboration with the R2R programmatic approach, so that it benefits from the larger network of development partners, which the R2R programme is linked to. In fact, Output 3.1.1 (under Outcome 3.1 "Knowledge about CCA and DRM is captured and shared at the regional and global level") specifically aims to develop and implement a knowledge management strategy which will be shared through existing international platforms in order to generate information on, inter alia, international best practices on CCA and DRM. This will promote regional exchange of best practices across the Pacific region. It is also expected that the results from the quasi-experimental design pilot will generate credible and transparent evidence which will be analysed and integrated into this and other regional knowledge platforms to increase catalytic leverage of GoS investments, supporting in this way the sustainability and replication of project interventions.

### ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS $^{24}$

### A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF: 200,000						
Project Preparation Activities Implemented	GEF/LDCF/SCCF/NPIF Amount (\$)					
	Budgeted Amount	Amount Spent Todate	Amount Committed			
Component A: Technical Definition and Capacity Needs Assessment	80,000	44,554.59	35,445.41			
Component B: Institutional Arrangements and Stakeholder Consultations	50,000	27,846.62	22,153.3			
Component C: Monitoring and Evaluation	30,000	16,707.97	13,292.03			
Component D: Financial Planning and Co-financing	40,000	22,277.29	17,722.71			
Total	200,000.00	111,386.47	88,613.53			

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.
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