REQUEST FOR CEO ENDORSEMETN/APPROVAL[1]
PROJECT TYPE: Full-sized Project
TYPE OF TRUST FUND:LDCF

PART I: PROJECT INFORMATION

Project Title: Integration of Climate Change Risks and Resilience into Forestry Management in Samoa (ICCRIFS)			
Country(ies):	Samoa	GEF Project ID:[2]	
GEF Agency(ies):	UNDP (select) (select)	GEF Agency Project ID:	4318
Other Executing Partner(s):	Ministry of Natural Resources and Environment	Submission Date:	2011-02-07
GEF Focal Area (s):	Climate Change	Project Duration(Months)	48
Name of Parent Program (if applicable): For SFM/REDD+ ☐		Agency Fee ($):	240,000

A. FOCAL AREA STRATEGY FRAMEWORK[3]

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (a)	Cofinancing ($)
CCA-1 (select)	1.1	1.1.1 1.1.2	LDCF	570,000	540,000
CCA-1 (select)	1.3	1.3.1	LDCF	111,500	170,000
CCA-2 (select)	2.1	2.1.1	LDCF	128,200	240,000
CCA-2 (select)	2.2	2.2.1	LDCF	1,550,300	1,270,000
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)			(select)		
(select) (select)	Others		(select)		
Subtotal				2,360,000	2,220,000
Project management cost[4]			(select)	240,000	310000
Total project costs				2,600,000	2,530,000

B. PROJECT FRAMEWORK

Project Objective: Increase the resilience and adaptive capacity of Samoa's forest areas and communities reliant on Samoa's forestry resources.					
Project Component	**Grant Type**	**Expected Outcomes**	**Expected Outputs**	**Financing from relevant TF (GEF/LDCF/SCCF) ($)**	**Confirmed Cofinancing ($)**
1. Policy mainstreaming and instituional	TA	1. Climate risk and resilience integrated into	1.1 Revised policy frameworks (National Policy	398,200	720,000

[1] It is important to consult the GEF Preparation Guidelines when completing this template
[2] Project ID number will be assigned by GEFSEC.
[3] Refer to the Focal Area/LDCF/SCCF Results Framework when filling up the table in item A.
[4] This is the cost associated with the unit executing the project on the ground and could be financed out of trust fund or cofinancing sources.

strenghtening		lowland agroforestry and upland native forestry policies, strategies and management techniques	on Sustainable Forest Management, Forestry Management Bill), and new National Forest Sector Plan developed with climate change risks integrated 1.2 Forestry-tailored climate early warning and information system developed 1.3 Climate-sensitive Forest Fires Prevention Strategy Developed 1.4 Government officers are trained on climate risk analysis, adaptive policies and planning techniques		
Community-based adaptation implementation	TA	Climate resilient agro-forestry and forestry techniques are demonstrated in lowland and upland areas	2.1 Climate-resilient agroforestry techniques are demonstrated in lowland customary lands at the mid-North Coast lowlands on Upolu Island (from Laulii to Falevao Villages), and in the villages adjacent to Lake Lanoto'o (Uplou) and Mauga o Salafai (Savaii) National Parks 2.2 Climate-resilient agroforestry	1,650,300	1,380,000

			techniques are demonstrated in upland native forestry areas in customary lands at the mid-North Coast lowlands on Upolu Island (from Laulii to Falevao Villages), and at Lake Lanoto'o (Uplou) and Mauga o Salafai (Savaii) National Parks		
Knowledge management	TA	Project knowledge and lessons learned are captured, analyzed and disseminated	3.1 Lessons learned and best practices are generated and shared between local communities, and national stakeholders through appropriate mechanisms. 3.2 Project experience in forestry adaptation is transmitted to education institutions to incorporate knowledge generated in training materials, curricula and school programs, as appropriate 3.3 Knowledge on adaptation practices are presented and shared through regional and global platforms and events	111,500	120,000
	(select)				
	(select)				
	(select)				

	(select)				
	(select)				
	(select)				
	(select)				
Subtotal				2,160,000	2,220,000
Project management Cost[5]				240,000	310,000
Total project costs				2400000	2530000

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

Sources of Cofinancing	Name of Cofinancier (source)	Type of Cofinancing	Cofinancing amount ($)
Bilateral Aid Agency (ies)	JICA	Grant	750,000
Bilateral Aid Agency (ies)	AusAid	Grant	1,250,000
National Government	MNRE, MAF, FESA	In-Kind	470,000
Other Multilateral Agency (ies)	SPC	In-Kind	15,000
CSO	CI	In-Kind	5,000
Other Multilateral Agency (ies)	UNDP	In-Kind	40,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Co-financing			2,530,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in $)		
				Grant Amount (a)	Agency Fee (b)[2]	Total c=a+b
UNDP	LDCF	Climate Change	Samoa	2,400,000	240,000	2,640,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				2,400,000	240,000	2,640,000

E. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Estimated person weeks	Grant Amount ($)	Cofinancing ($)	Project total ($)
Local consultants*	1,158.00	379,000	300,000	679,000
International consultants*	166.50	497,500	820,000	1,317,500
Total		876,500	1,120,000	1,996,500

* Details to be provided in Annex C.

[5] Same as footnote #3.

F. PROJECT MANAGEMENT COST

Cost Items	Total Estimated person weeks/months	Grant Amount ($)	Cofinancing ($)	Project total ($)
Local consultants*	**384.00**	**175,000**		**175,000**
International consultants*				**0**
Office facilities, equipment, vehicles and communications*		**15,000**	**270,000**	**285,000**
Travel*		**30,000**	**20,000**	**50,000**
Others**	Office supplies	**20,000**	**20,000**	**40,000**
	Specify "Others" (2)			**0**
Total		**240,000**	**310,000**	**550,000**

* Details to be provided in Annex C. ** For others, to be clearly specified by overwriting fields *(1) and *(2).

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

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

H. DESCRIBE THE BUDGETED M &E PLAN**:** Note: see as annex with M&E plan and budget table, due to formating difficulties in the template (inability to insert table here)

PART II: PROJECT JUSTIFICATION

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

A.1.1. THE GEF FOCAL AREA/LDCF/SCCF STRATEGIES:

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

Samoa, one of the 48 LDCs, ratified the UNFCCC in 1992 and is eligible for financial assistance from LDCF. Consistent with the Ninth Conference of Parties (COP9), the project will implement priority interventions in Samoa's NAPA in fulfilment of the criteria outlined in UNFCCC Decision 7/CP.7 and GEF/C.28/18. It will catalyze and leverage additional co-financing resources from bilateral and other multilateral sources. The project requests the LDCF to finance the additional costs of achieving sustainable development imposed on an LDCF-eligible country by the impacts of climate change. It is country-driven, cost-effective, and will integrate climate change risk considerations into lowland agroforestry and upland native forestry management plans and national development planning, which are priority interventions that are eligible under LDCF guidelines.

The proposed ICCRIFS project focuses on (i) building stakeholder capacity to increase resilience against and identify options to address climate change risks; (ii) enhancing community capabilities to develop and implement response strategies and measures to respond to the adverse effects of climate change; and (iii) improving local awareness and understanding of communities and other key stakeholders about the necessity and benefits of preparedness for climate change risks, as articulated in the LDCF programming paper and decision 5/CP.9.

A.2. NATIONAL STRATEGIES AND PLANS OR REPORTS AND ASSESSMENTS UNDER RELEVANT CONVENTIONS, IF APPLICABLE, I.E. NAPAS, NAPS, NBSAPS, NATIONAL COMMUNICATIONS, TNAS, NIPS, PRSPS, NPFE, ETC.:

Samoa's national development priorities are set out in the SDS (2008-2012), a four-year roadmap for development activities in key sectors. The SDS is currently in its fourth cycle. The goals and strategies are organized into three priority areas: Priority Area 1: Economic Policies; Priority Area 2: Social Policies; and Priority Area 3: Public Sector Management and Environmental Sustainability, with an overall vision of an 'improved quality of life for all'. Adaptation to climate change is integral to achieving this objective. The national environmental priorities for the current SDS period included numerous climate change activities, based on the SNC, NPCC, the NAPA and the NGHGAS.

A wide range of stakeholders participated in the consultative process for the NAPA, leading to identification of nine priority sectors, as well as recommendations concerning resources to be allocated to climate change risk management, including adaptation. The NAPA objectives are: '(1) to develop and implement immediate and urgent project based activities to adapt to climate change; (2) to protect life and livelihood of the people, infrastructure and environment; (3) to incorporate adaptation measures and goals into national and sectoral policies and goals; and (4) to increase awareness of climate change impacts and adaptation activities in communities, civil society and Government'. Samoa's NAPA6 was submitted to the UNFCCC Secretariat in 2005. (see Annex 4 for more details on the Strategy for the Implementation of the NAPA). Through extensive stakeholder consultations, nine sectors - ranked as: (1) Water, (2) Forestry, (3) Health, (4) Climate, (5) Agriculture, (6) Landuse Planning, (7) Coastal, (8) Biodiversity and (9) Tourism - were identified in Samoa's NAPA as requiring priority actions. For NAPA implementation, it was decided firstly to establish a national Climate Early Warning System (CLEWS) to provide the sectoral climate information to guide planning and decision-making. The Climate Sector would therefore become an integral part of all interventions. Secondly it was agreed to adopt an integrated approach linking a number of sectors or subsectors in the same project to include a wide range of stakeholders, disciplines and experiences. This is approach not only reflected the cross-sectoral nature of climate change but also empowered local communities to participate in community-based adaptation actions, brought together different development partners and Government to provide financial support, and promoted a cooperative and 'whole of Government' approach to address climate change impacts at the national level.

Table 1: The Nine Project Profiles identified in Samoa's NAPA

Priority	Sector	Project Profile
1	Water	Securing Community Water Resources
2	Forestry	Reforestation, Rehabilitation and Community Forest Fire Prevention Program
3	Health	Climate Health Cooperation Program
4	Climate Services	Climate Early Warning System
5	Agriculture	Agriculture & Food Security Sustainability
6	Landuse Planning	Zoning & Strategic Management Planning
7	Coastal	Implementing Coastal Infrastructure Management (CIM) Plans for Highly Vulnerable Districts
8	Biodiversity	Establishing Conservation Programmes in Highly

[6] GoS. 2006. Strategy for the Implementation of the National Adaptation Programme of Actions. MNRE, April (last updated August 2008)

		Vulnerable Marine & Terrestrial Areas in Communities
9	Tourism	Sustainable Tourism Adaptation Program

Note: Shading indicates the project profiles related to ICCRIFS

The NAPA project profiles were restructured by grouping similar sectors and activities in an integrated manner depending on the original priority ranking and investment availability (see Table 1 for details of the ICCRIFS project components). As climate change encompasses all sectors (with the education sector being added in August 2010 - see PPCR), it is anticipated that this integrated approach will bring different sectors, disciplines and interested parties together to address climate change, sharing sectoral resources and individual experiences. It will also provide the opportunity for different development partners to invest in similar adaptation initiatives, raising the necessary co-financing. In the case of the ICCRIFS project, this is demonstrated by the Australian Agency for International Assistance (AusAID) and the Japan International Cooperation Agency (JICA) supporting parallel agroforestry and native forestry projects, respectively. Also critical to the integrated approach is the role of the climate information services sector that operates the CLEWS and provides the sectoral climate reports and other information as a core component of each sectoral adaptation initiative.

The proposed ICCRIFS and other GEF-funded NAPA projects are part of the current LDCF and GEF-Pacific Alliance for Sustainability (GEF-PAS), aimed at providing greater certainty for funding of environmental programmes in PICs. They complement the national activities of the regional Special Climate Change Fund (SCCF)-funded PACC and the Integrated Water Resources Management (IWRM) projects. Aligning these projects in a programmatic manner maximizes the degree of learning and replication of high-impact adaptation solutions. The key focus of the regional IWRM and PACC projects in Samoa are water resources and coastal adaptive management, respectively; both programmes are highly complementary to the ICCRIFS, and its community-based interventions within the 4 water catchments in the ICCRIFS Project Site. ICCRIFS will build on the tools being developed through NAPA 1, ICCRAHS, such as CLEWS and SRIM, for example, to strengthen climate resilient project implementation and monitoring in the forestry sector.

The proposed project will forge linkages with the NAP on Land Degradation, through addressing land-use issues in both lowland agroforestry and native upland forestry areas and promoting sustainable forestry management practices as no-regret and ecosystem-based adaptation measures. It will also contribute to achieving targets outlined in Samoa's NBSAP, by the establishment of community-based conservation areas, as extension of Samoa's existing protected area's system in upland native forests and supporting the control of invasive species to enhance coverage of native forest species that are more resilient to current and anticipated climate change impacts.

Strong linkages will be made with other national projects, including those where UNDP is the Implementing Agency (IA). These include the Sustainable Land Management (SLM) project, ICCRA&HS, the UNDP/GEF-Small Grants Programme (SGP) and the Strategic Priority on Adaptation (SPA)-funded CBA Programme[7]. These programmes address natural resources, climate change adaption and community development issues. The lessons from these on-going programs will be applied to the implementation of the proposed project. Lessons from the project will, in turn, be entered in the UNDP-GEF's ALM platform. Similar linkages will be made with parallel programmes funded by other development partners, including JICA, AusAID and the WB.

PROJECT OVERVIEW:

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

[7] CBA Programme. http://www.undp-adaptation.org/projects

The key climate-related vulnerabilities and their effects on forestry and agro-forestry ecosystems include:

- Drought - increasing frequency of erratic rainfall and low rainfall associated with the El Niño phase of the ENSO lead to household water shortages and increasing stress on groundwater resources, and increased risks of forest fires. Dry periods are more common during the months of April to October, particularly at the rain-shadow north-western areas of both the main islands, Upolu and Savaii. Prolonged periods of drought, usually lasting three months or more, with increased risk of forest fires, have already been recorded on Savaii Island in Aopo, Asau and Falealupo villages, with the first five major forest fires occurring during the drought/dry periods of 1982-83, 1997-98, 2001-02, 2002-03 and September 2010.Extensive forest fires further retard forest succession rates, destroy plantation forests, disrupt ecosystems, pollute the air, destroy vital infrastructure, are a risk to human life and undermine attempts to secure sustainable food security regimes. While pristine indigenous rainforests are rarely susceptible to bushfires, damaged areas covered with secondary growth or invasive species increase the risks of bush fires during dry periods.
- Cyclones – the strong winds associated with cyclones result in severe destruction of vegetation, crops and infrastructure while the heavy rains result in flooding that again causes damage and increases the incidence of vector-borne and water-borne diseases. Tropical Cyclones Ofa (1990) and Val (1991) devastated Samoa causing damage estimated to be about three times that of the GDP, and were especially impacting on Samoa's forest and agroforestry areas.
- More frequent intense rainfall events and associated floodings have been observed in urban Apia over the past decade, inherently linked with poor forestry and watershed management upstream of the city.
- Increasing heat stress on human beings, plants and animals.
- Gradual changes in surface temperature and humidity can affect the composition of forest ecosystems, and the occurrence and extent of forest successions (e.g. cloud forests might move to higher altitudes, and their extension might be reduced in limited areas of mountain ridge tops).
- Impacts in low-lying coastal areas (erosion, saltwater intrusion and coastal inundation caused by sea-level rise, changing intensity of tidal patterns and storm surges), can force people to move further inland and uphill, further clearing forested areas.

Climate change exacerbates the impacts of unsustainable forestry and landuse practices, such as:

- Past large scale logging practices
- Encroachment and clearing of native upland forest areas for logging for wood, expanding grazing areas)
- Community woodlots with single varieties and insufficient maintenance
- Replanting of degraded areas with fast-growing species susceptible to fires and cyclones
- Firebreaks only in few areas with insufficient maintenance
- Mono-cropping and excessive use of chemicals in lowland agroforestry areas
- Over-cutting of vegetation and shifting cultivation without adequate fallow periods
- Free-ranging and uncontrolled pig and cattle grazing

The combined effects of climate change and unsustainable practices reduce the resilience of forest ecosystems, which in turn affect the resilience of the livelihood of communities dependent on forestry goods and services. The proposed project aims at introducing a set of alternative forestry and landuse practices adjusted to changing climate regimes, and supported by an enabling environment through policy changes, institutional strengthening, climate and forestry information management tools, capacity building and knowledge management actions.

A set of existing barriers to build climate resilience, this project aims at addressing is detailed under section 1.5 of the project document.

OUTCOME 1: Climate risk and resilience integrated into lowland agroforestry and upland native forestry policies, strategies and management techniques

Without LDCF intervention (project baseline)

Climate change and its impacts on forest ecosystems and agro forestry areas, and the ability to manage emerging risks in the context of uncertainly are currently poorly understood by Government agencies and more generally by local communities in Samoa. Despite the various national climate change related frameworks (such as NAPA, SNC, National Climate Change Policy, Climate Risk Profiles), the implementation of policy and on-the-ground adaptation measures is still at its early stages, being pursued through a first set of recently initiated sectoral projects (health, agriculture, coastal sector) and a number of community-based adaptation projects.

Endorsed by the CDC in 2007, the current NPSFM recognizes two components of the forestry sector – (i) native and (ii) plantation forests. But except for the statements promoting carbon trading under the objective for forest sustainable development, there are no provisions for climate change risks and hazards related to the forestry sector included in the policy. Likewise the Sustainable Forest Management Bill 2001, currently tabled in Parliament, enforces the NPSFM and deals mainly with the sustainable development of forests. Except for a few senior GoS officials, most of the stakeholders, particularly communities, have only limited awareness or understanding of both documents.

The NPSFM will undergo a review after 3 years of implementation, and based on that a new National Forest Sector Plan (NFSP 2012-2014) will be formulated, making very timely the climate change mainstreaming support of this project. Without the LDCF intervention, policy frameworks and their implementation strategies and instruments will continue omitting the current and potential risks of climate change; an important opportunity will be missed to address climate risks during the NPSFM review and the development of a new NFP, therefore continue hindering systematic institutional adaptation responses, and the development of the needed capacity to undertake them.

The strategies outlined in the NPSFM aiming at forestry conservation and the development of economically viable agroforestry systems on farms is being pursued through a number of projects (such as the planned AusAID Samoa Agroforestry and Tree Farming Program -SATFP, or the JICA Forest Conservation Project - FCP). While these can be useful pursuing no-regret sustainable forest management options, their results can be seriously compromised in the long term due to the lack of integrating climate change risks and resilience, and modifying forestry practices accordingly.

The main spatial information tool for forestry planning and management, the SamFRIS was created in 2004 using aerial photo images from 1999, complemented through ground-truthing and rectified for a GIS system. It included some information on climate zones but deals mainly with forest classification by location and used by the FD for planning and monitoring. Training was provided to FD personnel through FAO but due to on-going staff turnover, only a limited number of senior FD staff are familiar with it and have access to the system's database. While SamFRIS provides a good framework for the monitoring of forestry resources in Samoa, it is today outdated and does not integrate information on current and projected climate conditions. While its revision is planned under the JICA Forest Conservation Project, without the LDCF intervention it will be just applied to selected protected areas, and will miss the opportunity to interlay with climate information provided by CLEWS, as well incorporating other adaptation related tools (such as the Soil Resources Interpretation Manual - SRIM being developed through ICCRAHS)

The Soils Resources Interpretation Manual (SRIM) was first developed for Samoa in 2009 under the GEF-funded ICCRA&HSS project for the agriculture sector. The main focus is to match crop types against soil characteristics and climate conditions in order to achieve climate-resilient agriculture development. The assessment results of what crops grow best in which areas throughout Samoa will be presented on GIS maps and the SRIM for Agriculture is expected to be completd by the end of 2010. While a small number of food, fodder and energy tree species have been included in the initial assessment, most of the native trees have not been considered.

While the main form of energy for rural communities is biomass, energy trees are not formally promoted as cash agroforestry products in Samoa. Energy crops/trees will improve community livelihoods by providing an alternative income stream for farmers, if matched by complementary investment in bio-energy production. The Integrated Food and Energy System (IFES), developed by the FAO, is a very good example of an agroforestry planning tool with great potential for Samoa. Likewise, the integration of forests, agriculture and pastures is another agroforestry tool, as in the SilvoAgriPasture System (SAPS), with potential for local agroforestry development. Livestock production is extremely popular in Samoan agriculture, but is also the most significant threat to the protection of watersheds and upland native forestry areas as existing watersheds and native forests are being continually cleared to create new pastures. The inclusion of fodder trees and pastures would promote sustainable livestock farming in lowland areas at the same time as the protection of CBCAs in upland areas.

Effective adaptation responses in the management of forestry resources requires cross-sectoral coordination (e.g. water resources, agriculture, land use planning). The initial sectoral NAPA projects have been instrumental in supporting national coordination in climate change issues, through the National Climate Change Country Team chaired by MNRE. Without the resources provided through this project, the Forestry Sector and national institutions involved (e.g. Forestry Division, Department of Environment and Conservation, NGOs) will not be able to effectively integrate into national CC coordination processes, pursuing the revision of forestry policy frameworks to incorporate climate risks, create synergies with related national policy frameworks and their implementation mechanisms (such as NBSAP, NAP, IASS, WRMS).

A number of natural resource management policy frameworks and related tools (NRMTs) have been developed for Samoa (See Annex 5) and include the NBSAP and the KBA Gap Analysis for the conservation of terrestrial and marine biodiversity, the National Action Plan (NAP) to address Land Degradation, the National Invasive Species Action Plan (NISAP) (2008-2011), National Water Resources Management Act (2008) and the National Water Resources Management Strategy (NWRMS) (2008-2011) with its legally-binding National Water Resources Management Plans (NWRMPs). The NBSAP has been the main national biodiversity planning document since it was produced in 2001 and has since been updated to reflect changes in Samoa's environment while the KBA Gap Analysis was completed by CI in 2010, mapping the important biodiversity areas for conservation. The NBSAP and KBA Gap Analysis are particularly relevant to the ICCRIFS project as most of the key species and habitats they identify are found in upland customary land areas. Without this project, the above-mentioned processes will not be informed from climate risk and resilient perspectives, and their long-term objectives might be compromised due to expected climate change impacts. The ICCRIFS project will be instrumental to pursue no-regret adaptation measures that will enhance the long-term resilience of forest ecosystems, through effectively linking with these policy frameworks.

The National Policy on Landuse Planning has a focus on promoting sustainable use of Samoa's land resources so that they can best meet the needs of both present and future generations. Samoa's NAP was approved in 2006, aimed at combating land degradation and mitigating against the effects of drought. Both documents note the need for better management of agricultural lands and to promote agroforestry and alley cropping plantations on low-sloping grounds to reduce soil erosion. They also note the need to promote planting of trees along riverbanks to promote conservation of agro-soil on degraded lands within watersheds, sustainable agro-land use practices in hilly-sloped areas in villages that have limited flat lands, as well as organic farming to strengthen food-security programmes to ensure sustainable livelihoods of communities. There is a need to build capacity for the implementation of these proposed measures, with climate risks integrated to ensure that these efforts will be sustainable in the long term. The ICCRIFS project will serve to further these approaches in a climate-sensitive way.

The GEF-funded project on Samoa's Capacity Building and Mainstreaming of Sustainable Land Management is in its 2nd year of implementation. The project aims at building institutional capacity through mainstreaming Sustainable Land Management in the newly developed Natural Resources Management Act, including agricultural sectoral plans. The demo areas of the project are located and limited to Savaii in the Asau and Vaipouli areas. In Asau a training center has been established to ensure that capacity development to train framers in SLM practices are carried out as a measure of reversing

land degradation on a continuous and up-scaled basis. The Vaipouli area serves to demonstrate sustainable management of water resources through water-catchment level management. The SLM project provides useful experience for agroforestry management, but does integrate systematically climate risk information and on-the ground application is limited to 2 sites in Savaii, nevertheless synergies will be established with ICCRIFS to exchange info on land use practices and make them more resilient to current and anticipated climate changes.

NISAP was formulated in 2008, and identified a number of invasive species that are also found in the ICCRIFS project site. They include Albizia, silktree, Merremia, and mile-a-minute. Others such as the African rubber tree, mint weed, Leucaena and African tulip are also likely to be present. The DEC, with its limited resources, has carried out different measure to control the spread of Merremia and myna birds with limited success. With the exception of the DEC staff, there is limited awareness and understanding of the NISAP among FD staff, other GoS officials and communities. Lack of funding has been a major obstacle. Besides the NISAP, the Pacific Invasive Learning Network has supported the capacity building of PICs to reduce the impact of invasive species on biodiversity and sustainable development. Merremia has been identified by villages in project site as a major concern so that whatever activity is carried out in these areas will have to take this into account. DEC experience show that manual cutting of the vine is labor intensive and costly but is the most effective so far. Currently there is very limited knowledge on how climate change might affect the spread of invasive species, posing further risks for native forests. Without the LDCF resources the implementation of NISAP and related efforts to control invasive species might be jeopardized by long term impacts of climate change, and opportunities will be missed to adjust invasive species control practices and needed capacities accordingly.

NWRMS was developed in 2007 to operationalize the National Policy on Water Resources, in line with the Water Resources Management Act 2007. The WRMS promotes the sustainable management of water resources and recognizes that one of the main threats to the quantity and quality of water in Samoa is the uncontrolled clearance of forests within watershed areas. Except for Water Resources Division (WRD) staff, there is only limited stakeholder awareness and understanding of the NWRMS, particularly among rural communities. The EU-funded IWRM project supports the implementation of the Water Resources Strategy under the WRD of MNRE. The project has prioritized water intakes throughout the country and four of these intakes are located in the ICCRIFS community project site. The WRD has over the years worked closely with villages and the FD in the conservation of important catchement areas in Upolu and Savaii. The villages of Laulii, Solosolo, Leusoalii and Falefa have been involved in this project. In addition, an agro-forestry trial has been established in the Faleaseela water catchment area. ICCRIFS will build on these experiences and support the further expansion of tree-planting and watershed management activities within the Laulii-Falevao demo site and the at the Lake Lanotoo and Mauga o Slafai NP demo areas.

Currently there is very little awareness and knowledge of government departments on the use of financial and market mechanisms, tools and initiatives to support climate-sensitive forestry conservation and agro-forestry development, such as Payment for Environmental Services (PES), Clean Development Mechanism (CDM), REDD, Pacific Growers Export Partnership (PGEP), or available micro-credit schemes. UNDP is initiating a regional project to support REDD+ readiness in under-supported countries in the Pacific region, including Samoa, with funding from the Ministry of Foreign Affairs of Japan. This present a good opportunity to raise awareness on market-based climate finance mechanisms, that can be linked to efforts enhancing forest conservation and resilience through ICCRIFS.

CLEWS was developed under the ICCRA&HSS project to provide the CLEWS for Samoa through the provision of regular climate reports of forecasts and trends to the agriculture and health sectors. To enhance the collection and quality of the climate data, the national weather observation network was upgraded with the installation of a number of new automatic weather stations. Without LDCF intervention, the CLEWS will not provide information customized to the needs of forestry planners and practitioners, consequently they will not be able to develop capacity to integrate mid-term seasonal forecasts and longer term climate projections in strategic and management decisions, and in related advisory and extension services provided to communities.

In the lack of a comprehensive Forest Fire Prevention Strategy and adequate capacity and resources to implement it, the national Fire and Emergency Services Authority is underequipped to prevent and control forest fires which are exacerbated due to prolonged and intense droughts. Without developing a systemic forest fire prevention capacity, Samoa's forests will continue to experience increased exposure and vulnerability to climate-induced droughts and consequent forest fires. FESA has fire prevention responsibility within the limits of the Apia township. Although it has assisted combat forest fires in the past, the main focus of its work has been on the protection of buildings and homes. Forest fire prevention is an important aspect of the FD and more recently the Disaster Management Office (DMO), although the latter is more concerned with the loss of lives and properties as a result of forest fires. FESA can offer basic training in fire fighting but has no specific expertise in forest fire fighting which has over the years been a specific responsibility of the FD under the Forest Act. FESA currently pursues enhancing forest fire prevention and control capacity through the AusAID-funded NAPA 4 Adaptation project. The following are the NAPA 4 planned activities and ICCRIFS complementarities:

- Draft a national forest fire prevention strategy: this activity will depend on the ongoing review of the National Fire Plan. ICCRIFS will provide support to integrate climate change risk and resilience considerations, linked with the Climate Early Warning System to be tailored to forestry management purposes.
- Fire prevention mechanisms developed and related training and awareness-raising conducted: NAPA4 aims at revamping the existing fire station at Asau (Savaii), build and equip 2 new ones next to existing forestry stations at Togitogiga (South-central coast of Upolu, and Maota in Savaii). Planned capacity building activities will involve training of forestry extension officers as volunteer fire fighters, conducting public awareness-raising (TV&radio ads on forest fire prevention, community awareness workshops, installation of fire gauge signs and conduct of forest fire prevention drills) targeting the villages in the service area of the above 3 fire stations. ICCRIFS will contribute to integrate climate change considerations in the training and awareness raising materials, and extend the community awareness activities to the project pilot villages, in collaboration with FESA.

The overall awareness and capacity of forestry planners to systematically analyze climate risks and incorporate climate change into forestry plans and practices will remain very limited, which can have serious impacts on forestry resources management if climate change is not considered into the long term planning cycles of forestry management.

Without LDCF intervention, the above-mentioned policy and capacity gaps will persist. Policy makers, development planners and disaster management professionals will not be able to efficiently interpret and integrate climate risk scenarios and adaptive measures into concrete forestry-related policies, plans and programs. Forestry sectoral planners, policy makers and vulnerable communities living in forest areas will not be able to anticipate climate change impacts and integrate these concerns into policy revision, financial planning, decision-making processes and actions.

Above all, without the LDCF intervention, Samoa's forestry and agro-forestry resources will be continuing to degrade under current human pressures exacerbated by climate change, compromising the effects of ongoing capacity development, forestry conservation and agroforestry development efforts, and the livelihoods of rural communities of Samoa that depend on forestry resources.

OUTCOME 2: Climate resilient agro-forestry and forestry techniques are demonstrated in lowland and upland areas

Without LDCF intervention (project baseline)

Climate change and frequency of extreme climatic events, such as prolonged droughts, excessive rains and tropical cyclones, are projected to continue to increase, along with land degradation and forest fires. It is thus highly likely that the current range of baseline interventions will be insufficient to reduce forest vulnerability. Without LDCF intervention, climate change will not be adequately integrated into current and planned agroforestry development and native forestry conservation projects, and the potential for

improved climate-resilient livelihood options for local communities will not be fully realized.

The Key Biodiversity Areas Gap Analysis (KBA), supported by Conservation International and SPREP has been a carried out through a 2 years process, finished in 2010. The analysis has identified 8 terrestrial KBAs and 7 marine KBAs as priorities for conservation effort in Samoa. The 2 National Parks identified as demo areas for this project are included. The upland forestry area of the community demo site on Upolu was not included due to lack of data on threatened species that trigger a KBA. The summary report includes a set of recommendations for further research to increase understanding on species, their biology and conservation; establishment and further refinement of site management, further refinement of KBAs through adding additional biological and social criteria; and effective engagement with communities to enhance management of KBAs on customary land through collaborative efforts between governments, donors, NGOs and community groups. Currently there is limited awareness and understanding of how the results of this analysis can be used for enhanced NP and forestry planning and management. Consequently, the recommendations in the KBA analysis have not been followed up systematically, although a number of projects are using the KBA analysis to identify priority sites for future conservation effort.

The current capacity of the FD is very limited to service the protected areas and agroforestry areas, with only 4 stations that cannot meet demand for supply of native tree species. Similarly, there is very limited capacity to monitor forest ecosystems (with only one surveillance trail in the O le Pupu Pue NP). The main forestry information system, the SAMFRIS is outdated and lacking the full integration of climate information. Consequently, without enhancing FD's capacity to assess and implement systematic adaptation measures, forestry resources will continue to degrade, affected by cyclone damage, drought and forest fires, and expansion of invasive species, amongst others.

Subsistence agriculture is practised by the majority of rural farmers on small plots with few exceptions. When the soil fertility of existing farm plots is exhausted, the land is laid fallow and new plantation land cleared from the virgin bush. Traditional crops are cultivated (e.g. taro, bananas, coconuts) mainly for domestic use, although surplus products are often sold in the Apia or roadside markets. Livestock farming is very popular but practices through poor grazing land management. There are limited agricultural inputs to soil fertility improvement, crop production supply (seeds, planting material), irrigation techniques, so large areas of lowland areas are under-developed. With current massive on-going migration of economically active workers, the shortage of agricultural labor is becoming a major challenge in the agricultural sector (i.e. about 50% of Samoans currently reside overseas because of the above mentioned difficulties further exacerbating cultural erosion (see State of Environment Report, 1993).

The cultivation of plantation forests has not been practiced extensively as most rural households rely on the native forests for their timber/wood requirements. All the plantation forests that were planted by the GoS in the 1970s on leased customary lands have been handed back to the villages, but many had been abandoned or poorly managed. The FD has been promoting the development of community woodlots, through its Community Forestry Program initiated in the early 1980's, but there has been limited commitment by the farmers involved who relied on the FD for supply of seedlings and monitoring. Only round half of the 1000 farmers registered to date in this programme are still active, and the programme has been operating with a very modest budget in recent years. There is still largely a lack of awareness by local farmers of the technical issues and properties related to the various tree species and cultivation techniques. The main species planted under the Community Forestry Program have been Flueggea flexuosa (poumuli) and Swetenia macrophylla (Brazilian mahogany), and native species such as Pometia pinnata (tava), Terminalia richii (malili), Syzygium inophylloides (asi toa), Calophyllum neo-ebudicum (tamanu) and Intsia bijuga (ifilele). Currently there is little understanding on how changing climatic conditions affect the cultivation and production of these and other tree species. With only a small market for wood products, there is little incentive for farmers to plant their own trees, but instead log the native trees on their lands as needed. Without LDCF intervention, unsustainable woodlot management practices and consequently encroachment to native forestry areas will continue, further increasing vulnerability of agro forestry and forestry areas to current and anticipated climate change impacts and risks.

Above all, without LDCF intervention, communities dependent on agro forestry activities in the demo

areas will be lacking knowledge and information on climate risk assessments, available adaptation options, consequently traditional farming practices and livelihoods will continue suffer from climatic variations and change, causing landslides, soil erosion, declining yields. Moreover, the scope of current initiatives will not be broadened to include climate change considerations into national and local planning efforts, focusing on the protection of livelihoods. Livelihoods and coping strategies among rural communities will thus continue to deteriorate as a result of the impacts of droughts, excessive rains, tropical cyclones and forest fires. This will severely constrain subsistence agriculture, forestry development and water resources management.

In the past there have been intents to set up CBCA (terrestrial and marine) with varying levels of success. There have been some limited and initial assessments and community consultations were carried out supported by international and regional organizations (CI and SPREP, respectively) and national NGOs (O le Siosiomaga Society Inc.). Management plans have been drawn up for some CBCAs (e.g. Uafato), and scattered implementation actions have been carried out driven by local champions and availability of limited funds (e.g. Falealupo Canopy Walkway as an ecotourism attraction). In reality, community involvement has been limited, in most areas with no clear commitment. This was due to lack of securing funds for tangible implementation of follow-up actions and lack of clear incentives and sustainable business models linked with livelihood benefits. Even the scattered implementation actions have been discontinued and decaying such as the Falealupo Canopy Walkway and Uafato Community Centre. As a result, most of these CBCAs only exist on paper. Without the LDCF intervention, these past CBCA efforts will remain ineffective and dysfunctional, without clear community commitment and institutional support, lacking a model for participatory management plan, informed on climate risks through decision making and management tools (such as V&A assessments, CLEWS, rehabilitation and forest fire prevention plans, etc.). This will present an impediment to the implementation of no-regret conservation measures that can enhance resilience of forests, exposing upland forestry areas in customary land to further climate change risks, that will result in further fragmentation and degradation of native forests.

Past and current agroforestry and forestry projects have been promoting particular farming techniques (e.g. NGOs promoting, permaculture, organic farming or bamboo planting), addressing native and agro forestry areas separately, but whole of watershed approaches will not be pursued systematically, aiming at enhancing resilience of lowland and upland forestry areas of communities in an integrated fashion. For example, METI established a bamboo experimental plot at the Valilele Permaculture Farm, in order to determine suitable varieties for different uses (shoots to eat, leaves as fodder, trunk as construction material). The NGO has been promoting bamboo planting and providing planting material to its farmer members. METI has been also experimenting with constructions (chicken shelter, fale) using bamboo as building material. Through an EU-funded Permaculture project, demo plots are being established in 10 pilot villages, including Lufilufi village, part of the ICCRIFS demo area in Northern Upolu. These experiences are very valuable to ICCRIFS, but still applied in a pilot basis in Samoa, does not explore the full potential of using such techniques to enhance resilience to climate induced impacts, and provide livelihood benefits at the same time.

Samoa's Protected Areas System on public lands is relatively young, various national parks lack clear establishment of boundaries, including Lake Lanotoo and Mauga-o-Salafai NPs selected as demo sites for the ICCRIFS project. Only Ole Pupu Pue National Park and Mount Vaea Scenic Reserve have established management plans under the JICA PAM Project. Invasive species, such as Merremia peltata, is being controlled through planting trees that create shade and surpass growing of Merremia. It is being carried out only in few areas, given limited FD capacity. Monitoring of forestry ecosystems is not systematic, only one surveillance trail has been established in Ole Pupu Pue NP through the PAM Project. Currently there is a lack of capacity to systematically conduct flora and fauna surveys in existing trails, but there is also a need to extend these activities to other protected areas. The JICA Forest Conservation Project, serving for co-financing ICCRIFS will support the establishment of boundaries for the Lake Lanotoo and Mauga-o-Salafai NPs through catastral surveys, and develop comprehensive management plans, but without LDCF resources, these plans will not be informed systematically on climate change risks, and FD staff and extension services will not have the capacity to interpret climate reports from CLEWS and SRIM and modify management plans and practices accordingly. Consequently, resilience of native forests in NPs to climate change risks will decrease, with

potential further degradation and fragmentation of native forest coverage. Currently there is a lack of understanding and valuation of forestry ecosystem services and related incentives to encourage conservation of upland forest areas and reduce encroachment. Visitor facilities (trails, signage, rest areas, some interpretive materials) have been introduced only to the O le Pupe Pue NP and Mt. Vaea Scenic Area by the JICA PAM project. Currently there are no user fee schemes in place in Samoa.

During the PPG phase linkages has been established with the Pacific FAO office in order to explore linkages with the FAO GEF-PAS Forestry and Protected Area Management Project (FPAM), which is a sub-regional project involving 4 PICs, Fiji, Samoa, Vanuatu and Niue. The development objective of the FPAM is "to enhance the sustainable livelihood of local communities living in and around protected areas". Its Global Objective is to "strengthen biodiversity conservation and reduce forest and land degradation". Synergies will be created especially with the FPAM technical components on community-based conservation management, mechanisms for sustainable protected area financing and sustainable land management in forest margins.

OUTCOME 3: Project knowledge captured, disseminated and replicated

Without LDCF intervention (baseline)

Without LDCF intervention, the technical guidelines, lessons learnt and good practices generated from the project will have impacts only limited to the communities and the government officers directly involved in the projects. Lessons from successful community-based adaptation interventions will not be systematically documented, synthesized, and communicated to wider audiences. Therefore, valuable experience generated from the proposed project would remain inaccessible to users and planners in other communites and countries facing similar challenges. This can compromise in general the replicability and long-term sustainability of the project results.

Without LDCF resources, lessons learnt and good practices will not be captured and disseminated systematically, which can hinder the implementation and linking of the outcomes and output areas of the project, most importantly the effective implementation of adaptation measures in the lack of systematic analysis of V&A assessment results, the review of forestry policies in the lack of informing the process from the demo experience, and the widespread training and information of national stakeholders involved in the lack of a comprehensive dissemination activities through user-oriented means.

Opportunities will be missed to raise awareness amongst the broader public on climate change impacts on Samoa's forestry resources and on adaptation options, if project resources do not support the development and implementation of a comprehensive communication strategy and plan.

MNRE has established a website (www.mnre.gov.ws), managed by its Information Technology Division (ITD), and carried project documents and progress reports. However, there is a shortage of qualified technical staff to prepare project reports for posting and subsequent updates. There is also limited capacity to integrate experiences in regional and global platforms, such ALM.

Without LDCF resources, the project experience will not inform education activities and programmes at the different level, and another important opportunity will be missed to provide enhanced education for future generation of the general public and of forestry professionals. Without systematically sharing lessons learnt, what works best and what does not, the different government departments, NGOs involved in rural development and forestry conservation projects will continue to experiment in an isolated fashion, with a potential risk of duplicating existing efforts and might repeating past mistakes.

Given that this project is one of the first initiatives in the region to implement a combination of on-the-ground adaptation measures and policy changes in the forestry sector, it will be key to share the experience more broadly between communizes of Samoa, in the Pacific region and with broader user and professional circles. Without LDCF resources supporting systematic knowledge management

activities, the replication of project results will be seriously limited, as it has been experienced with some of the past projects (e.g. the CBDAMPIC project that involved communities in the proposed demo area, but have not resulted in systematic follow up and replication activities)

2. INCREMENTAL /ADDITIONAL COST REASONING: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) OR ADDITIONAL (LDCF/SCCF) ACTIVITIES REQUESTED FOR GEF/LDCF/SCCF FINANCING AND THE ASSOCIATED GLOBAL ENVIRONMENTAL BENEFITS (GEF TRUST FUND) OR ASSOCIATED ADAPTATION BENEFITS (LDCF/SCCF) TO BE DELIVERED BY THE PROJECT:

The indicative activities under each outcome and output, proposed to be financed through this project, are detailed in section 2.4 of the project document.

OUTCOME 1: Climate risk and resilience integrated into lowland agroforestry and upland native forestry policies, strategies and management techniques

LDCF intervention (adaptation alternative)

The LDCF will support capacity building among stakeholders in the forestry sector on climate change related policy formulation and the identification and development of adaptive management strategies. It will fund training and capacity building activities for national planners and policy advisors on climate change related policy development, their inter-sectoral linkages and incorporation into national development plans. Through the policy development process, linking with demo activities, awareness will be raised among communities and NGOs on the nature of the strengthened policy provisions and, in particular, the main responses to climate change within the forestry sector. Public officials at all levels will be better able to implement policies that support community-based adaptation initiatives. Technical experts will assist the project in policy development and capacity building, with an emphasis on improved institutional coordination between the key sectors of climate, forestry, agriculture, environment, fire services, water, education, health and community. The linkages between the ICCRIFS and other national projects will also be identified to promote the synergies between the various climate change related interventions.

The existing NPSFM with its strategies, the Forestry Management Bill will be revised and a new National Forest Sector Plan will be developed to integrate climate risks and resilience. This will include responses to climate-induced hazards and their consequences.

Improved coordination among the relevant GoS agencies (MNRE, MAF, MWCSD and FESA) will ensure that the revision of NPSFM is consistent with related policies on agriculture production, biodiversity protection and forest fire prevention. The linkages between these agencies, the private sector and rural communities will be institutionalized to promote dialogue on the effectiveness of the forestry and associated policies to guide the planning and implementation of adaptation measures. Greater stakeholder involvement in policy development and preparation will be promoted through combining top-down and bottom-up approaches..

SamFRIS will be revised to reflect climate impacts on forestry, where the tree species and varieties will be classified by the soils and climate conditions. These will then be cross-checked against the forest resources on the ground to establish a climate-based forestry classification system. Training will also be conducted on the new SamFRIS for forestry planners, GoS officials and project staff, looking at the assumptions and issues involved and the application of the new system for forestry planning and monitoring, including the use of the GIS maps. The SamFRIS update will be supported through the JICA Forest Conservation Project by undertaking aerial surveys on forestry vegetation cover. The ICCRIFS project will provide resources for the integration of climate variables and layers in a common GIS-based SamFRIS and related user applications.

Project resources will be used to draw from the experience of developing the Agriculture SRIM under the ICCRA&HSS, and integrate information on agroforestry areas in SamFRIS, in order to develop one

comprehensive and integrated GIS based system and tools for forestry and agroforestry planning and management. Training will be conducted for forestry planners, GoS officials and project staff on how to use and apply the forestry-relevant information integrated from SRIM to identify the most suitable location-specific tree species for agroforestry and native forestry. Based on the new integrated system, GIS maps will be developed by the MNRE-SIA staff and this tool will be also utilized in the proposed AusAID Agroforestry Programme (SATFP) to determine the best selection of climate resilient trees.

With LDCF resources, available tools and processes for natural resources management, vulnerability assessment and adaptation planning, financial, livelihood enhancement and marketing approaches, as well as monitoring techniques will be systematically analyzed, and training provided to build capacity of government departments, NGOs and community leaders involved.

Awareness raising and training will be conducted on forestry-related policy frameworks and processes (NBSAP, KBA Gap Analysis, NAP, NISAP and NWRMS), as well as the above-mentioned tools, so the forestry and environment planners, extension officers and project staff can effectively link these in the climate change mainstreaming processes for the review of NPSFM and FMB, and the development of the new, climate resilient NFSP. These tools and the capacity build around them will support the implementation of demo activities in lowland agroforestry and upland native forestry areas, under Outcome 2. A manual will be prepared on the above tools and processes, reflecting the demo experience, in both English and Samoan language, tailored to different audiences, such as forestry planners and members of rural communities.

LDCF resources will be used to create synergies with initiatives that are linked through policy processes and applying similar tools, such as FAO/GEF Forestry and PAM Project, JICA National Parks Project, the current Sustainable Land Management (SLM) Project, the UNEP/GEF Regional Invasive Species Project, the EU Water Project, IWRM Project and the proposed UNDP/GEF5 Project on Land Degradation.

CLEWS and related climate information services will be extended to the forestry sector through LDCF funds. The relevant climate parameters will include temperature, rainfall, humidity, soil moisture and the trends in extreme events such as cyclones, droughts and floods. MD staff will be trained in the collection and analysis of climate data and the preparation of climate reports for the forestry sector. Forestry planners, GoS officials, project staff and communities will also be trained in the interpretation and analysis of climate information, as well as their prioritization for and application to the planning and implementation of adaptation activities. The Forestry CLEWS is strongly liked to the ICCRA&HSS project (agriculture and health) the PACC Project (coastal) and the AusAID-funded NAPA 4 Adaptation Project (water resources, forest fires, landuse planning and tourism).

The project will support the preparation and application of a Forest Fire Prevention Strategy and related manual (FFPM), integrating climate risk information and linked with CLEWS. It will set out the functions and responsibilities for the different agencies, communities and individuals, and prescribe relevant climate-resilient responses for each group of actors. Training will also be conducted for FESA officials, forestry planners and project staff on the application of the FFPM to forest management and fire prevention, both at the national and local levels. The FFPM output of the project will build on the Forest Fires component of the NAPA4 Project.

OUTCOME 2: Climate resilient agro-forestry and forestry techniques are demonstrated in lowland and upland areas

With LDCF intervention (adaptation alternative)

LDCF resources will be used to enhance information on sensitive forest ecosystem and key biodiversity species, and understanding on how they can be impacted under different likely climate change scenarios, using the enhanced information tools, such as CLEWS and SAMFRIS, combining with existing forestry ecosystem assessment tools and processes (such KBGA). To this end, project resources will be used to train forestry officers in gathering and interpreting ecological data in order to make informed forestry management decisions. With the support of CI, ecological surveys in the community demo native upland

area of the project will be conducted to serve as a baseline of information for the establishment, management and monitoring of a Community-based Conservation Area. Further assessments will be carried out to gather information on how threatened species can be affected under different climate change scenarios, especially considering the most vulnerable forest ecosystems (such as the cloud forests sensitive to changing temperature and humidity ranges). CI will also assist in training in the assessment of ecosystem services provided by native forestry areas.

Based on the initial consultations and analysis during the PPG phase, detailed and site-specific vulnerability assessments will be carried out in the demo areas, with the active involvement of local communities, civil society organizations and government offices. This will serve to establish adaptation plans for upland native forestry areas and lowland agro forestry areas, integrated into the processes of developing management plans for NPs, establishing a CBCA in upland community lands, and integrated land use plans in lowland agro-forestry areas. The demo processes will serve to build systemic capacity of FD, DEC and related institutions, and to inform the policy review processes describe under Outcome 1.

Through the LDCF interventions government officers, community leaders and other stakeholders will be familiarized on the forestry related management tools, in order to develop and implementation the site-specific and climate-sensitive management plans with adaptation options integrated in the demo areas. The adaptation plans will be supported by the various stakeholders (see Figure 5 above), utilizing the knowledge and skills acquired from tools and capacity building delivered under Outcome 1, complemented with specific trainings on climate-resilient forestry and agroforestry methods

Agroforestry Adaptation Plan (AFAP) for lowland agroforestry development in the project areas will be formulated with the active participation of local communities and NGOs, in customary lands at the Laulii-Falevao area and in the villages adjacent to Lake Lanoto'o and Mauga o Salafai National Parks.Village groups in the project areas will be organized, civil society networks will be established and extensive awareness raising among communities involved will be conducted in order to ensure the key players are fully knowledgeable of climate-risks, adaptation techniques and related assessment, planning and implementation techniques.This will be the basis for the design of the agroforestry demo activities, including identification and prioritization of site-specific appropriate adaptation measures in each pilot village. The demonstration activities will be built on current subsistence practices and traditional knowledge, enhanced through climate-resilient techniques.

Based on the climate reports from the CLEWS and SRIM, the appropriate mix of climate resilient crops and trees will be selected in order to address individual and community needs for food security, livelihood support and alternative income generation. For this purpose, mixed cropping techniques will be introduced applying high value trees, such as the sandalwood, and energy trees (following the IFES approach). The mixed cropping techniques can provide effective ground cover, help prevent soil erosion, contribute to sequester carbon dioxide, create an alternative income stream for farmers and help promote energy security if appropriate technologies are made available (i.e. biomass gasification). Pasture and tree fodder for livestock will be integrated into the agroforestry mix, based on the SAPS, in order to improve existing practices and conserve remaining upland forests.

Linkages will be established with related rural livelihood support projects, such as the AusAid Samoa Agroforestry Project to promote complementary initiatives to diversify livelihoods, through small business development opportunities (processing of crops, timber and non-timber forest products), and market linkages for value-added crops and livestock products. The sustainability of the interventions will be also ensured through establishing community nurseries, to secure the continuous supply of climate, resilient plants. The purpose of these livelihood support activities will be to enhance productivity of current agroforestry areas, thus preventing communities to further encroach to native forestry areas due to clearing for agriculture and grazing land and wood.

The ICCRIFS project will build on the experiences generated by METI on application and production of bamboo varieties, further enhancing understand on bamboo varieties and their production techniques that area resilient to climate change and suitable to Samoan conditions. ICCRIFS will support the replication of intercropping techniques using bamboo, as a means of providing wind-breaks, enhancing moisture retention in the soil and improve soil properties, making agroforestry plantations more resilient

to climate-induced impacts.

Relevant fire prevention options, based on the new FFPM, will be introduced. These include identifying fire resistant tree species, setting the tree spacing and fire breaks and strengthening forest fire fighting capacities (professional and volunteer forest fighters)

Soil and water conservation will be promoted through holistic farming systems, to retain soil fertility, reduce soil erosion, increase the canopy cover and improve water retention in the ground.

A Native Forestry Adaptation Plan (NAFAP) for upland native forestry conservation in the project areas (both CBCAs and National Parks) will be formulated in order to enhance long-term resilience of native forests, through rehabilitation of degraded areas and planting of climate-resilient native species, control of invasive species, fire prevention arrangements and reducing encroachment by neighboring community and land leasers.

Further joint activities to support the climate-sensitive management of protected areas will be pursued through ICCRIFS, including vulnerability assessments, the use of climate information for adaptive planning, and the introduction of climate-resilient forestry management techniques on native forest ecosystems, integrated within the process of developing and implementing Protected Area Management Plans, supported by the JICA Forest Conservation Project. The Native Forestry Adaptation Plan that will be developed for the ICCRIFS project sites (Lake Lanotoo and Mauga o Salafai NPs, as well as the upland CBCA to be established in Northern Upolu) can be replicated in other protected areas of the country using the resources from the JICA FCP.

Synergies will be created with the GEF-FAO FPAM project during the ICRRIFS implementation through involving the FAO project team in the project technical advisory groups, especially considering the following technical components of FPAM: strengthen capacity of community-based conservation management, development of mechanisms for sustainable protected area financing, sustainable land management in forest margins. The ICCRIFS project will support common objectives through enhancing information and capacity on climate risk assessments and adaptation planning.

LDCF funds will allow capacity of FD and the communities involved to effectively monitor the upland forest areas, control invasive species and prevent forest fires. Overall, as a result of LDCF interventions, the coverage of native forest areas and their functional biodiversity will be enhanced, avoiding their further fragmentation and degradation, making them more resilient to climate-induced damage from cyclones, forest fires and expansion of invasive species.

OUTCOME 3: Project knowledge captured, disseminated and replicated

With LDCF intervention (adaptation alternative)

The project will improve the collection and exchange of knowledge and thus enhance the replication and upscaling of successful forestry coastal management and adaptation to climate change, both within Samoa, and more broadly in the Pacific and globally.

LDCF resources will be used to develop a comprehensive communication and awareness programme with broader national level outreach raising awareness on the importance of forestry resources of Samoa, their vulnerability to CC and adaptation options. The range of dialogue options among stakeholders will include national workshops, school climate change programs , radio and TV programmes, and the on-line dissemination and sharing of project information.

The project will create linkages with ongoing efforts to integrate CC into school curricula (ongoing WB project to create syllabus and training material for primary education on CC issues), as well as with higher level education institutions, such as USP to incorporate project experiences into professional education of future agriculture and forestry experts.

LDCF resources will support the development of a range of knowledge management materials (e.g. brochures, audio-visual materials), tailored to different user groups, especially targeting rural communities, using simply forms and Samoan language to transmit the project experience.

The ICCRIFS project will serve to engage USP Alafua Campus located in Samoa, and its agricultural specialists, in order to create linkages with education and research activities. The Soil Science Department of offers courses on soil science and has expertise to do soil research and analysis. USP can assist in soil studies at ICCRIFS site as part of practical training for students. There is also potential to collaborate in preparation of case studies and other technical requirements of ICCRIFS.

Experiences in agro forestry and forestry adaption will be shared between Pacific Island Countries and other SIDS, in order to support similar projects elsewhere and create linkages with regional and international initiatives.

B.3. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROJECT AT THE NATIONAL AND LOCAL LEVELS, INCLUDING CONSIDERATION OF GENDER DIMENSIONS, AND HOW THESE WILL SUPPORT THE ACHIEVEMENT OF GLOBAL ENVIRONMENT BENEFITS(GEF TRUST FUND) OR ADAPTATION BENEFITS (LDCF/SCCF). AS A BACKGROUND INFORMATION, READ MAINSTREAMING GENDER AT THE GEF.":

The project will cover approximately 10,000 Ha of native forestry areas (NPs and customary upland areas), and at least 20,000 Ha lowland agroforestry areas, involving directly 26 villages in 3 different areas of the country, 2 of on the island of Upolu and 1 on Savaii. It is expected that, as a result of the combined policy, climate-resilient agro-forestry practices and knowledge management activities, food security in the target areas will be significantly enhanced. The integrated watershed level land use and forestry measures will contribute to enhancing water supply for both agricultural and domestic use. The increased yields and variety of crops, as well as the use of them for food processing, fodder, or construction material will contribute to livelihood diversification and alternative income opportunities. The enhanced food and water supply will also contribute to health benefits.

The project pursues integrated watershed management approach, and by enhancing agroforestry practices in lowland areas, it is expected that encroachment and clearing of upland native forest for crop production, wood harvest and grazing land will be reduced. It is expected that as a result of the reduced pressure on natural forest areas, combined with facilitating regeneration through planting of climate resilient native species and controlling invasive species will enhance resilience of forest ecosystems. This way the forest goods and services will be sustained and enhanced, providing additional livelihood benefits t local communities.

The village, district and inter-district level committees to be set up under ICCRIFS will support sub-national and local institutional frameworks, mechanisms and capacities, linking with broader development objectives and related initiatives in the demo areas. During the community consultations, from each village representatives of Women's Groups have been involved, and they will play key roles in the local project committees, related planning and technical activities. Gender roles will be further analyzed during the site-specific vulnerability assessment and adaptation planning processes. Gender considerations will be strenghtned also through the involvement of national NGOs, amongst them, for example, Women in Business especially targets women leaders of families to enhance farm productions through organic techniques and value added crops and products.

The enhanced resilience of native forestry and lowland agroforestry will reduce vulnerability of communities to impacts extreme climatic events, such as devastations by cyclones and forest fires, reducing damage to community assets, properties and life.

The knowledge management activities of the project are designed in a way so that it broader layers of society in Samoa can benefit from the project experience, facilitating replication of climate-resilient forestry techniques in other parts of the country.

B.4 INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS THAT MIGHT PREVENT THE PROJECT OBJECTIVES FROM BEING ACHIEVED, AND IF POSSIBLE, PROPOSE MEASURES THAT ADDRESS THESE RISKS TO BE FURTHER DEVELOPED DURING THE PROJECT DESIGN:

#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner
1	Staff turnover affects project implementation	*28 Nov 2010*	Operational	Building technical and operational capacity of Executing Agency and gov. partners can be comprised due to staff change, a recurring issue in the Pacific, due to limited availability of qualified persons P = 3 I = 4	Provision of continuous training and incentives for project staff, setting up and regular engagement of project board and technical advisory group to avoid too narrow focus and involvement of direct project staff. Alert Project Manager and Board on potential staff issues and changes in timely manner.	MNRE, UNDP
2	Competing mandates and lack of coordination between relevant government department causes delay in policy review and approval process.	*28 Nov 2010*	Political	Agro-forestry and forestry related policies are heavily interlinked with other sectoral policy processes, such as agriculture, water, coastal management, mandated by a wide range of government agencies. Climate change represents a dynamic and often competing agenda for policy, resource mobilization and implementation processes P = 2 I = 3	Continuously inform high level policy makers through the NCCCT, ensure good coordination with related initiatives through project technical team, provide high quality technical assistance, link effectively to the on-the-ground demos to inform policy processes and showcase direct applications of policy instruments	MNRE, NCCCT, UNDP
3	Communities may not perceive benefits of the application of climate sensitive planning processes, use of climate information, and other technical activities, and interest and support to the project might fade	*28 Nov 2010*	Organizational	The concept of climate change, especially its long term creeping impacts are difficult to perceive, principal livelihood needs can have priority, especially in subsistence communities. P = 2 I = 3	Keep up the good momentum following the community consultations during PPG phase and continuously inform pilot communities on project advances using targeted information channels, implement immediate and tangible on-the-ground activities addressing priority community needs, while conducting the detailed assessment and adaptation planning process. Employ and train community project field assistants in pilot villages to ensure effective coordination with project team, support experts and partners. Management of	MNRE

					community expectations as well as leveraging additional resources for activities that are priorities for local communities but fall outside the scope of this NAPA follow-up project.	
4	Extreme climatic effects beyond predicted changes harm adaptation efforts	*28 Nov 2010*	Environmental	Extreme climatic events with strengths beyond the enhanced resilience of forest ecosystem and the adaptation measures out in place can affect the demo activities in the pilot villages P=2 I= 5	Implement effective Climate Early Warning System in early project stages, including short and mid-term seasonal forecasts and long term projections, to allow timely preparadness and adjustment of agroforestry and forestry practices preventing and mitigating potential damage from unexpected extreme events. Implement pilot activities in a good variety of demo areas in different parts of the country, to avoid simultaneous harmful impacts in all sites.	MNRE, UNDP

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

Institution	Contact information	Main responsibility	Role in PPG and FSP
MNRE	Mr. Taulealeausumai L Malua CEO PO Private Mail Bag T: +(685) 22481 F: +(685) 23176 taulealea.malua@mnre.gov.ws www.mnre.gov.ws	The CEO MNRE, is the PD, Executive and Chair of the PB and Chair of the NCCCT	MNRE took the lead coordination role in the project design phase (PPG Implementation), liaising with key stakeholders and providing technical and policy advice. MNRE CEO chaired the PPG Steering Committee meetings, providing leadership and guidance. The MNRE provided input on climate change vulnerabilities and resilience, particularly in designing policy development and awareness training for GoSofficials and communities
MNRE-FD	Mr. Taupau Maturo Paniani ACEO PO Private Mail Bag PO. Private Mail Bag T: +(685) 23800 F: +(685) 23176 maturo.paniani@mnre.gov.ws	Project Coordinator, and responsible for all forestry project activities	ACEOFD was a member of the PPG Steering Committee, and coordinated all aspects of the Project, The ACEO-FD will serve as Project Manager for ICCRIFS implementation.

Institution	Contact information	Main responsibility	Role in PPG and FSP
	www.mnre.gov.ws		
MNRE-DEC	Mr. Faleafaga Toni Tipamaa ACEO PO. Private Mail Bag T: +(685) 23800 F: +(685) 23176 toni.tipamaa@mnre.gov.ws www.mnre.gov.ws	Responsible for all environment and biodiversity conservation project activities	ACEO-DEC was a member of the PPG Steering Committee, DEC will: •Provide management of Lanotoo and Vaiaata if declared nature reserves •Undertake resource surveys •Prepare management plan of both areas •Ensure links between ICCRIFS and Land Degradation project and Management and control of invasive species.
MNRE-MD	Mr. Mulipola Ausetalia Titimaea ACEO Private Mail Bag T: +(685) 20855 F: +(685) 23176 ausetalia.titimaea@mnre.gov.ws www.mnre.gov.ws Mr. Sunny Seuseu sunny.seuseu@mnre.gov.ws Ms. Anne Rasmussen annie.rasmussen@mnre.gov.ws	Responsible for the climate project activities	MNRE, MD is responsible for the operation of the CLEWS and the ACEO was a member of the PPG Steering Committee. MD will lead the extension of the CLEWS to cover the Forestry Sector, training of FD staff, farmers and other users, produce and disseminate climate data/information tailored to agro-forestry and forestry users
MNRE GEF Services	Tupa'emanaia Dr. Steve Brown ACEO Private Mail Bag T: +(685) 23800 F: +(685) 23176 steve.brown@mnre.gov.ws www.mnre.gov.ws	Responsible for GEF programmes and compliance with its processes and guidelines	ACEO-GEF Services was a member of the PPG Steering Committee and participated in the production of this ProDoc; has pro-actively harmonized relevant projects and key project stakeholders and will continue to promote linkages with ongoing and pipeline projects
MNRE, SIA	Mr. Safuta Toelau Iulio ACEO Private Mail Bag T: +(685) 23800 F: +(685) 23176 toelau.iulio@mnre.gov.ws www.mnre.gov.ws	Responsible for land information and GIS services	ACEO-SIA was a member of the PPG Steering Committee. The ACEO will be responsible for the analysis of spatial information and production of GIS maps
MNRE-ITD	Mr. Nanai Pai Faiva Principal Officer Private Mail Bag T: +(685) 23800 F: +(685) 23176 pai.faiva@mnre.gov.ws www.mnre.gov.ws	Responsible for information technology activities of the project	Principal Officer-ITD was a member of the PPG Steering Committee and will lead the implementation of FSP IT-related activities including the development of the project website and the utilization of the ALM
MNRE-WRD	Mr. Suluimalo Amataga Penaia	Responsible for water	ACEO-WRD was a member of

Institution	Contact information	Main responsibility	Role in PPG and FSP
	ACEO Private Mail Bag T: +(685) 23800 F: +(685) 23176 amataga.penaia@mnre.gov.ws www.mnre.gov.ws Ms. Yvette Keslake yvette.kerslake@mnre.gov.ws	resources-related project matters	the PPG Steering Committee and will advise the PMU on the conservation of water resources and protection of watershed areas WRD will share experience from its watershed management projects, provide water data for water flow predictions by Met Division, and assist to monitor water flow levels in Namo, Laulii, Solosolo and Falefa.
MNRE-LMD	Mr. Patea Malo Setefano ACEO Private Mail Bag T: +(685) 23800 F: +(685) 23176 patea.setefano@mnre.gov.ws www.mnre.gov.ws Ms. Faainoino Laulala faainoino.laulala@mnre.gov.ws	Responsible for land management-related matters	ACEO-LMD was a member of the PPG Steering Committee. LMD will Share experience from its land rehabilitation project, support training of farmers in appropriate land management practices
MNRE-PUMA	Mr. Tagaloa Jude Kolhhase ACEO Private Mail Bag T: +(685) 23800 F: +(685) 23176 jude.kolhhase @mnre.gov.ws www.mnre.gov.ws	Responsible for planning and landuse management	PUMA will advise the FSP on planning, landuse management and EIA
MAF	Mr. Fonoiava Sesega CEO Private Mail Bag T: +(685) 22561 F: +(685) 21865 fonoiava.sesega@stec.ws www.maf.gov.ws Mr. Asuao Kilifi Pouono Ex-CEO Private Mail Bag T: +(685) 22561 F: +(685) 21865 maffm@lesamoa.net Mr. Peseta Frank Fong ACEO Economic and Planning Private Mail Bag Apia, SAMOA T: +(685) 22561 F: +(685) 21865 frank.fong@maf.gov.ws www.maf.gov.ws	Mr. Seseaga is a newly appointed Member of the PB and NCCCT as previous CEO retired Member of the PPG Steering Committee	Both CEOs and ACEO were members of the PPG Steering Committee. MAF will support the agriculture-related project activities in lowland agroforestry, including development of management strategies, production of GIS maps based on the SRIM, analysis of agriculture climate reports and piloting of climate resilient crops in the project areas

Institution	Contact information	Main responsibility	Role in PPG and FSP
MoF	Mr. Tupaimatuna Iulai Lavea CEO T: +(685) 34313 F: + (685) 21312 iulai.lavea@mof.gov.ws www.mof.gov.ws Mrs. Noumea Simi ACEO Aid Coordination Division (ACD) noumea.simi@mof.gov.ws www.mof.gov.ws Mrs. Lita Iamafana Financial Controller ACD lita.iamafana@mof.gov.ws www.mof.gov.ws	CEO-MoF is the Senior beneficiary of the PB and Member of the NCCCT Member of the PPG Steering Committee Member of the PPG Steering Committee	MoF assisted the PPG phase with identification of relevant co-financing, providing the project with additional funding and key adaptation stakeholders, making on-going linkages and updating the national policies outlined in the SDS. For the FSP, MoF through the ACD, is responsible for the management of project funds and the monitoring of expenditures
FESA	Mr. Seve Tony Hill Chief Executive Officer Apia, SAMOA T: +(685) 20404 F: +(685) 20457 Mr. Mamea Samuel Ieremia Sammy_fleck@hotmail.com	Member of the PB and NCCCT	FESA will lead the activities on the preparation of the forest fire prevention manual, raising awareness of communities about dangers of forest fires, train staff, communities and farmers in fire prevention and control techniques
MFAT	Mrs. Sharon Potoi Aiafi ACEO Apia, SAMOA T: (685) 21171 F: (685) 21504 sharon@mfat.gov.ws www.mfat.gov.ws	Member of the PB and NCCCT	CEO-MFAT will be the political focal point of the project, responsible for facilitating official communication with the UNFCCC, GEF, UN Agencies and Regional Organizations
MWCSD Village Communities in project area	Leaula Maulolo Amosa ACEO Internal Affair Apia, SAMOA T: +(685) 23698 F: +(685) 26602 E: maulolo@lesamoa.net www.mwcsd.gov.ws Village Council of Chiefs	Members of PB & NCCCT Responsible for implementation of demonstration project activities	During the PPG phase, village communities in the project areas participated in stakeholder consultations to develop the project activities. All the village councils of chiefs will work closely with MNRE, through the Internal Affairs Division of MWCSD to implement the FSP. Representatives of village communities were consulted during the PPG phase on the development of the Prodoc through technical meetings.

Institution	Contact information	Main responsibility	Role in PPG and FSP
UNDP	Ms. Nileema Noble, Resident Representative and Coordinator, UNDP Multi-country Office, Samoa T: (+685) 23670/23671 F: (+685) 23555 gabor.vereczi@undp.org www.undp.org	Member of PB (as senior Supplier) and UNFCCC	The UNDP, as IA, was a member of the PPG Steering Committee and during the PPG phase provided overall guidance on UNDP-GEF for prodoc formulation. UNDP-CO and UNDP RCU in Bangkok provided overall technical guidance and review, ensuring that the project conforms with LDCF requirements. UNDP also facilitated coordination with other UN Agencies and regional organizations (SPC, SPREP, CI).UNDP will continue delivering these roles and services as IA during the project implementation phase
UNDP/GEF SGP	Mr. Ollie Reupena – Interim SGP Coordinator Ollie.reupena@undp.org Mr. Kevin Petrini – Coordinator, MAP-CBA-SP Programme kevin.petrini@undp.org	Coordination of community-based environmental and climate-change adaptation projects financed through the Small Grants Programme	• Share lessons learnt from SGP projects • Support coordination of community interventions through the National SGP Committee and its members
SPREP	Mr. Taito Nakalevu Pacific Adaptation Climate Change (PACC) Officer T: +(685) 21929 F: +20231 taiton@sprep.org www.sprep.org Mr. Stuart Chape Manager Island Ecosystems Program stuartc@sprep.org	Responsible regional CCA and biodiversity programs	SPREP is the EA for the PACC project under the regional GEF-PAS. SPREP will advise on relevant PACC project linkages and endeavour to harmonize this project with all other adaptation projects in the region, drawing on its mutually beneficial experiences and lessons learnt. Linkages will be created with the recently initiated Ecosystem Based Adaptation Assessment project, coordinated by SPREP, with the potential use of ICCRIFS demo areas as pilot for this regional initiative
FAO	Mr. Aru Mathias Forester Apia, SAMOA T: + (685) 22127 F: + (685) 22126 Aru.Mathias@fao.org www.fao.org	Mandated by the UN to deal with global food and agriculture and forestry	FAO has been engaged during the PPG phase in providing technical advice in forestry and agroforestry techniques and food security issues. Linkages will be made with the Forestry and Protected Area Management Project (FPAM). FAO will provide technical advice (e.g. IFES) on the

Institution	Contact information	Main responsibility	Role in PPG and FSP
			agroforestry and native forestry components of the project
JICA	Ms. Naoko Laka Activity Manager Apia, SAMOA T: + (685) 22572 F: + (685) 22194 E: sm_oso_rep@jica.go.jp www.jica.go.jp	Continuing its involvement in the management of national parks in Samoa	JICA experts will advise on the native forestry conservation component of the project and the synergies between the FSP and its current national parks management projects
AusAID	Mrs. Misileti Masoe Satuala Activity Manager Climate Change and Environment Apia, SAMOA T: (685) 23411 F: (685) 26872 Misileti.Satuala@ausaid.gov.au www.ausaid.gov.au	Involved in CCAand agroforestry projects in Samoa	AusAID is supporting the NAPA 4 project, involving Landuse Planning, Water Resources, Forest Fires and Tourism Sectors. The forest fire component is integrated in ICCRIFS as co-financing. AusAid is also planning to support an agroforestry project, which will provide parallel co financing for ICCRIFS, therefore AusAid will be continued be engaged during project implementation.
WB	Mrs. Maeva Betham Vaai Joint World Bank – ADB Samoa Liaison Officer Apia, SAMOA T: (685) 34340 F: (685) 24228 mvaai@worldbank.org www.worldbank.org	WB has been involved in climate risks and hazards programmes in Samoa for the last 10 years and is continuing to support national adaptation projects	WB will share its experiences on CCA with the FSP and advise the on synergies between the project and its current PPCR initiative
USP	Mr. David Hunter Head School of Agriculture Alafua Campus, Apia, SAMOA T: (685) 21671 F: (685) 22933 hunter_d@samoa.usp.ac.fj www.usp.ac.fj	Involved in regional agricultural education at its Alafua Campus, Samoa	Exchanges has been initiated during the PPG phase and will be further explored during project implementations in order to link project experience with USP research and curricular education activities, especially considering in the fields of soil science and agriculture, being conducted at the USP Alaufa Campus located in Samoa
CI	Mr. James Atherton Conservation Outcomes Officer Vailima, SAMOA T: (685) 21593 F: (685) 28570 jatherton@conservation.org www.conservation.org	Involved in regional biodiversity conservation programs based at its Samoa office	CI will provide support in ecosystem and vulnerability assessments, extending the KBGA application, and advising on the use of this information for the enhanced protection and management of conservation areas.
SPC	Mr. Sairusi Bulai Team Leader Forests and Trees Programme	Manages the Centre for Pacific Crops and Trees (CePaCT)	SPC can provide technical assistancefor lowland agroforestry on:

Institution	Contact information	Main responsibility	Role in PPG and FSP
	Suva, FIJI T: (679) 337 0733 F: (679) 337 0021 SairusiB@spc.int www.spc.int Mr. Cenon Padolina Regional Forest Genetic Resource Officer T: (679) 337 0733 F: (679) 337 0021 CenoP@spc.int www.spc.int Dr. Lex Thomson Team Leader FACT Project EU-funded Facilitating Agricultural Commodity and Trade T: (679) 337 0733 F: (679) 337 0021 LexT@spc.int www.spc.int		• V&A assessments, identification and introduction of climate resilient crops and tree species • Cultivation and planning techniques • Species propagation : establishment and managements of plots, nurseries operations • Agro-forestry production - to increase and diversify agro-forestry production • Value Adding – to maximize the value of planted farm forestry resource to farmers and • Institutional Strengthening - to strengthen governance in the forestry sector and institutional dealing with agro-forestry • Program Management - to reflectively and efficiently manage the program • Information – to support extension and awareness of national and community levels. • Economic Analysis – to conduct economic analysis of agro-forestry • Marketing and trade-to provide technical assistance and developing marketing strategy and facilitating trade of agro-forestry products SPC will also provide technical assistance in establishment of models in Community Conservation Areas, Sustainable Forest Management, Sustainable Land Management, watershed management, extension, education and awareness
Samoa Umbrella of NGOs (SUNGO), involving METI, Women in Business, and SFA	Mrs. Rowena Vavatau President Motootua, SAMOA T: (685) 24322 / 22804 / 22347 F: (685) 20654 sungomanagement@lesamoa.net METI – Dr. Walter Vermuellen	NGOs are key partners in the implementation of national projects	METI will assist farmers develop integrated farming approaches for sustainable crop production and introduction of bamboo inter-cropping techniques based on experience from CROPPRO and Life Skills projects, and ba Train and build local capacity

Institution	Contact information	Main responsibility	Role in PPG and FSP
	Director, walter@meti.ws WIBD - Ms. Karen Mapusua Associate Director , Karen@womeninbusiness.ws Samoa Farmers Association Ms. Leaupepe Lasa Aiono		WIDB will assist in introducing and training of enhanced farming techniques, and business management skills SFA will assist in providing planting materials and extension advice to farmers, marketing village farm produce both locally and overseas

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

Coordination with the baseline initiatives related to the 3 outcomes, described in sections B 1. And B 2. will be ensured through the following processes and mechanisms:

- National Climate Change Country Team

- Project Board and Technical Support Team involving representatives of agencies and project managers in charge of related initiatives

- Knowledge management and communication activities as outlined in Outcome 3, ensuring broad dissemination of project results and exchange of good practices and lessons learnt.

The roles of the organizations engaged in the related baseline initiatives is listed in the stakeholder involvement plan table above

Further clarifications on project linkages, addressing GEF Secretariat review comments:

WB-PPCR: The process is being coordinated by the Ministry of Finance in Samoa. MNRE and UNDP have been involved since early stages of the PPCR process, and have been advocating for linkages with existing and pipeline NAPA implementation initiatives. PPCR is currently in its Phase 1 design, with WB team consultation mission taking place during 1-18 February. UNDP attended a development partners' meeting on 2nd February where first draft of the Strategic Programme for Climate Resilience (SPCR) for Samoa has been presented and discussed, further consultation meetings will follow. In the current status of the Strategic Programme, PPCR in Samoa is focusing on coastal adaptation and related infrastructure measures with the following components:

- Investment Project 1: Climate proofing the design and construction of the upgraded West Coast Road
- Investment Project 2: Climate proofing the design and construction of the Samusu – Lepa Access Road
- Investment Project 3: Enhancing implementation of Coastal Infrastructure Management Plans through ecosystem-based adaptation
- Investment Project 4: Programme to support civil society engagement in strategic climate change adaptation initiatives
- Technical Assistance: Establishing a climate change adaptation trust fund for Samoa

While the above components do not have direct relevance to forestry and agroforestry sector adaptation, or the demo areas addressed in the ICCRIFS project, linkages will be fostered where relevant to synergize with coastal ecosystem-based adaptation measures and civil-society support activities.

NAPA 4: meeting was held with MNRE and the Fire and Emergency Services Authority (FESA – in charge of NAPA4), in order to update on current project status and further specify linkages and complementarities with ICCRIFS.

The NAPA4 project is just about to start its initial implementation stages with immediate priorities focusing on improving equipment of fire stations (e.g. fire tracks, hoses for forest fires etc.)

NAPA 4 planned activities and ICCRIFS complementarities:

1. Draft a national forest fire prevention strategy: this activity will depend on the ongoing review of the National Fire Plan. ICCRIFS will provide support to integrate climate change risk and resilience considerations, linked with the Climate Early Warning System to be tailored to forestry management purposes.
2. Fire prevention mechanisms developed and related training and awareness-raising conducted: NAPA4 aims at revamping the existing fire station at Asau (Savaii), build and equip 2 new ones next to existing forestry stations at Togitogiga (South-central coast of Upolu, and Maota in Savaii). Planned capacity building activities will involve training of forestry extension officers as volunteer fire fighters, conducting public awareness-raising (TV&radio ads on forest fire prevention, community awareness workshops, installation of fire gauge signs and conduct of forest fire prevention drills) targeting the villages in the service area of the above 3 fire stations. ICCRIFS will contribute to integrate climate change considerations in the training and awareness raising materials, and extend the community awareness activities to the project pilot villages, in collaboration with FESA.

FAO: Contacts have been established in early stages of the project formulation. Aru Mathias, Forestry Specialist at the FAO Subregional Office for the Pacific Islands, based in Samoa, has been part of the technical advisory group for ICCRIFS. As the project document baseline analyses states:
"During the PPG phase linkages have been established with the Pacific FAO office in order to explore linkages with the FAO GEF-PAS Forestry and Protected Area Management Project (FPAM), which is a sub-regional project involving 4 PICs, Fiji, Samoa, Vanuatu and Niue. The development objective of the FPAM is "to enhance the sustainable livelihood of local communities living in and around protected areas". Its Global Objective is to "strengthen biodiversity conservation and reduce forest and land degradation". Synergies will be created especially with the FPAM technical components on community-based conservation management, mechanisms for sustainable protected area financing and sustainable land management in forest margins."

Given that the FPAM project is GEF-funded, it cannot be used as co-financing for ICCRISF; nevertheless synergies will be pursued through ICCRIFS implementation as stated above.

C. GEF AGENCY INFORMATION:

C.1 CONFIRM THE COFINANCING AMOUNT THE GEF AGENCY BRINGS TO THE PROJECT:

UNDP commits USD 40,000 parallel co-financing from the Community-Centered Sustainable Development Programme, providing technical support to project stakeholders through expertise and experience developed in formulation and implementation of sustainable village development plan, participatory rural appraisal and training techniques, as well as activities related to the sustainable use of natural resources.

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

The project corresponds to:

UNDAF Outcome 4: The mainstreaming of environmental sustainability and sustainable energy into regional and national policies, planning frameworks and programmes; and Pacific communities sustainably using their environment, natural resources and cultural heritage

UNDP Strategic Plan Environment and Sustainable Development <u>Primary</u> Outcome:
Promote climate change adaptation

UNDP Strategic Plan <u>Secondary</u> Outcome: Strengthened capacity of developing countries to mainstream climate change adaptation policies into national development plans.

Expected CP Outcome(s):
4.1.1. & 4.2.1 The environment-economic-governance nexus demonstrated through community-

based natural resource management and use that supports implementation of gender-sensitive national policies as well as the mainstreaming of environment into national plans.

Expected CPAP Output (s)

4.2.1.1 Protected and conservation area management and governance systems strengthened
4.2.2.1. Engendered MDG-based village and local level sustainable development plans developed and implemented by communities

UNDP's Comparative Advantage

Globally, UNDP plays a primary role in ensuring the development and management of capacity building programmes and technical assistance projects, drawing on its experience in human resources development, integrated policy design and implementation, institutional strengthening, and non-governmental and community participation, as well as on its network of country offices and its inter-country programming experience. The proposed project is aligned with UNDP's comparative advantage, as articulated in the GEF Council Paper C.31.5 "*Comparative Advantages of GEF Agencies*", in the area of capacity building, providing technical and policy support as well as expertise in project design and implementation. At the national level, UNDP has focused on developing and supporting projects intended to assist the country to develop its own capacity for environmental management for sustainable development and poverty alleviation.

UNDP is well placed to lead the ICCRIFS project initiative because of its involvement in a wide variety of concurrent GEF-PAS and related projects as Implementing Agency in Samoa, particularly the NAPA follow up projects in agriculture, health, coastal and tourism sectors (financed through LDCF and SCCF), as well as the community-based adaptation projects through the SPA-financed Global CBA and the AusAid-funded MAP-SGP-CBA projects. UNDP is also the Implementing Agency for the GEF-funded project on Samoa's Capacity Building and Mainstreaming of Sustainable Land Management, from which experience can be drawn for the efforts of enhancing resilience of agro-forestry practices under ICCRIFS. UNDP's Community Centred Sustainable Development Programme (CCSDP) is another example of targeted development support to rural communities of Samoa, being implemented in partnership with MWCSD, MNRE and National NGOs such as Women in Business and South Pacific Business Development. UNDP has continually supported Samoa's national policy development and has strengthened Samoa's national capacities and partnerships to ensure attainment of on-going sustainable development initiatives and programmes. The proposed ICCRIFS project will continue the mainstreaming of climate change into national policies and development plans, which is one of the key outputs articulated in the Pacific United Nations Development Assistance Framework[8] (UNDAF) under Outcome 4 on Environmental Sustainability. The Common Country Assessment/UNDAF goal for Samoa is 'To support the Government of Samoa's national development vision with a focus on reducing poverty and vulnerability through the improvements in basic services, increasing community participation in decision making, increasing income generating opportunities, maximizing opportunities of globalization and promoting natural resource management and environment sustainability...'. As such, the ICCRIFS Project is in line with this goal. The excellent long-term working partnership between the UNDP-MCO and the

[8] UNDAF. 2008. United Nations Development Assistance Framework 2008-2012.

MNRE was highlighted in the current UNDP Country Programme Action Plan,[9] signed in April 2007, where the majority of investment was allocated to the environment sector.

UNDP's comparative advantage in the implementation of the ICCRIFS Project also lies in the effective facilitation of partnerships with fellow UN Agencies, regional organizations (CROP agencies, NGOs), development partners, as well as its long-standing experience in the fields of policy support and capacity development in Samoa. During the PPG phase, through UNDP liaison, technical experts of specialized UN and regional organizations, such as FAO, SPC, SPREP or CI have been engaged. As an advocate of the MDGs and their integration into national sustainable development processes, UNDP is able to backstop implementation of the ICCRIFS Project on the basis of a strong history supporting climate change and environmental programmes in Samoa. The UNDP-MCO based in Samoa with its programme staff experienced in environmental, policy and community development issues, along with the presence of a UNDP Regional Technical Adviser for Climate Change Adaptation, who is also based in Samoa, UNDP is well placed to provide the institutional and technical support required for this project.

PART III: INSTITUTIONAL COORDINATION AND SUPPORT

A. **INSTITUTIONAL ARRANGEMENT:** NA

B. PROJECT IMPLEMENTATION ARRANGEMENT: The project will be implemented over four years beginning in February 2011, with MNRE as the Executing Agency (EA) and its Chief Executive Officer (CEO) as the Project Director (PD). The UNDP will serve as the GEF Implementing Agency (IA). MNRE and UNDP will jointly monitor and evaluate all project activities. The project will be governed in accordance with the Guidelines, GEF Rules and Procedures and GoS operational principles.

Establishing an effective project management structure is crucial for the ICCRIFS's success (see Figure 8). At the national level, the CDC is the highest-level decision-making authority and the highest overseeing body for all development projects. It is chaired by the Prime Minister, with membership comprising all Cabinet Ministers and Associate Ministers, GoS CEOs and Assistant Chief Executive Officers (ACEOs). The CDC must approve all new projects and endorse all progress reports as provided by the Project Board.

As project EA, the MNRE will have responsibility for facilitating project coordination with other relevant ministries and stakeholders in Samoa. The EA will ensure the timely and effective delivery of project outputs and the proper use of project resources and will appoint the Project Manager (PM) responsible for overall project management, and will have direct control over the agroforestry and native forestry aspects of the project. The PM will be responsible for delivery of outputs as indicated in the Strategic Results Framework (SRF), as well as the management of project information as appropriate. In addition the PM will ensure provision of high-quality expertise and inputs to the project and also be responsible for day-to-day operations.

The EA will also appoint the Project Coordinator (PC) who will be responsible for the overall planning and implementation of the project, coordination with the PM and other stakeholders and for the preparation of reports (including financial reports) to UNDP and the Project Board (PB). The PC will be responsible to PM for the effective implementation of the project. As far as possible the PC will give due consideration to previous and on-going projects, as well as studies and reports relating to the forestry-related management tools.

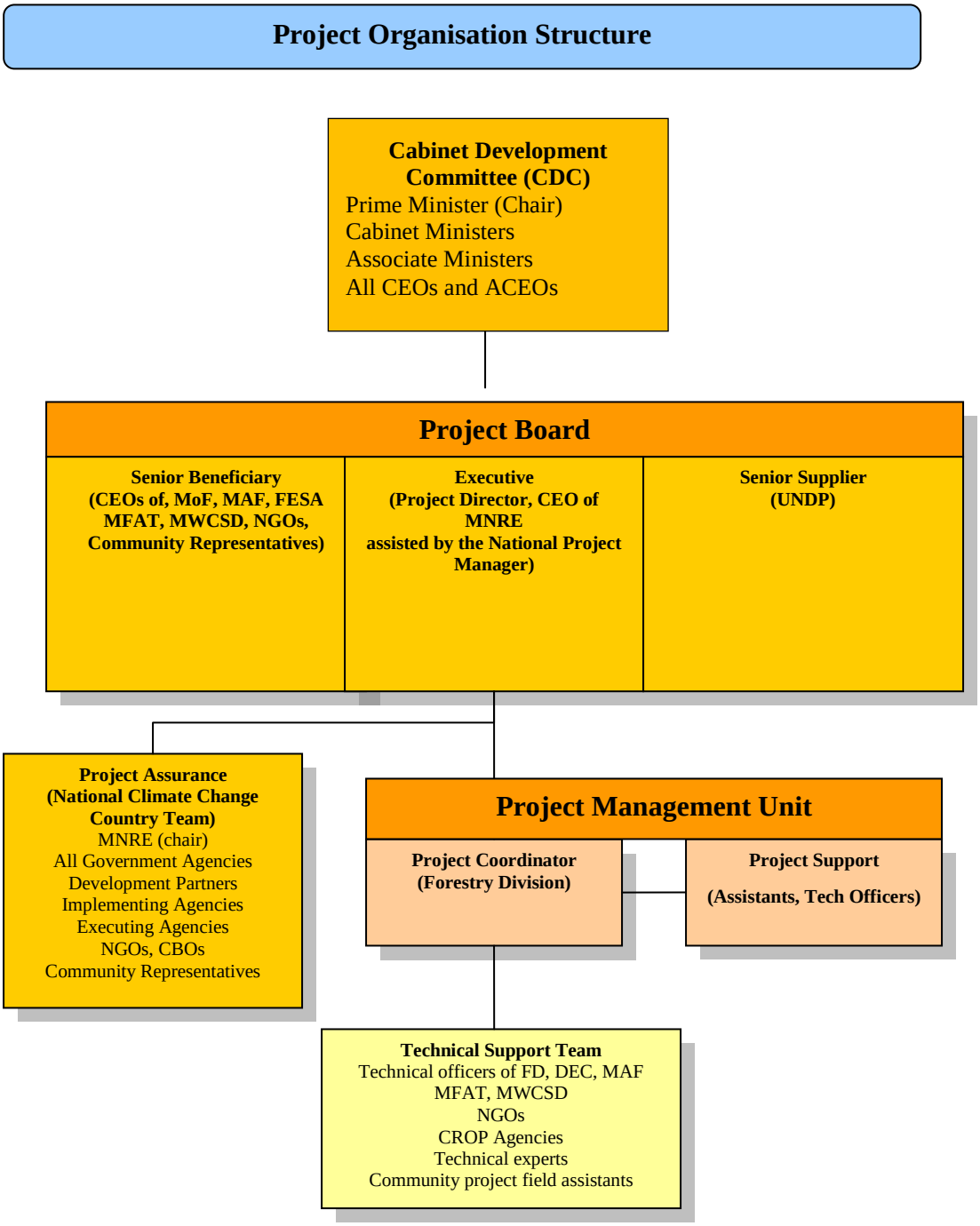
National Climate Change Country Team (NCCCT): The Project Assurance Body (PAB) is the existing NCCCT. It is the highest overseeing body at the project level for all climate change projects and will ensure that the ICCRIFS project is aligned with the GoS's broader climate change, environmental and development

[9] UNDP. 2007 Country Programme Action Plan 2008-2012

objectives, as well as being complementary to the achievement of the MDGs. It usually meets at least 2-3 times per year, chaired by the CEO of MNRE. Other members of the NCCCT will include all the CEOs of Government ministries and corporations, development partners, and representatives of IAs, EAs, NGOs, private sector and communities.

The Project Board will be responsible for making executive management decisions related to the project. It will comprise the Chief Executive Officer (CEO) of MNRE, who will chair the PB, the UNDP as Senior Supplier (representing the interests of the parties concerned which provide funding and/or technical expertise to the project) to provide guidance on the technical feasibility and support of the project. CEOs of MoF, MAF, FESA, MFAT, MWCSD, NGOs, and Community Representatives (Chairs of District-level Committees to be established at the 3 demo sites) will act as the Senior Beneficiary to ensure the realization of project benefits from the beneficiaries' viewpoint. The PB shall provide guidance to the Project Manager (PM) when needed, including proposing project revisions. The PM will be the Assistant CEO, Forestry (ACEOF) of MNRE and will be responsible to the PD. Reviews will be undertaken by the PB at designated decision points during the running of the project, or as necessary when raised by the PM, These will help ensure quality programming occurs. The PB is also consulted by the PM for decisions when project tolerances have been exceeded. The PB will meet at least once per quarter. It will be the main decision-making body of the project. The work of the PB will be guided by the continuous review, alignment and approval of Annual Work Plans (AWPs), which will be endorsed by the Implementing Partners (MNRE and MAF) and UNDP. The approved annual and quarterly work plans will be the instruments of authorization through which the PM will deliver results.

Figure 8: Project Organization Structure



Project Management Unit (PMU):

1 PC,
1 Technical Officer, Agroforestry (TOAF),
1 Technical Officer, Native Forestry (TONF), and
1 Office Administrative Assistant (OAA)
1 Communication and Knowledge Management Officer (CKMO)

The EA will provide office space with basic amenities (such as electricity and water) for the PMU including the TST. PMU staff will be funded by the project throughout its duration to ensure delivery of results as specified in the SRF. The PC will be responsible for delivery of outputs as indicated in the SRF; and channeling the flow of results and knowledge from the project to the PB and relevant project stakeholders as appropriate. In addition the PC will ensure provision of high-quality expertise and inputs to the project and also be responsible for day-to-day operations.

The Technical Support Team (TST) will consist of Technical officers of relevant Department and Ministries (FD, MAL, DEC, MFAT, MWCSD), NGOs, CROP Agencies, as wel as the technical experts hired by the project.

The Technical Support Team (TST) will consist of Technical officers of relevant Departments and Ministries (FD, DEC, MAF, MFAT, MWCSD), NGOs (METI, WIDBI, Farmers' Association), CROP Agencies (SPC, SPREP), the community project field assistants, as wel as the technical experts hired by the project.

In order to ensure effective implementation of the community-based adaptation measures, community coordinators will be appointed in the pilot villages, and district and inter-district commitees will be set up in the 3 demo areas, involving village representatives (chiefs, women a nd youth groups), government representatives (national and village level), as well as NGOs active in the areas.

Terms of Reference for Key Project Groups, Staff and Sub-contracts can be found in Annex 1.

Financial Arrangements:

MNRE will Be responsible for the financial control of the project through UNDP;

Sign-off on all budget and work-plan revisions and maintain project accounts and financial responsibility;
Work with the project and assume responsibility for entering into necessary work arrangements with other national, state and regional organizations for efficient and effective project implementation;
Support the project by providing guidance and authority to engage services consistent with the objectives of the project; and
Receive advances equivalent to the financial needs of the project as indicated in the quarterly work plans provided.

Funds will be released to the MoF, who will be responsible for the initial warrant and disbursement of funds in accordance with the work plan and the project document. Further cash advances will be contingent upon timely reporting of expenditure by the MNRE to the UNDP-CO, Samoa.

PART IV: EXPLAIN THE ALIGNMENT OF PROJECT DESIGN WITH THE ORIGINAL PIF:

The original PIF Objective, Components and Outcomes focus has been retained with smaller wording

changes. Outcome 2 has been streamlined to emphasize the integrated approach of dealing with native upland and lowland agro-forestry areas. For the same reason, the scope of community demo areas has been expanded to involve villages adjacent to national park areas, in order to foster conservation of native forests through providing enhanced livelihood benefits in agroforestry community land. Training related outputs in the PIF have been integrated as activities across all technical output as underlying aim of capacity building of national stakeholders amongst government, local communities and NGOs. The scope of knowledge management activities has been broadened to harness a wider range of knowledge products and dissemination means, giving more emphasis to the involvement of education institutions. The activity areas related to the Climate Early Warning System to be tailored to the forestry and agroforestry sectors have been specified to great extent building on the evolving experiences with CLEWS and related agriculture information management being developed under NAPA 1, ICCRASH Project dealing with agriculture and health sectors.

PART V: 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 template. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
Taule'ale'ausumai La'avasa Malua	Chief Execurive Officer	MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT	**12/16/2010**
Sairusi Bulai	Officer-in-Charge	SECRETARIAT OF THE PACIFIC COMMUNITIES	**OCTOBER 6, 2010**

B. GEF AGENCY(IES) CERTIFICATION

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

Agency Coordinator, Agency name	Signature	Date *(Month, day, year)*	Project Contact Person	Telephone	Email Address
Yannick Glemarec Executive Coordinator UNDP/GEF		February 7, 2011	**Gabor Vereczi**	+685 27482	Gabor.vereczi@undp.org

ANNEX A: PROJECT RESULTS FRAMEWORK

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: 4.1.1. & 4.2.1 The environment-economic-governance nexus demonstrated through community-based natural resource management and use that supports implementation of gender-sensitive national policies as well as the mainstreaming of environment into national plans.
Country Programme Outcome Indicators: 4.2.1.1.1 Indicator: Participatory Rural Appraisals (PRAs) conducted which contribute to village visions and human development profiles on population retention, income generation and sustainable livelihoods. 4.2.2.1.1 1 Indicator: Increased number of village sustainable development activities addressing climate change and environmental challenges including natural disasters.
Primary applicable Key Environment and Sustainable Development Key Result Area: Promote climate change adaptation
Applicable SOF Strategic Objective and Program: Least Developed Countries Fund (LDCF)
Applicable SOF Expected Outcomes: N/A
Applicable SOF Outcome Indicators: N/A

Project Goal	**Integration of climate change risk and resilience into forestry management in Samoa.**				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
Project Objective[10]: Increase the resilience and adaptive capacity of Samoa's forest areas and communities reliant on Samoa's forestry resources.	Ha of increase in forest coverage in upland forestry areas composed by climate resilient native species[11] Ha of increase in forest coverage in lowland forestry areas composed by climate resilient and high-value species[12] Number of farmer organizations/networks and farmers in Samoa who have increased their adaptive capacity through a)	To be defined through the update of SamFRIS during 1st year of the project Rural communities in Samoa	To be defined according to the baseline to be set up during 1st year of the project By the end of the project a) 4 farmers' organizations/networks (METI, WIDBI, SFA, FD Community Forest	SamFRIS aerial survey and ground-truthing of sample plots[14]. Calculation of planted and rehabilitated area based on number of seedlings used and spacing of planting. Field visits, surveys, inspections	Major climate-induced hazards (e.g. drought, forest fires, cyclones) does not cause mayor damage to the targeted forestry areas Project stakeholders are able to perceive reductions in vulnerability over the time-scale determined by project

[10] Objective (equivalent to Atlas output) monitored quarterly ERBM and annually in APR/PIR

[11] Native species involve tree species such as Pometia pinnata (tava), Terminalia richii (malili), Syzygium inophylloides (asi toa), Calophyllum neo-ebudicum (tamanu) and Intsia bijuga (ifilele), Canaga odorata (mosooi), as well as shrubs, such as matalafi, masame. The forest restoration activities (like facilitating natural regeneration through control of invasive species, replanting native species) will aim at least 80% in composition of native species.

12 Flueggea flexuosa (poumuli) and Swetenia macrophylla (Brazilian mahogany), Tectona grandis (teak),Santalum spp (sandalwood and Bambusa spp (bamboo)

14 There were 544 sample plots (size: 100X20 meters each) established for the 2004 ground survey for SamFRIS. There is detailed information on species composition and forest coverage on each plot. These plots will be used in the 2010 update, and will be adjusted or further plots established to monitor the 3 project demo sites.

Project Goal	Integration of climate change risk and resilience into forestry management in Samoa.				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
	implementing forestry and agroforestry adaptive measures b) receiving climate information services on a regular basis and c) receiving information on good adaptive practices and participating in knowledge sharing activities	lack the capacity to integrate climate-resilient management techniques into their forestry use and agroforestry management practices	Programme) and at least 1000 farmers in the 26 pilot villages are implementing adaptive practices b) at least 2000 farmers are receiving climate and forestry information services on a regular basis c) at least 3000 farmers receiving information on good adaptive practices and participating in knowledge sharing activities[13]	and reports Assessment s and technical reports on adaptation measures implemented Training reports and Qualitative-based surveys (QBS) GIS based information on status of forests (SAMFRIS) End of project evaluation report	duration Institutional linkages between agencies involved in the project and other relevant ministries and NGOs is functional and supportive Strong communication and information links with rural communities are built and sustained by the Government and NGOs
Outcome 1[15]: Climate risk and resilience integrated into lowland agroforestry and upland native forestry policies, strategies and management techniques	National Policy on Sustainable Forest Management and Forestry Management Bill revised to integrate CC risks, and new National Forest Plan and Forest Fire Prevention Strategy developed with adaptation options incorporated Existence of forestry and climate information tools Number of government officers and farmers	Forestry policy frameworks do not integrate climate risks SAMFRIS is outdated and does not includes only limited climate info. CLEWS is not tailored to the forestry sector Officers and	By the end of year 2 the NPSFM is revised and based on that a new National Forestry Sector Plan and Forest Fire Prevention Strategy developed. By the end of year 3 the Forest Management Act revised to reflect the policy changes. By the end of year 2, SamFRIS is updated with climate information integrated from forestry tailored CLEWS By the end of year 3 at least 50 officers (including FD, MDEC, MAF, MET Division and their extension officers	National forestry policy documents and management plans Forestry climate reports including CLEWS procedures and information products Revised SAMFRIS	Officers and communities are receptive and collaborative for the CLEWS to be expanded to the forestry sector and its application is supported with good communication at the different levels Appropriate staff members

13 Targets are based on information on n. of households (one farmer per household) in the 26 pilot villages (as per CBS Census 2006) , n. of members of 4 participating farmers' organizations/networks (METI, WIDBI, SFA, FD Community Forest Programme)

[15] Outcomes (equivalent to ATLAS activity) are monitored annually in the APR/PIR.

Project Goal	Integration of climate change risk and resilience into forestry management in Samoa.				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
	regularly receiving climate early warning and forestry information services	end users does not receive tailored climate and forestry information supporting forestry and agroforestry practices	and local representatives) and at least 2000 farmers (at pilot villages and through farmers' organizations) receiving climate early warning and forestry information services	Training workshop reports	are selected for training by their ministries and staff turnover does not negate training benefits Competing mandates and lack of coordination between relevant government department does not delay policy review and approval process.
Outcome 2 Climate resilient agro-forestry and forestry techniques are demonstrated in lowland and upland areas	Existence of climate-sensitive management plans in the NPs and CBCA N. of district level committees established and functioning Number of farmers participating in climate-resilient landuse and forestry planning processes, and n. of farmers implementing adaptive forestry and agroforestry practices	Currently there are no management plans for the Lake Lanotoo and Mauga o Salafai NPs. There was a past attempt to establish a CBCA only at Laulii village, only exist in paper and dysfunctional Currently the only protected area with a committee involving adjacent villages is at the O le Pupu Pue NP	By the end of year 2 climate-sensitive management plans are prepared for the Lake Lanotoo, Mauga o Salafai NPs, and a CBCA established with similar management plan for the upland areas of the 14 villages between Laulii-Falevao By the end of year 1, 3 district-level committees established at village adjacent to Lake Lanotoo and Mauga o Salafai NPs and at community demo area between Laulii-Falevao villages, involving village leaders, gov. officials and NGO reps. By end of the year 2 at least 1500 farmers participating in climate-resilient land-use and forestry planning processes, and by the end of the project at least 1000 farmers are implementing adaptive agroforestry and forestry practices in the participating	Project progress reports Formal M&E protocols of the project Forestry Management Plan documents Evaluation reports Communities feedback on utility of demonstration project through meetings and interviews Field evaluations on demo plots	Communities are receptive and supportive of adaptation measures Networks between national organizations exist and local communities providing training and management support for project initiation are built and sustained Extreme climatic effects and changing environmental conditions do not harm adaptation efforts

Project Goal	Integration of climate change risk and resilience into forestry management in Samoa.				
	Indicator	**Baseline**	**Target**	**Sources of verification**	**Risks and Assumptions**
		in Samoa Communities currently lack awareness, physical and financial resources and leadership to anticipate climate change risks and implement adaptive solutions	26 pilot villages		Climate-resilient trees and crops suitable for lowland agroforestry in Samoa are available and affordable.
Outcome 3: Project knowledge and lessons learned are captured, analyzed and disseminated	Number of knowledge management products generated and disseminated Number of farmers receiving tailored knowledge management products on good adaptive practices and participating in knowledge sharing activities. Number of national, regional or international events and platforms, where project experience is presented	The analysis and dissemination of adaptation lessons learnt is very fragmented and limited to a number of incipient projects	Starting from year 2 of the project, at least 5 lessons learned and best practices consolidated every year in form of case studies, experience notes, brochures, photo stories or audio-visual materials and disseminated directly to communities and through appropriate media By the end of the project at least 1500 farmers in the pilot villages, and 1500 farmers involved in farmers' organizations/networks receive knowledge products and participate in knowledge sharing activities. Project experience and KM materials are presented in at least 2 national workshops, 2 regional events, and in at least 2 international web-based platforms	KM products Community feedback on the usefulness of awareness and technical information materials (interviews, surveys) Project documents and reports Meeting reports, web site contents	Project stakeholders are willing to collaborate in sharing and analyzing honestly their experience, including challenges and lessons learnt. Urgent administrative and technical project tasks do not distract project team in collating and communicating project experience. Managers of regional and international events and web platforms are supportive to receive and portray project experience.

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

ANNEX C: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF/LDCF/SCCF RESOURCES

Position Titles	*$/ person week**	*Estimated person weeks***	*Tasks to be performed*
For Project Management			
Local			
Project Coordinator	192	750	• Facilitate the day-to-day functioning of the PMU; • Manage human and financial resources, in consultation with the project's senior management, to achieve results in line with the outputs and activities outlined in the project document; • Lead the preparation and implementation of the annual results-based work plans and logical frameworks as endorsed by the management; • Coordinate project activities with related and parallel activities both within MNRE and with external implementing partner agencies; • Monitor project activities, including financial matters, and prepare monthly and quarterly progress reports, and organize monthly and quarterly progress reviews; • Support the PM in organizing PB meetings; • Coordinate the distribution of responsibilities amongst Project Team members and organize the monitoring and tracking system of all cluster services; • Report and provide feedback to UNDP-GEF and the PB on project strategies, activities, progress and barriers; and • Manage relationships with project stakeholders including donors, NGOs, the private sector, GoS agencies, as required
Project Assistant	192	162	• Maintain all files and records of the project in both electronic and hard copies; • Provide logistical support to the PM, PC, project partners and consultants in organizing training events, workshops and seminars; • Maintain close linkages with relevant agencies and stakeholders; • Assist consultants by organizing their travel schedules, arranging meetings with different stakeholders and book hotel venues and accommodations as required;

			• Prepare monthly leave records for the project staff and consultants; • Prepare and update inventories of expendable and non-expendable project equipment; • Assist the PMU in preparing project reports to comply with GoS and UNDP formats; and • Draft necessary correspondences to local agencies and stakeholders.
International			
Justification for Travel, if any: to project demo sites and communites, to government department and extension service offices located oputside of Apia			
For Technical Assistance			
Local			
Note: table for technical consultants is annexed, due to formatting difficulty (not possible to add rows)			
International			
Justification for Travel, if any: to Samoa, to project demo sites and communities			

* Provide dollar rate per person week. ** Total person weeks needed to carry out the tasks.

ANNEX D: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS

A. EXPLAIN IF THE PPG OBJECTIVE HAS BEEN ACHIEVED THROUGH THE PPG ACTIVITIES UNDERTAKEN. 1. TECHNICAL DEFINITION AND CAPACITY NEEDS ASSESSMENT: CURRENT AND PROJECTED CLIMATE CHANGE RISKS HAVE BEEN ANALYSED IN TERMS OF IMPACTS ON RESILIENCE OF FOREST ECOSYSTEMS, SERVICES AND GOODS PROVIDED BY FORESTS, AND CONSEQUENTLY IMPACTS ON THE LIVELIHOOD OF RURAL COMMUNITES RELIANT ON FORESTRY RESOURCES. LINKAGES WITH EXISTING DEVELOPMENT AND POLICY FRAMEWORKS, AND WITH FORESTRY-RELATED INITIATIVES HAVE BEEN ANALYSIED, WITH THE ADDITIONALITY OF THE PROPOSED OUTCOMES AND INTERVENTIONS AND THE ROLES OF THE DIFFERENT ORGANIZATIONS IN CHARGE OF THEM IDENTIFIED (AS DESCRIBED IN THE STRATEGY SECTION AND STAKEHOLDER INVOLVEMENT PLAN) . 3 DEMO AREAS HAVE BEEN SELECTED CONSIDERING IMPACTS AND VULNERABILITES TO THE IDENTIFIED CLIMATE-INDUCED RISKS, REPRESENTATIVENESS OF FOREST AREAS, PROTECTED AREAS AND RURAL COMMUNITES OF SAMOA, CAPABILITY TO DEMOSTRATE WIDE RANGE OF ADAPTATION MEASURES AND WILLIGNESS OF LOCAL STAKHOLDERS TO COLLABORATE IN PROJECT IMPLEMENTATION (AS DESCRIBED IN ANNEX 3). TECHNICAL NEEDS AND CAPACITES HAVE BEEN ASSESSED THROUGH INVOLVING NATIONAL AND INTERNATIONAL EXPERTS AT THE DIFFERENT GOVERNMENT DEPARTMENTS, NGOS, REGIONAL AND UN ORGANIZATIONS (SPC, SPREP, CONSERVATION INTERNATIONAL, FAO), AND SPECIALIZED TECHNICAL AGENCIES ALREADY INVOLVED IN CLIMATE CHANGE ADAPTATION PROJECTS IN SAMOA (E.G. THE NZ-BASED NIWA INVOLVED IN THE CLIMATE EARLY WARNING SYSTEM FOR THE NAPA1 LDCF PROJECT IN AGRICULTURE AND HEALTH)

2. INSTITUTIONAL ARRANGEMENTS, MONITORING & EVALUATION: THE STRATEGIC RESULTS FRAMEWORK HAS BEEN ESTABLSIHED WITH QUALITATIVE AND QUANTITAIVE INDICATORS. MONITORING & EVALUATION PLAN HAS BEEN DEFINED AND BUDGETED. INSITUTIONAL ARRANGEMENTS HAVE BEEN SET UP WITH TORS FOR KEY PROJECT GROUPS AND EXPERTS.

|

3. VARIOUS ROUNDS OF STAKEHOLDER CONSULTATIONS HAVE BEEN HELD THROGH AN INCEPTION WORKSHOP AND TECHNICAL MEETINGS INVOLVING GOVERNMENT DEPRATMENTS, REGIONAL ORGANIZATIONS, DEVELOPMENT PARTNERTS AND COMMUNITY REPRESENTATIVES. COMMUNITY CONSULTATIONS HAVE BEEN PURSUED THROUGH A FIELD WORKSHOP AT THE PROJECT DEMO SITE IN NORTH-EAST UPOLU, WITH THE PARTICIPATION OF OF TRADITIONAL CHIEFS, REPRESENTATIVES OF GOVERNMENT AND WOMENS' GROUP FROM 14 VILLAGES. STAKHOLDER INTERVIEWS HAVE BEEN CONDUCTED IN THE PILOT VILLAGES ADJACENT TO THE LAKE LANOTOO AND MAUGA O SALAFAI NP DEMO SITES. THE ROLE OF STAKEHOLDERS IS DETAILED IN THE STAKEHOLDER INVOLVEMENT PLAN (ANNEX 2)

4. THE TOTAL BUDGET AND WORKPLAN HAS BEEN SET UP, IN LINE WITH THE PROPOSED OUTCOMES, OUTPUTS AND ACTIVITIES. DEVELOPMENT PARTNERS (BI-LATERAL AGENCIES AND REGIONAL ORGANIZATIONS) HAVE BEEN ENGAGED TO PROVIDE CO-FINANCING SUPPORT, AND GOVERNMENT IN-KIND CO-FINANCING HAVE BEEN SECURED TO MEET PROJECT REQUIREMENTS.

B. DESCRIBE FINDINGS THAT MIGHT AFFECT THE PROJECT DESIGN OR ANY CONCERNS ON PROJECT IMPLEMENTATION, IF ANY: THE BUDGET OF OUTCOME 1 HAS BEEN INCREASED FROM THE INDICATIVE ALLOCATION IN PIF, BASED ON DETAILED ASSESSMENT AND PLANNING OF THE INFORMATION MANAGEMENT TOOLS (CLEWS, SAMFRIS, SRIM) AND RELATED TECHNOLOGICAL AND CAPACITY BUILDING NEEDS (SEE DETAILED ACTIVITY AND TASK LIST FOR CLEWS IN ANNEX 6). THIS HAS BEEN CARRIED OUT BASED ON EVOLVING CLEWS EXPERIENCE IN NAPA 1 LDCF PROJECT AND WITH THE INVOLVEMENT OF NIWA EXPERTS. A LOCAL GIS EXPERT HAS BEEN ALSO BUDGETED TO PROVIDE SUPPORT TO FORESTRY DIVISION IN THIS FIELD FOR THE PROJECT.

C. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES AND THEIR IMPLEMENTATION STATUS IN THE TABLE BELOW:

Project Preparation Activities Approved	*Implementation Status*	*GEF/LDCF/SCCF Amount ($)*				*Cofinancing ($)*
		Amount Approved	*Amount Spent Todate*	*Amount Committed*	*Uncommitted Amount**	

Technical Definition and Capacity Needs Assessment	Completed	20,000	16,000	4,000		18,250
Institutional Arrangements, Monitoring & Evaluation	Completed	20,000	16,000	4,000		20,000
Stakeholder Consultations	Completed	5,000	5,000			5,000
Financial Planning and co-financing definition`	Completed	5,000	3,000	2,000		
PPG Management Budget Costs	Completed					6,750
	(Select)					
	(Select)					
	(Select)					
Total		50,000	40,000	10,000	0	50,000

* Any uncommitted amounts should be returned to the GEF Trust Fund. This is not a physical transfer of money, but achieved through reporting and netting out from disbursement request to Trustee. Please indicate expected date of refund transaction to Trustee.

ANNEX E: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used**)**

Provide a calendar of expected reflows to the GEF/LDCF/SCCF Trust Fund or to your Agency (and/or revolving fund that will be set up)

H: M&E PLAN

Type of M&E activity	Responsible Parties	Budget US$ excluding project team staff time	Timeframe
Inception Workshop (IW)	Project Manager (PC) UNDP Country Office (CO) UNDP-GEF Regional Coordination Unit (RCU)	$5,000	Within first two months of the appointment of PD and Project Manager
Inception Report	Project Manager (PM) and PMU staff UNDP CO	None	Immediately following IW
Measurement of Means of Verification for Project Purpose Indicators	PC under close supervision of PD will oversee the hiring of specific institutions and delegate tasks and responsibilities to relevant PMU members	To be finalized in Inception Phase and Workshop.	Start, mid and end of project
Measurement of Means of Verification for Project Progress and Performance (measured on an annual basis)	Project Board (PB) chaired by CEO of MNRE PB with overseeing by UNDP-CO and PD; Measurement of progress conducted by MNRE, MWCSD and MAF	To be determined as part of the Annual Work Plan's preparation.	Annually prior to Annual Project Report andProject Implementation Review and upon completion of the implementation of the annual work plans
Annual Project Report (APR) and Project Implementation Review (PIR)	PC and PMU staff UNDP-CO UNDP-GEF	None	Annually
Tripartite Review (TR) and Terminal Tripartite Review (TTR) Reports	GEF Operational Focal Point UNDP-CO PC	$5,000	Every year, upon receipt of APR
PB Meetings	PC PB Members UNDP-CO	$1000	Following Project IW and subsequently at least once a year
Annual status reports /seminar /workshop	PC and PMU staff	$5,000	To be determined by Project Team and UNDP
Technical reports/ knowledge and advocacy material	MNRE, FD, MWCSD, MAF, PM and PMU staff, UNDP External consultants as needed	$10,000	To be determined by Project Team and UNDP

Mid-term External Evaluation	PC and PMU staff UNDP-CO, UNDP-GEF RCU, External Consultants (i.e. evaluation team)	$25,000	At the mid-point of project implementation.
Final External Evaluation	PC and PMU members UNDP-CO UNDP-GEF RCU External Consultants (i.e. evaluation team)	$25,000	At the end of project implementation
Lessons learnt and shared at international level	PMU and UNDP	Will cover from Outcome 3	Yearly
Audit	MoF and UNDP	$ 3000	Yearly
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	UNDP-CO UNDP-GEF RCU (as appropriate) PB Members	n/a, financed through IA fees	Yearly
TOTAL INDICATIVE COST Excluding project team staff time and UNDP staff and travel expenses		$USD 79,000	

C. (continuation of the table)

Position Titles	***$/ person week****	***Estimated person weeks****	***Tasks to be performed***
For Technical Assistance			
Local			
SamFRIS-GIS Expert	650 $	24	• Coordinate with and assist the SRIM and CLEWS, JICA experts to integrated updated forest coverage, soil, landuse, climate and other information layers into SAMFRIS, based on experience with the ICCRAHS project • Assist and train the FD Planning Officer and other staff to update and maintain the SAMFRIS database • Assist in the ground truthing of forestry data in the ICCRIFS demo sites, appliyng GPS techniques • Assist in the preparation of GIS-based maps and applications • Assist in training activites tailored to different user groups (FD, communites) on the use of the revised GIS based forestry information
Forest Fire Prevention Expert	650 $	24	• Consult with MNRE on climate change, forestry and environment issues • Consult with Samoa Water Authority (SWA) and MNRE for supply of water • Consult with communities to address their needs • Prepare new FFPM and finalize for submission to CDC Deliver training on manula to project stakeholders
Agro forestry technical officer	220 $	192	(i) Coordination and Management Funtions • Ensure a detailed work plan and budget are in place, oversee project implementation, monitor work progress, reporting and communication, and timely delivery of relevant outputs within the Forestry/Agriculture Sectors and across other key development sectors; • Ensure stakeholders consultations related to activities for these outputs within the Forestry/Agriculture Sectors; and • Ensure partnerships are developed with relevant stakeholders and development partners (ii) Strategic Planning and Technical Support • Ensure climate risks are integrated into agricultural planning and policy processes, including the updating of existing

			forestry/agriculture policies and plans; • Ensure easy access to climate risk data and GIS maps illustrating crop diversification options for national forestry/agriculture development planners and exporters of forestry/agriculture products in high risk areas; and • Ensure technical support and assistance is available and provided to support project implementation. (iii) Capacity building and training • Ensure project capacity building, awareness, educational and training programmes are developed and implemented; and • Ensure resources are available to conduct training, including offering technical support.
Native forestry technical officer	220$	192	(i) Coordination and Management Functions • Ensure a detailed work plan and budget are in place, oversee project implementation, monitor work progress, reporting and communication, and timely delivery of relevant outputs within the Forestry/Environment Sectors and across other key development sectors; • Ensure stakeholders consultations related to activities for these outputs within the Forestry/Environment Sectors; and • Ensure partnerships are developed with relevant stakeholders and development partners. (ii) Strategic Planning and Technical Support • Ensure climate risks are integrated into forestry/environment planning and policy processes including the updating of existing forestry/environment policies and plans; • Ensure easy access to climate risk data and GIS maps illustrating tree crop diversification options for national forestry/environment development planners and exporters of forestry/environment products in high risk areas; and • Ensure technical support and assistance is available and provided to support project implementation. (iii) Capacity building and training • Ensure project capacity building, awareness, educational and training programmes are developed and implemented;

			and • Ensure resources are available to conduct training, including offering technical support.
Community project field assistants (26 in total, for each pilot villages)	120 $	390	• Liaise with the PMU on project activities • Facilitate the organization of the training and technical assistance activities in the village • Facilitate the coordination of the village project committee, coordinating also with district level committees • Coordinate with farmers of the village on the technical activities • Support the field work undertaken by FD officers and specialists (e.g. forestry surveys, monitoring, etc.) • Assist in the establishment and maintenance of the community demonstration plots
Communication and knowledge management officer	220 $	192	• Collecting and analyzing project lessons learnt and good practices • Establish a project communication strategy (tailored to stakeholder groups) • Coordinating the preparation of knowledge and communication products (case studies, press releases, photo stories, videos, brochures, information sheets, etc.) • Assist in the organization of knowledge exchanges activities (field visits, national and local forums, school activities) • Incorporate project knowledge products in national, regional and global web-based platforms (e.g. MNRE website, SPREP CC Portal, ALM) • Liaise with national and regional partners and education institutions to facilitate the dissemination of project experience and knowledge materials
International			
Agro-forestry specialist	3000 $	23	• support the development of Agro-forestry Adaptation Plans (AFAP) in the project demo sites and villages • assist the project team in site-specific assessments, the identification and design of climate-resilient agro-forestry techniques • to conduct awareness raising and training workshops on the integration of climate-sensitive crops and trees (food/energy/animal fodder) and pasture

			management techniques (following IFES and SAPS approach) • work closely with the technical Officer on Agroforestry and other specialists and technical institutions, e.g. SPC • Support the identification of livelihood support mechanisms based on the enhanced framing techniques and value added crops, liaising with technical experts of related projects
Ecosystem-based Adaptation and Protected Areas expert	3000 $	23.5	• Support the development of Native Forestry Adaptation Plans (NAFAP) in the demo areas • Assist in conducting vulnerability assessment of sensitive forest ecosystems and species • Assist the project team in the identification, design and implementation of adaptation measures • Integrate the climate information and forest management tools in the planning and implementation process (CLEWS, SAMFRIS, FFPS) • Conduct trainings for government officers, extension services and communities • Coordinate closely with Technical Officer on Native Forestry, and other technical specialists, including those CI and the JICA FCP.
Consultant, Mid-Term Evaluation	3000 $	7	• Provide guidance to the National Consultant in conducting the mid-term evaluation • Assess the progress towards achievement of the project objectives as outlined in the initial project document • Look into the relationship between this project and other relevant projects to reduce climate change risks through adaptation • Assess the structure and performance of the project management team and support provided by UNDP • Identify lessons learnt from the implementation of the project's activities • Provide guidance and specific recommendations on how the Project

			Team and UNDP can improve performance (both substantive and management) during the remaining duration of the current project • Provide guidance and specific recommendations for future support in the area of CCA and disaster risk management (as applicable) for both the GoS and UNDP to consider • Produce the MTE Report • Present the findings to relevant stakeholders
Consultant, Final Evaluation	3000 $	7	• Provide guidance to the PMU staff in conducting the final evaluation • Assess the progress towards achievement of the project objectives as outlined in the initial project document • Look into the relationship between this project and other relevant projects to reduce climate change risks • Assess the structure and performance of the project management team and support provided by UNDP and to what extent recommendations from the mid-term evaluation were implemented • Identify lessons learnt from the implementation of the project's activities in the following areas: i. Relevance – the extent to which the activity is suited to local and national development priorities and organizational policies, including changes over time ii. Effectiveness – the extent to which the project objective has been achieved or how likely it is to be achieved iii. Efficiency – the extent to which results have been delivered with the least costly resources possible iv. Results – the positive and negative, and foreseen and unforeseen, changes to and effects produced by a development intervention. In GEF terms, results include direct project outputs, short-to medium term outcomes, and longer-term impacts including replication effects and other local effects v. Sustainability – the likely ability of an intervention to continue to deliver

			benefits for an extended period of time after completion. Projects need to be environmentally as well as financially and socially sustainable. • Provide guidance and specific recommendations for future support in the area of CCA and disaster risk management (as applicable) for both the GoS and UNDP to consider • Produce the FE Report • Present the findings to relevant stakeholders
Forestry Policy and Planning Specialist	3000 $	17.5	• Consult with MNRE on climate change, forestry and environment issues • Consult with Samoa Water Authority (SWA) and MNRE for supply of water • Consult with communities to address their needs • Prepare new FFPM and finalize for submission to CDC Deliver training on manula to project stakeholders
Climate Early Warning System Experts	3000 $	69	Adjustment of current climate services, knowledge and infrastructure to forestry use (based on work undertaken during the ongoing NAPA 1 ICCRHAS, agriculture and health sector) • Development of additional data collection capacity for forestry application (installation of automated weather stations for data recording in selected forestry areas, establishment of forest climate risk database) required as base-line data for CLEWS • Development of climate-forest knowledge and application tools (such as Cyclone Track Atlas, ¬ Fire-weather index, GIS map layer analysis, GIS forest-climate reference and display tool, etc.) • Training on interpretation and use of CLEWS, stakeholder interactions, support for policy planning and provision of climate information services (protocols and scheduled delivery methods for climate-forestry bulletins and advisories, and delivery pathways to all relevant stakeholders)
Soil Resources (SRIM) Expert	3000 $	11.5	• Prepare a concept paper for extending the SRIM to cover the Forestry Sector and integrate to SamFRIS, in consultation with the PC and senior FD staff on the planning and technical issues involved

			• Identify the relevant tree types including native species, energy trees and high-valued exotic varieties • Support the analysis soil characteristics and conditions in pilot villages • Consider relevant climate parameters • Determine economic returns on plantation trees and protected trees • Develop GIS layers for the the different tree species • Prepare guidance notes and training materials for users on the use and application of the SRIM linked with SamFRIS • Conduct training of forestry planners and officials on the SRIM integrated into SamFRIS • Advise on the communication of SRIM information to village communities and rural farmers
Knowledge Management and Communications Specialist	3000 $	8	The consultant will support the KM and Communication Officer in the preparation of the project communication strategy and key knowledge products; will provide training to project staff on production and dissemination of knowledge products.
Justification for Travel, if any: to Samoa, to project demo sites and communities.			