

PROJECT DEVELOPMENT FACILITY REQUEST FOR Pipeline Entry and PDF Block B APPROVAL

AGENCY'S PROJECT ID: PIMS 2162

GEFSEC PROJECT ID:

COUNTRY: 11 Pacific Island Countries: Cook Islands, Federated States of Micronesia, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and Fiji (subject to submission of Initial National Communications)

PROJECT TITLE: Pacific Islands Adaptation to

Climate Change Project (PACC)

GEF AGENCY: United Nations Development

Programme (UNDP)

OTHER EXECUTING AGENCY(IES): N/A

DURATION: 8 Months

GEF FOCAL AREA: Climate Change

GEF OPERATIONAL PROGRAMME: Adaptation

GEF STRATEGIC PRIORITY: SCCF

ESTIMATED STARTING DATE: April 2006
ESTIMATED WP ENTRY DATE: June 2007

PIPELINE ENTRY DATE: March 2006

FINANCING PLAN (US\$)	
GEF ALLOCATION	
Project GEF Allocation	11,250,000
Project Co-financing	33,750,000
(estimated)	
Additional co-financing	37,050.000
available but not required	
under 1:4 sliding scale	
formula (estimated)	
Total US\$70,800.000	
Total Project financing	82,050,000
Breakdown of total Co-	70,800.000
Financing	
EU baseline	53,700.000
SPC(DSAP)	7,600.000
FAO	4,500.000
FSM/Cook Islands budgets	5,000.000

FSM/Cook Islands budgets	5,000.000
PARALLEL FINANCING	33,750,000
DETAILS	
GEF Agency (in kind)	50,000
National Contribution	220,000
Baseline Project contribution	33,480,000
(EU)	

PDF B**	350,000
PDF CO-FINANCING (details	provided in Part
II, Section E – Budget)	
GEF Agency	10,000
National Contribution	
SPREP	10,000
Sub-Total PDF Co-financing:	20,000
Total PDF Project	370,000
Financing:	

RECORD OF ENDORSEMENT ON BEHALF OF THE GOVERNMENT:

Please see next page

This proposal has been prepared in accordance with GEF policies and procedures and meets the standards of the GEF Project Review Criteria for approval.

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Federated States of Micronesia: MOOTEB, John E.	Deputy Assistant Secretary Department of Economic Affairs, Federated States of Micronesia PO Box PS-12, Palikir, Pohnpei, FM 96941	27 April 2005
Fiji: TUILOMA, Cama	Chief Executive Officer Ministry for Local Government, Housing, Squatter Settlement and Environment, Level 2&3, FFA House, Gladstone Road, Suva, Fiji, TEL: 679 3311 699/3304 304 ext 302; FAX: 679 3312 879	29 April 2005
Nauru: DEIYE, Tyrone	Acting Secretary Department of Industry and Economic Development, Government Offices, Yaren District, Republic of Nauru TEL: (674) 4443181; FAX: (674) 4443745 E-mail: jc@cenpac.net.nr	11 May 2005
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Solomon Islands: LIKAVEKE, Steve Daniel	Permanent Secretary Ministry of Natural Resources Department of Forests, Environment and Conservation, P.O. Box G24, Honiara, Solomon Islands	23 May 2005

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ACRONYMS

ACP Asia, Caribbean, Pacific ADB Asian Development Bank

AusAID Australian Agency for International Development

APF Adaptation Policy Framework

CBDAMPIC Capacity Building for Adaptation Measures in Pacific Island Countries

CCAIRR Climate Change Adaptation through Integrated Risk Reduction

CCT Climate Country Teams

CHARM Comprehensive Hazard and Risk Management

CLIMAP Climate Change Adaptation Programme for the Pacific CROP Council of Regional Organizations of the Pacific

DSAP Development of Sustainable Agriculture in the Pacific Programme

FSM Federated States of Micronesia

FSP Full Sized Project

GDP Gross Domestic Product
GEF Global Environment Facility
KAP Kiribati Adaptation Project
LDC Least Developed Countries
LDCF Least Developed Country Fund
MDG Millennium Development Goals

NAP National Action Plan

NAPA National Adaptation Programmes of Action

NCSA National Capacity Self-Assessment NGOs Non-Governmental Organisations

NZAid New Zealand Aid PC Project Coordinator

PAC Project Advisory Committee

PACC Pacific Islands Adaptation to Climate Change Project

PICs Pacific Island Countries
PIF Pacific Islands Forum

PICCAP Pacific Islands Climate Change Assistance Programme

PM Project Manager

PMU Project Management Unit PPA Pacific Power Association

PRCC Pacific Resources Concerns Centre
RTA Regional Technical Adviser

SIDS Regional Technical Adviser
SIDS Small Island Developing States

SOPAC South Pacific Applied Geoscience Commission

SPA Strategic Programme on Adaptation SPC Secretariat of the Pacific Community

SPREP Secretariat of the Pacific Regional Environment Programme

TWC Technical Working Committee

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

USA United States of America
USP University of the South Pacific
V&A Vulnerability and Assessment
WaSSP Water Sector Support Programme

WG Working Group

PART I - PROJECT CONCEPT

A – SUMMARY

- 1. The PACC will implement long-term adaptation measures to increase the resilience of a number of key development sectors in the Pacific islands to the impacts of climate change. This objective will be achieved by focusing on long-term planned adaptation response strategies, policies and implementation measures to bring about this result. The key development sectors this project will focus on are water resources management; food production and food security; coastal zone and associated infrastructure (roads and breakwater). To ensure sustainability of the project, regional and national adaptation financing instruments will also be developed.
- 2. The project will be completed in two phases. The PDF-B exercise (Phase I) will further design and develop and ascertain the components of the FSP in consultation with the participating countries. During Phase I, baseline and additional adaptation activities in the key socio-economic sectors identified will be further elaborated. Using the Adaptation Policy Framework as a guiding tool for project development, a strategy and structure for implementing key adaptation activities in the identified areas will be further developed and finalized.
- 3. In Phase II, the FSP will mainly focus on the national implementation of adaptation activities in the key selected economic areas and establish national mechanisms to ensure sustainability of the project. Monitoring and evaluation of the project will also ascertain during this phase whether adaptation investments significantly enhanced sustainable development in case study countries. Regional activities will consist of technical backstopping to enhance national implementation in the form of advice and information, training, regional monitoring, coordination of regional workshops, the facilitation of the sharing of lessons among the PIC participants and project management oversight. While some funds will be allocated for regional backstopping (as will be agreed to by countries during the PDF.B phase), most of the GEF assistance will be targeted at implementation activities at the national level.

B - COUNTRY OWNERSHIP

B.1 COUNTRY ELIGIBILITY

4. Eleven (11) Pacific Island Countries (PICs) will take part in the PACC project. Fiji's participation will be subject to the submission of its initial national communication. All of the participating PICs have ratified the UNFCCC. The ratification dates are as follows: Cook Islands (20/04/93); Federated States of Micronesia (18/11/93); Fiji (25/02/93); Nauru (11/11/93); Niue (27/02/96); Papua New Guinea (16/03/93); Samoa (29/11/94); Solomon Islands (28/12/94); Tonga (01/07/98); Tuvalu (26/10/93); and, Vanuatu (25/03/93).

B.2 COUNTRY DRIVENNESS

5. The eleven PIC participating in the PACC are all unique in terms of their geographic composition, culture, socio-economic and political state of development. Nevertheless, all face

common sustainable development challenges as SIDs associated with their size and remoteness. One of the greatest challenges facing SIDs in the 21st century is climate change. For all SIDs there is a need to build resilience to climate change in key economic, climate sensitive sectors. This issue has been clearly identified in documents such as the Initial and National Communications, NAPAs and in the regional climate and disaster frameworks where water resources management, food security and coastal zone and associated infrastructure are all identified as priority areas where adaptation work is needed. UNEP's *Third Global Environment Outlook* also provides a list of the main economic, social, environment issues of nine of the participating countries, where all countries highlight the need to protect water resources, food and food security and infrastructure (Annex I)

Table .1

PIC Initial National Communications: Identification of water, food production as security and coastal zone and associated infrastructure as priority adaptation areas

	PACC Country	INC Submitted	Water	Food Production and Food Security	Coastal Zone Associated Infrastructure
1	Cook Islands	30/10/99		$\sqrt{}$	$\sqrt{}$
2	FSM	04/12/97		$\sqrt{}$	$\sqrt{}$
3	Fiji	Not submitted			
4	Nauru	30/10/99	V	V	$\sqrt{}$
5	Niue	02/10/01		$\sqrt{}$	$\sqrt{}$
6	PNG	27/02/02	V	V	$\sqrt{}$
7	Samoa	30/10/99	V	V	$\sqrt{}$
8	Solomon Islands	29/09/04	V	V	$\sqrt{}$
9	Tonga	21/07/05	V	V	$\sqrt{}$
10	Tuvalu	30/10/99	V	V	V
11	Vanuatu	30/10/99	√	V	V

- 6. In addition to the need to build adaptive capacity in the area of water resources, food and food security and infrastructure, PICs have also recognized the urgent need to integrate climate change adaptation into the wider national economic and social planning processes. During two high level adaptation consultations held in Fiji in 2002 and 2003, representatives of 16 PICs from finance, treasury, environment and water noted that climate change, climate variability and sea level rise were inevitable. They concluded that PICs had no choice but to adapt and agreed that there was a need to integrate adaptation concerns into national development plans and national policies and strategies. They further agreed that mainstreaming of adaptation within the context of national sustainable development into national and sub-national economic development planning needed to be carried out in a programmatic manner. The meeting also called for permanent, government-funded, high-level committees and a dedicated budget for adaptation.²
- 7. The most recent regional affirmation of the importance of integrating adaptation concerns into wider national economic and social planning processes was the Regional Climate Change Framework endorsed at the 36th Pacific Islands Forum 2005. In this framework, leaders of the Pacific islands region, recognized the importance of Pacific island countries and territories taking

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¹ Pacific Islands Framework for Action for Climate Change 2006-2015 and the Disaster Risk Reduction and Disaster Management: A Framework for Action 2005-2015

² First and Second High Level Adaptation Consultation Meeting, Fiji in SOPAC 'Proceedings of 2nd High Level Consultation Meeting, Sigatoka Fiji

action to address climate change through their national development strategies, or their equivalent, which are linked to national budgetary and planning processes³

- The PACC is consistent with the needs of the participating countries for a number of reasons. First the PACC is a direct response to country members requesting the SPREP Secretariat at Annual SPREP Meetings and other meetings since 2003 to develop a regional adaptation proposal to present to the GEF through UNDP.⁴ The context behind the request for a regional approach to adaptation was the desire by PICs that SPREP develop further regional adaptation projects following on from the successful SPREP/CIDA CBDAMPIC project that carried out adaptation implementation activities in the Cook Islands, Fiji, Samoa and Vanuatu. During the CBDAMPIC terminal review meeting, the representatives of the Climate Change Country Teams (and other government representatives present) universally lauded the project (and CIDA and SPREP) for an initiative that actually got some practical things accomplished, that addressed real needs of communities and improved the livelihoods of their people. They too indicated their intentions to continue this type of work in their national programmes and their international interventions. They noted both the practical focus of the project, the ability to go beyond studies into implementation, the engagement of communities, and the flexibility provided by CIDA and SPREP to allow countries to adapt the approach most effective in their countries.
- 9. The PACC is also consistent with the needs of participating countries as it seeks to progress national adaptation activities in key economic climate vulnerable areas identified by the participating countries themselves in national and regional policy instruments and frameworks. At the same time, the PACC will further build on the of work taken at the national level by institutions like the ADB, CIDA and the World Bank to integrate adaptation into national budgetary and planning processes in eleven PICs.
- 10. During the development of the FSP, the PACC will ensure that activities financed under the project do not duplicate ongoing activities already financed by the GEF through its EA window and/or under the LDCF. The PACC for example, will not be carrying out vulnerability assessments, greenhouse gas inventories (INC and SNC requirement) or detailed capacity assessments related to the climate change convention (NCSA). Neither will it pick up any activities identified in the NAPAs (for the LDCs) or under the SPA. For example the Samoan NAPAs identified activities that needed urgent and immediate action. The PACC will focus on long term activities linked to sustainable development not identified in the immediate action list of the Samoan NAPAs. The more urgent list will be left for funding under the LDCF.

³ Pacific Islands Climate Change Framework for Action available at sprep.org

⁴ Ministers of Fiji, France, French Polynesia, Kiribati, New Zealand, Niue, Samoa, Tokelau and Senior Officials of American Samoa, Australia, Cook Islands, Federated States of Micronesia, Guam, Marshall Islands, New Caledonia, Papua New Guinea, Tonga, Tuvalu, United States of America, Vanuatu and Wallis et Futuna, met in Papeete, 17 September, 2004, on the occasion of the Fifth Environment Ministers Meeting: ... Urged the Secretariat to work with UNDP to develop a regional medium sized project to respond to the needs of member countries by 2005 and acknowledged the offer of assistance by UNEP to build on SPREP's Pacific Environment Information Network as well as the *Critical Ecosystems Initiative* of Conservation International. Furthermore, PICs again expressed their desire for PACC to proceed in a meeting with GEF/Sec and UNDP-GEF, UNFCCC COP 12, Argentina December 2005.

⁵ Terminal review report to CIDA on the CBDAMPIC project by Dr Barry Smit.

C - PROGRAMME AND POLICY CONFORMITY

C.1 PROGRAMME CONFORMITY

11. The proposed project is consistent with the guidelines/requirements of the SCCF managed by the GEF ⁶ The project is also consistent with the UNDP focus to programme adaptation in the four areas of (1) institutional and constituency capacity building and awareness raising; (2), integration of climate change risk reduction strategies at the strategic, policies and practices into various sectors; (3), implementation of adaptation measures and (4), financial instruments, including insurance and other risk transfer systems.

C.2 PROJECT DESIGN

Problem Statement

- 12. The impacts of climate change represent one of the greatest threats to the sustainable development of SIDS and by extension, the PICs. The cost of extreme events (primarily cyclones and droughts) exceeded US\$\$1 billion in the 1990s alone. In the capital cities of Fiji Islands, Solomon Islands, Vanuatu, Samoa and Tonga, a cyclone with a 25-year return period causes average damages estimated at 3% of national GDP. A 100-year cyclone-with a 50% chance of occurring within the present generation-inflicts damages estimated to average 60% of GDP⁷
- 13. At the same time, human induced vulnerability is rising due to rapid urbanization, infrastructure concentration and growing environmental degradation in coastal areas. The prognosis for the future is that climate change is expected to exacerbate present-day vulnerability in significant ways. Pacific Islands are starting to feel these impacts already. Compared to earlier historical records during the 20th century, the southern Pacific is experiencing a significantly drier and warmer climate (by 15% and 0.8 degrees centigrade respectively). The Central Equatorial Pacific is facing more rain (about 30%) and a similarly hotter climate (0.6 degrees centigrade), and sea surface temperatures in both areas have increased by about 0.4 degrees centigrade). These and other changes such as increases in the frequency and intensity of extreme events are expected to intensify during the 21st Century. The impacts are expected to be pervasive, affecting coastal infrastructure and housing, water supply, agriculture, tuna and coastal fisheries and human health and well being. The impacts would also fall disproportionately on the poor. ⁸
- 14. PICs and their development partners have made modest progress in addressing these challenges with a small number of PICs benefiting from adaptation projects such as the ADB funded CLIMAP, the CIDA/SPREP CBDAMPIC, the World Bank funded KAP and the

⁶ GEF paper "Programming to implement the Guidance for the Special Climate Change Fund adopted by the Conference of the Parties to the United Nations Framework Convention on Climate Change at its Ninth Session (GEF/C.24.12)

⁷ Shorten, GG 2003 'Catasprophe Insurance in the Pacific: Managing Disaster Risks in the Pacific Islands Region-Summary Report'

⁸ Hay, J.E Mimura, N Campbell, J Fifita, S Koshy, K Mc Lean, RF, Nakalevu T, Nunn P and N de Wet 2003: Climate Variability and Change and Sea Level Rise in the Pacific Islands Region: A Resource Book for Policy and Decision Makers, Educators and Other Stakeholders, SPREP

UNEP/SOPAC Pilot Project on Empowering Women in Rainwater Harvest. Most projects implemented in the region on climate change since the early 1990's however, have largely concentrated on assessments of vulnerability and adaptation and related capacity building. Whilst these initiatives are highly commended, countries have continued to call for support for more urgent concrete adaptation action to enhance adaptive capacity in the face of anticipated extreme climate events. This proposal builds on previous assessments and focuses on implementation.

Table 2
Major Projects Supporting Adaptation: Pacific Island Countries 1990s-2006

Major Projects in Supporting Activities (Capacity Building, Research, Monitoring)				
Project	Implementing Agency	Amount (US\$M)	Donor	
Sea Level and Climate Monitoring	AMSAT	12.0	AusAID	
NCSA	National Governments	0.2 per country	UNDP-GEF	
PICCAP	SPREP	2.3	UNDP-GEF	
Environmental Vulnerability Index Phase	SOPAC	1.0	NZ, Ireland, Norway,	
III			Italy	
Meteorology Enhanced Climate Reduction	BOM/SPREP(PIGCOS)	0.8	AusAID	
Impact of Climate Change on Oceanic	SPC/PFRP	0.6	SPC/PFRP	
Tuna Stocks				
SOPAC water and sanitation specialist	SOPAC	.05	DFID	
Pacific Regional Environmental Strategy	ABD	0.4	ADB	
Pacific Regional Climate Change Bulletin	WMO	0.1	NZ	
Building Capacity to Ensure against	SOPAC	0.1	Taiwan/ROC	
Disasters				
USP Research Projects on Vulnerability	USP	0.5	USP	
SIDSNET	SPREP	0.2	UNDP-GEF	
NAPAs	LDC Governments	0.2	UNDP-GEF	
Major Projects in Adaptation Measures an	nd Policies			
Project	Implementing Agency	Amount (US\$M)	Donor	
Vulnerability and Adaptation Initiatives	AusAID	2.4	AusAID	
Capacity Building for Adaptation in	SPREP	1.3	CIDA	
Pacific Island Countries				
Climate Change Adaptation Programme	ADB, Governments	0.8	ADB/Canada	
for the Pacific				
Kiribati Adaptation Project	Kiribati Government	0.6	World Bank/Japan	
Pilot Project on Empowering Women in	SOPAC	PAC 0.1 UNEP		
Rainwater Harvest				
Small Grants Programme	National Governments	.005 per project	UNDP	
Major Projects in Risk Management/Disas			-	
Project	Implementing Agency	Amount (US\$M)	Donor	
Reducing Vulnerability in ACP States	SOPAC	6.9	EU	
Infrastructure Asset Management Project II	Samoa Govt	2.6	World Bank	
(Risk Management Component)				
Infrastructure Asset Management Project II	Samoa Govt	2.3	World Bank	
(Coastal Hazard Component)				
Cyclone Emergency Project (Risk	Tonga Govt	1.8	World Bank	
Management Project)				
Community Risk Strength, Community	SOPAC	.02	UK/DFID	
Resilience				

15. The gravity of the climate change problem facing the PICs and the limited work on adaptation implementation to date, suggests an urgent need to do more adaptation work in the

priority development areas identified by the PICs building on the lessons learnt from the CBDAMPIC, SOPAC, World Bank, ABD and UNEP experiences in the Pacific.

Current Baseline

16. As a general proposition, all participating countries have development baselines in water resource management, food and food security and coastal management and infrastructure. Assistance to countries from development partners further adds to the national baseline. For the purposes of the PACC and in the absence of national baselines from each of the participating countries (part of the PDF.B exercise), the PACC's baseline reference point will be the budgets of regional and national projects in the above sectors currently being funded by the EU, the FAO as well as the baselines for building resilience to harbor facilities and roads in the Cook Islands and Federated States of Micronesia respectively.

Water Sector Baseline

(a) The vulnerability of Pacific Island Countries was acknowledged at the 3rd World Water Forum, 2003. The are also a number of frameworks, strategies, projects promoting access to safe water to PICs communities such as the *Pacific Regional Action Plan for Sustainable Water Management, 2003* and the work of the GEF International Waters project. However there is an urgent demand for integrating adaptation work in the water sector as identified in the National Communications of all participating countries.

Under the PACC, the indicative available socio-economic baseline in the water sector is US\$53,700,000. The European Union, through its 9^{th} EDF, is financing significant water programmes in many PICs, such as the "Rural Communities Water Supply and Sanitation" in Papua New Guinea, and the "Water Sector Support Programme" (WaSSP) in Samoa. Each of these 2 programmes is funded at respectively \in 25,000,000 and \in 19,000,000 bringing the total available baseline at \in 44,000,000 (US\$53,700,000)

Food Production and Food Security

(b) A lot of research and technological development has taken place in the region to address problems such as nutrient deficiencies, land use, as well as addressing policy issues such as land tenure, marketing and fiscal instruments to ensure food security. There is great scope to address food security and food production within the context of climate change adaptation.

Under the PACC, the estimated available socio-economic baseline in the food production and food security sector is US\$ 12,100,000. The two programmes upon which the PACC activities will build are the Development of Sustainable Agriculture in the Pacific programme (DSAP) implemented in the Pacific by the Secretariat of the Pacific Community (SPC) and the FAO-coordinated Support to the Regional Programme for Food Security in Pacific Islands Countries implemented by national governments. The common factor that these two programmes share is their lack of focus on climate issues particularly variability and change as well as extreme events.

DSAP promotes sustainable agriculture that will improve food production thereby enhancing food security and income generation in the Pacific. Funded by the European Union, the programme commenced in 2003 in the 10 Pacific Island countries and territories of Fiji, French Polynesia, Kiribati, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Wallis and Futuna, In 2004, the 6 ACP countries of Cook Islands, Federated States of Micronesia, Marshall Islands, Nauru, Niue, and Palau joined DSAP. The DSAP is funded by European Union through the European Development Fund (EPF) with a total budget of 6,200,000 € or US\$7,600,000.

FAO's support to the Regional Programme for Food Security in Pacific Islands Countries is a US\$4,500,000 project funded through the Fund for Food Security and Food Safety (TFFS). It is part of the wider Regional Programme for Food Security (RPFS). The Italian funded TFFS acts as a catalyst for mobilising further financing and donor support for the wider programme. Countries participating in the programmes are the Cook Islands, Fiji, Marshall Islands, Niue, FSM, Kiribati, Nauru, Palau, PNG, Solomon Islands, Tuvalu, Samoa, Tonga and Vanuatu.

Coastal zone and associated infrastructure (roads and breakwater)

(c) Protection of the coastal zone and associated infrastructure is funded out of national budgets. The costs of rebuilding after cyclones as well as the maintenance costs continue to increasing in national governments' expenditures. It is projected that climate change will further add to this cost. Pilot studies to build the resilience of roads to climate change have commenced in the Federated States of Micronesia.

Under the PACC, the socio-economic baseline or in the coastal zone and associated infrastructure (road and breakwater) is estimated at US\$5,000,000.

Summary of Current Baseline

- 17. Development work has been carried out in water resource management, food and food security, coastal management and associated infrastructure as part of national development initiatives and through development partner assistance. Nevertheless, much more work remains to address climate change impacts on the above sectors. In addition, apart from a the initiatives to date in a few selected countries, adaptation concerns have generally not been factored into national and sectoral development plans, policies and strategies.
- 18. Under this business-as-usual scenario, the following is anticipated:
 - No strategic framework will exist to integrate adaptation within the design and implementation of socio-economic development activities (attempts to address climate change will remain piecemeal and reactionary to assistance on offer from development partners;
 - Key national and regional institutions responsible for addressing adaptation and influence budgetary planning will remain uncoordinated and ineffective;

- Financial instruments, institutions and incentives to support climate change adaptation transfer will remain underdeveloped;
- PICs capacity for increased resilience to the short- and long-term impacts of climate change will not be improved.

Alternative Scenario

- 19. As a result of the PACC intervention, the following alternative scenario is envisioned:
 - Long-term adaptation measures to increase the resilience of key development sector (namely water resources management, food production and food security and coastal zone and associated infrastructure) to the impacts of climate change implemented incountry;
 - National frameworks and strategies for adaptation developed and integrated into sectoral plans for water resources management, food production and food security and coastal zone and associated infrastructure;
 - Adaptation integrated into key national institutions responsible for development and budgetary planning;
 - Improved coordination among regional organizations dealing with climate change and disaster risk management;
 - Improved societal awareness and preparedness to future climate change, from policy makers to local communities;
 - Financial instruments, institutions and incentives to cover the initial capital and transaction costs associated with adaptation measures developed and operational.

Project Approach

- 20. Guided by the UNDP Adaptation Policy Framework and on the methodologies contained in the Framework to integrate climate risks into key development sectors, the PACC will build resilience to climate change in selected countries in the key vulnerable socio-economic sectors of water resources, food production and food security, coastal zone and associated infrastructure.
- 21. Consistent with the SCCF rationale of additional cost reasoning, the PDF-B phase will identify and verify the range of development activities that have taken place to date in the selected socio-economic areas of water resource management; food production and food security and coastal zone and associated infrastructure. This will be done to confirm the base-line scenario (development in the absence of climate change and without SCCF contribution). The PDF-B exercise will involve the countries articulating the activities they will be focusing on during the FSP based on their differing baselines, capacity and needs. The PDF-B exercise will also provide an opportunity for countries to know the kind of assistance and expertise they can call on from each other and from the region and elsewhere. It is envisaged that during project implementation countries armed with clear direction of what they want, will implement the activities themselves with the option of regional and other expertise where it is needed.

- 22. An alternative scenario, to justify the SCCF additional cost grant contribution in the selected key economic sectors will be further developed during the PDF-B phase. This will be done with strong stakeholder engagement, assessing and enhancing adaptive capacity, analysis of adaptation to cope with current and future climate change and the development of a programme to monitor, evaluate, improve the impact of the adaptation activity, and to measure adaptation benefits.
- 23. The PDF-B will also assess the range of financial instruments and investments needed at the national and regional level so that adaptation financing is sustainable. This purpose of this assessment will be to ascertain the incentives, institutions and instruments needed to fund adaptation activities in the long-term and a forward strategy that will be implemented during the FSP. This work will complement the calls by Pacific Island Leaders at the 33rd and 34th Pacific Islands Forum to continue to pursue arrangements for a sustainable regional adaptation fund Additionally the assessment will look at the feasibility of national adaptation implementation measures within the context of existing arrangements such as the Small Grants Programme which has proved to be a successful model to provide grant financing to date.
- 24. As indicated above, the objective of the PACC is to implement long-term adaptation measures to increase the resilience of a number of key development sectors in the Pacific islands to the impacts of climate change. The expected outcomes of the FSP are:
 - (1) National frameworks and strategies for adaptation developed and integrated into national sustainable development plans for their equivalent in water resources management, food production and food security and coastal zone and associated infrastructure. The proposed allocation is US\$1,500,000. The proposed activities include individual, institutional and systemic capacity building and awareness raising at all levels (village, local, national) to facilitate the integration of adaptation frameworks and strategies into national sectors.
 - (2) Adaptation measures in key socio-economic areas identified by the participating PIC implemented in the areas of water resources management, food production and food security and coastal zone and associated infrastructure. The implementation of adaptation measures will constitute the bulk of the FSP and is provisionally budgeted at US\$ 8,750,000. The respective areas are:

Water Resource Management Sector

- 25. As indicated above the adaptation measures will build on the EU's water programmes in PICs such as the Rural Communities Water Supply and Sanitation" in Papua New Guinea, and the WaSSP in Samoa. The proposed measures and activities building on this development baseline include:
 - Development and implementation of climate-friendly water purification programmes and water use efficiency technology;
 - Implementation of higher capacity intake systems in low lying or flood-prone areas;
 - Implementation of alternative water storage programmes;

• Implementation of climate friendly watershed management programmes.

The eleven participating countries are the Cook Islands, Federated States of Micronesia, Fiji, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

Food and Food Security Sector

- 26. As elaborated above ,the adaptation activities will build on two current programmes, the DSAP implemented in the Pacific by the SPC and the FAO-coordinated Support to the Regional Programme for Food Security in Pacific Islands Countries. The FSP proposes to:
 - (a) explore and trial adaptation demonstration programmes in pilot sites, in agricultural stations and through pilot farmers selected by the DSAP and RSPF. The relevant programmes involve the:
 - use of non-circulating hydroponics;
 - implementation of bucket irrigation and efficient water management;
 - trial of stable and all year round resistant crops across rural areas;
 - trial of new climate friendly management programmes for plantations;
 - trial of alternative farming systems that improve productivity while efficiently using water resources and protecting soils;
 - trial of crops (fruit trees) that are more resistant to climate hazards such as flooding and cyclones.
 - (b) up-scale successful and selected adaptation demonstration programmes. This will involve an investment programme on selected climate resistant crops (including fruit trees), successful climate friendly management programmes for plantations, and other selected successful demonstrations.

The nine participating countries are Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu, Nauru, Niue, Fiji, and Samoa.

Coastal Management and Associated Infrastructure

- 27. This proposed activity will be a pilot limited to FSM and the Cook Islands. The demonstration builds on the ADBs CLIMAP's climate profile and climate-proofing analysis work. Adaptation measures have been costed at US\$1,250,000. Two adaptation activities have been selected for implementation under the PACC project. These activities have been requested specifically by the two countries involved and will be funded out of the allocation awarded to individual countries for implementation during the FSP. By project implementation, the complete list of activities to be undertaken by countries will be as detailed as the examples provided below.
 - (1) Building Resilience to Climate Change: Road Infrastructure Project in Kosrae, Federated States of Micronesia (US\$550,000)

- 28. The infrastructure development plan for Kosrae includes completion of the circumferential road where currently a 16 km gap exists. Funds for the roading project will be provided under the Compact of Free Association with the USA. The main purpose of this development is to complete the road around the island of Kosrae and provide all-weather land access to the remote area of Walung in the southwest. It is the only community without reliable links to the other municipalities. Completion of this link will also allow easier access to the presently undeveloped interior of the island along the western coast, providing scope for agriculture and new settlement in the area. There are also plans to construct power lines along the road, to join Walung to the existing electricity distribution system from two directions along the new route. This will convert the present 'radial' configuration of the power distribution system in Kosrae to a more reliable ring-main, with benefits for the whole island.
- 29. The drainage works for the original road design (both built and yet to be built sections) were based on an hourly rainfall of 178 mm, intended to be the hourly rainfall with a return period of 25 years. An analysis of more reliable data indicated an hourly rainfall with a return period of 25 years is 190 mm. But by 2050 the hourly rainfall with a 25 year return period will have increased to 254 mm as a consequence of climate change. A recommendation that the design of the road be modified so the drainage works could accommodate an hourly rainfall of 254 mm was accepted by the Government of the State of Kosrae and a "climate proofed" (ADB project terminology) design was prepared and costed by State employees. The additional cost of "climate proofing" the road design and construction for the yet to be built section is in the vicinity of US\$500,000. It is also estimated from small trials that it is more costly to "climate proof" retroactively US\$776,184 for a 3.2 km section of existing road (US\$243,000 per km) as opposed to US\$511,00 to "climate proof" 6.6 km of new road (US\$77,00 per km).
- 30. For cost-effectiveness, the Government of the State of Kosrae has decided it will delay with construction of even the northern section of the new road until additional funds are available to complete the "climate proofing". Therefore, the national and state governments are requesting the GEF for funding the additional costs of the remaining section of the road yet to be completed, while other donors will ensure the costs of "original design" road building.
 - Building Resilience to Climate Change: Design of the Breakwater for the Western Basin, Avatiu Harbour, Rarotonga (US\$ 550,000)
- 31. The domestic tuna industry is becoming a key export earner for the Cook Islands. This development and the future expansion of the long line fishing industry is constrained by a lack of appropriate infrastructure, and in particular by lack of berth space and other facilities within Avatiu Harbour. The Cook Islands Ports Authority is in the process of developing the Western Basin to accommodate extra vessels, provide sufficient wharf to minimize delays in offloading fresh fish and to allow the fishing vessels to use the harbor in most sea conditions other than those associated with cyclones.
- 32. The Western Basin is adjacent to, and directly west of the existing Avatiu Harbour. It is on an existing area of reclamation on the reef flat, approximately 100 m wide. In the 1980s construction of a western breakwater was undertaken, but had not been completed by 1987, when

Cyclone Sally occurred. The incomplete breakwater was damaged, in part due to the absence of a planned lining of armored basalt boulders. The internal components of the breakwater were stripped and spread over the reef flat.

- 33. The design brief for the Western Basin states that the breakwater and quay walls should be designed for a nominal design life of 60 years. Fixtures should be robust enough to withstand a cyclone with a ten year return period. The Western Basin is being developed in stages, based on demand and commensurate with development of the fishing industry and availability of funding. The first stage, involving an expenditure of \$NZ1,000,000.00 sourced through a government grant, overseas aid grant, cash reserves and a loan. This outlay was for a wharf facility but with no added protection against storms.
- 34. A separate feasibility study is being undertaken, which relates to the design and construction of a permanent breakwater system for the Western Basin. As originally planned, it will involve:
 - determination of design water level and waves;
 - calculation of wave transformation from offshore to the breakwater and harbor
 - determination of conditions for wave run up on the breakwater side and wave overtopping;
 - identification of design options that will reduce risks (including those to breakwater, vessels and port infrastructure) to acceptable levels, including height and cross section of breakwater; and configurations and weight of armor blocks that will be resistant to wave forces;
 - calculation of costs and benefits for each design option, including additional costs and benefits associated with taking into account the climate change scenario.
- 35. In building resilience to climate change risks through the design of a breakwater, the PACC will consider how global warming will affect changes in cyclone intensity and frequency (and hence changes in the return periods of design wind speeds and of significant wave heights) and mean sea-level change. While inputs for the design of the breakwater and the associated additional cost analysis are still pending, early estimates indicate that the additional cost of climate proofing the breakwater is around the vicinity of US\$550,000.00.
- 36. The lessons learned from the above projects, recommendations and design of follow-up projects for PICs Governments will also be a component of Outcome 2 has been provisionally costed at US\$150,000.00. This activity will produce recommendations and follow-up schemes for PICs Governments for potential replication on a wider scale.
- 37. The third Outcome involving all PACC countries is financial instruments, institutions and incentives to support climate change adaptation transfer developed. This outcome will address the financial issues concerning the application of adaptation technologies and techniques in the PICs, as well as climate change impacts on the financial service sector in the PICs and in the region. This is a crucial issue for the sustainability of the project and for a successful mainstreaming of adaptation into national, sectoral and community level planning. National activities identified include:

- Capacity building for the financial service sector on climate change issues and on incorporating climate change in investment decisions;
- Assessment of financial services, which include financial risk management products, financial resources involved in dealing with climate change-related damages and adaptation, and alternative methods to generate financial resources;
- Conduct of research into how financial services sector (public and private) could be innovative to meet potential increase in demand for adaptation funding to spread and reducing risk from climate change;
- A study on measures to improve penetration of, or access to insurance and disaster preparedness/recovery resources;
- Conduct of policy studies concerning the provision of insurance for climate-related risks (e.g., regulations, pricing, tax treatment of reserves, flexibility in markets);and
- Promotion of micro-financing schemes and development banking for assisting adaptation measures, climate-related disaster relief, and climate-related disaster preparedness/recovery.

38. Regional Activities include:

- Designing a follow-up programme to the agreement of Pacific Island Leaders (as stated in the Forum Leaders Communiques' of 2003-2005) for a long term adaptation financing facility. The design will incorporate mechanisms providing for transparency, accountability with fund proposal design and execution;
- Strengthening regional cooperation among CROP and development partners in climate change and disaster risk management including the potential for pooling of financial resources.
- Carrying out a study of the impacts of adaptation investments on development, economic growth and poverty reduction in the PICs.

3. SUSTAINABILITY (INCLUDING FINANCIAL SUSTAINABILITY)

- 39. The project is intended to catalyze action at the national and regional level to integrate adaptation into key economic, climate sensitive sectors during and after the project ends. Climate change affects all sectors and levels of society but there has been little action to date to address climate change within an integrated whole of country development context. The key institutions responsible for adaptation are the ministries or departments of environment who struggle to influence budgetary planning and effectively influence powerful ministries such as finance, public works and agriculture etc....The PACC will identify through the APF methodology what the most ideal implementation arrangements are to ensure that adaptation in the identified sectors are mainstreamed into national policies, plans, programmes and projects. At the regional level, there is also a need to address climate change adaptation and natural hazard risk management in a more holistic manner. The integrated approach to adaptation that the PACC promotes makes good economic sense in the long run, because of the cost saving potential but also because it promotes longer term adaptation by acting on priorities of the present.
- 40. To ensure sustainability and following the guidance embodied in the APF there will be;

- careful application of the scoping and design process to ensure the PACC is well integrated into the national and regional policy planning and development process;
- strong stakeholder engagement that promotes active and sustained dialogue among affected individuals and groups;
- assessing and enhancing adaptive capacity by catalyzing change management processes to ensure that the project beneficiaries can better cope with climate change including variability.
- 41. The proven Country Team Approach as applied in regional projects in the Pacific will be employed in the project implementation. This approach was first established during the PICCAP, which initially identified and evaluated the vulnerable sectors in each PIC and came up with adaptation measures. It is based on the realization that to effectively tackle climate change issues, there is a need to bring together many actors from different crosscutting thematic areas. In the context of the PACC, this approach will involve the PIC national governments designating an agency in their respective country to host a team of sectoral representatives and national experts, to facilitate the implementation of projects/activities on adaptation to climate change. As much as possible, existing mechanisms at the regional and national levels will be used (and strengthened where needed). PICs will be required to form Climate Country Teams (CCTs) with representatives from relevant agencies/ministries concerned, a National Coordinator and a support staff. In some PICs, their existing Climate Change Country Team can serve as the CCT for the PACC. In the envisioned regional PACC project, this in country structure (NC + CCT + relevant agencies/ ministries) will be supported financially and technically and made responsible for coordinating, implementing and managing in-country activities.
- 42. Technical Working Groups(WGs) will also be formed to supplement the country teams and provide technical advice in each of the outcome areas. A coordinating mechanism will be set up to coordinate the work done by members of the WGs, which will be mainly regional intergovernmental organizations and other related regional and international agencies in the Pacific. This mechanism will ensure complementarities of the WG members, particularly in identified vulnerable sectors in the PICs such as water, agriculture, coastal resources etc. As in other regional projects, a Project Advisory Committee (PAC) will be formed to provide project implementation advice and direction. The entire process will be supported by UNDP Samoa and the UNDP-GEF RTA providing technical, financial and administrative assistance to the entire process as needed. Institutional sustainability is also ensured by the multi stakeholder participation of leading climate change and environment agencies at both the national and regional levels.
- 43. The designated host agency/ministry of the National Coordinator in each PIC will play a significant role in the overall coordination and implementation of the national activities under PACC. Other concerned agencies/ministries may co-implement activities directly relevant to their concern. The main purpose of this co-implementation structure is that relevant agencies/ministries are to continue to spearhead and sustain the activities after the project life. The proposed project will strengthen the role of the designated host agency/ministry in leading the adaptation programmes in each PIC as well as fostering continuous and closer working relationships with the other government ministries and/or departments. The institutionalized

continuous monitoring and evaluation of the adaptation projects, even after completion of the project period, will bring sustainability of the PACC project with desired benefits in the long run.

4. **REPLICABILITY**

44. It is envisaged that the PACC will promote and engender concrete, innovative and sustainable ways in addressing climate change impacts, vulnerability and sustainable development. Very few projects in the Pacific have focused on adaptation implementation activities (or stage III GEF adaptation). As one the first of GEF projects of its kind in the Pacific region, one of the important elements of this project is to document the process taken to achieve the project outcomes following the APF methodology. The intention is that that the lessons drawn from the PACC will be replicated within other key national development sectors and through the Pacific islands region. This will be important for the development of other climate change projects within the region. It is hoped that work done to develop viable financing instruments to address adaptation will serve as a catalyst for further action where it is needed. The lessons learned from the PACC will also link into the UNDP-GEF Adaptation Learning Mechanism and be instrumental in enabling knowledge sharing and replication of adaptation approaches worldwide.

5. STAKEHOLDER INVOLVEMENT/INTENDED BENEFICIARIES

- 45. Widespread stakeholder consultations have been carried out in conceptualizing the proposed PACC project (e.g., during regional adaptation workshops, and specific consultation meetings under the CCEAP and NAPA projects, and the recent Regional Workshop on Community Level Adaptation to Climate Change under CBDAMPIC). Consultations were also held with target stakeholders during country missions conducted by UNDP-GEF in the PICs concerning the need to develop and implement adaptation projects in the PICs. During these missions, consultations were held with national representatives from government agencies, NGOs private sector organizations, regional organizations and the civil society.
- 46. During the proposed PDF-B exercise, regional stakeholders will be consulted on the design of the PACC and informed on the progress of the preparatory phase. Meetings will also be conducted with the CROP, the planned PACC Project Advisory Committee, and interested bilateral donor agencies and development partners. National stakeholders will be regularly informed through direct communications between the PACC PDF-B Chief Technical Adviser (CTA) and the Country Teams, regional workshops and meetings.
- 47. National and regional stakeholders will participate in a logical framework analysis (LFA) workshop, which will come up with the project-planning matrix, which will be the basis of the PACC design. The LFA will further strengthen the PACC goal, purpose, outcomes/outputs and activities.
- 48. While most of the project activities will be carried out at the national level, the project management office (based on the designated executing agency), as well as the regional and international experts that will be involved in the project, will play a backstopping role for the

PICs, which may need external assistance for some of their national activities. The inception phase of the project will confirm this and where memorandum of agreements (MoAs) between parties can be finalized. Among the project stakeholders are the following:

- PIC Government Minstries and Agencies (e.g., Finance, Environment, Health, Natural Resources, Water, Agriculture, Forestry, Public Works etc.);
- PIC Climate Country Teams;
- NGOs and Local Community-based Organizations;
- Local Communities and local community groups;
- Private Sector;
- Banks and Financing Institutions;
- International and Regional Organizations (e.g., PIF, PRCC, PPA), SOPAC, SPC, SPREP, WWF, and the USP.

6. MONITORING & EVALUATION

- 49. Monitoring and Evaluation (M&E) will be carried out in both phases (PDF-B and FSP) Project monitoring and evaluation will be conducted in accordance with established GEF and UNDP procedures, and will be provided by the PDF-B Team and the FSP Team, with support from UNDP Samoa and the UNDP-GEF RTA.
- 50. During the PDF-B process, an LFA will be conducted. The Logical Framework Matrix, to be developed as part of the FSP design during the PDF-B will provide performance and impact indicators for programme implementation, along with their corresponding means for verification. These will form the basis on which the Monitoring and Evaluation system for the FSP will be built, including the full definition of project staff M&E responsibilities.
- 51. Indicators will be developed for the FSP based on the methodologies developed by UNDP for vulnerability and adaptation projects. The methodologies use stakeholder surveys and H-form in a vulnerability risk reduction approach.

D. FINANCING

- 1) FINANCING PLAN
- 52. Based on preliminary estimates, the dedicated project co-financing for the PACC is US\$33,750,000.00 This is the minimum amount needed to meet the 1:4 sliding scale ratio under the SCCF. There are potentially more additional funds of US\$37,050,000.00 on call for a total socio-development baseline figure of \$USD70,800.000.00 The GEF contribution under the SCCF is 20% of the dedicated project co-financing of USD\$33,750,000.00 which is US\$11,250,000.00. The dedicated project co-financing will be generated from PIC Governments and other co-financiers through in-kind contributions, cash, and the costs of baseline projects. The precise budget breakdown of allocations will be further detailed and finalized during the PDF-B exercise.

2) Co-Financing

- 53. Baseline activities consist of ongoing and planned (with budget allocations) socioeconomic development projects, in general, in the PICs. These are identified in earlier paragraphs of this document and will be confirmed during the PDF-B exercise.
- 54. The budget for the initially identified baseline activities adds up to about 84% of the PACC implementation costs. Initial discussions with institutions such as IGES/Japan indicate interest to financially support the PACC. These contributions, combined with contributions (in-kind) from SPREP and UNDP-Samoa are expected to bring the total co-financing for PACC to about 86% of the total implementation costs of the proposed regional adaptation project.
- 55. As indicated above, the GEF allocation requested meets the terms of the sliding scale for projects over US\$5million supported by the SCCF where up to 20% of the total cost of the project can be covered by resources of the SCCF and at least 80% of the total project costs will be required to be met from co-financing support (including existing projects, budget lines and inkind contributions).

E. INSTITUTIONAL COORDINATION AND SUPPORT

- 1) CONSULTATION, COORDINATION AND COLLABORATION BETWEEN AND AMONG IMPLEMENTING AGENCIES, EXECUTING AGENCIES, AND THE GEF SECRETARIAT, IF APPROPRIATE.
- 56. The PACC will build on the initiatives of the World Bank and UNEP in the Pacific Islands region as well as those of other bilateral and multilateral donors such as the ADB, AusAID, NZAid, CIDA, Japan and the United States of America as described in table 2 above.

The PACC will ensure consultation, coordination and collaboration by

- (a) Involving IA, donor and CROP participation during the PDF-B process and during the implementation of the FSP;
- (b) incorporating the lessons learnt from earlier national, bilateral and regional adaptation projects;
- (c) progressing strategies and plans that have been finalized already by the region and by countries.
- 57. The team that developed the PACC will regularly consult and involve all the known ongoing climate change (adaptation) and environment projects in the region in the design and development of the project. Key members of some of these projects will also be consulted, and where possible, involved in the implementation of the project development exercise. Most of them will most likely be members of the Project Advisory Committee of the PACC. The establishment of links with these projects is expected to help in identifying the relevant activities that build on the achievements of these projects. The project has been conceptualized and will be developed in close cooperation with both the local stakeholders as well as with the UNDP office in Apia, Samoa, which also participates in the project development through various stakeholder

and co-financing consultation meetings, technical workshops, and technical backstopping during the PDF-B exercise and FSP, and in the multipartite review meeting. Consultations will also be carried out with the CDAC Unit of UNDP-GEF, New York during the project development phase.

2) IMPLEMENTATION/EXECUTION ARRANGEMENTS

CORE COMMITMENTS AND LINKAGES

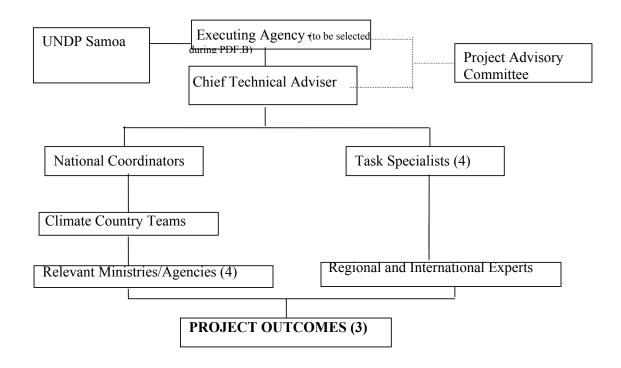
- 58. The PACC project is consistent with UNDP policies and interventions on climate change adaptation in the region and fits within UNDP's Strategy for Supporting National Adaptation to Climate Change. UNDP's strategy is a four phased approach. Phase One focused on the development of adaptation guidelines that led to the Adaptation Policy Framework (APF). Phase Two focused on regional adaptation assessments. Phase Three involved national adaptation assessments such as the NAPAs and the National Communications. Phase Four focuses on UNDP's commitment to implementation adaptation and is where the proposed PACC fits in.
- 59. The various stakeholders of the proposed PACC project include those that will be involved in its design and those involved in project implementation. The main stakeholders and beneficiaries will be the governments of the participating PICs. The PACC will seek a long term programmatic whole-of-government approach involving not only ministries and agencies dealing with environmental issues, water, food and food security, and coastal management and infrastructure but also those involved in good governance, sound macro-economic planning and sustainable development.
- 60. Other stakeholders who will be invited to participate in the PACC design and implementation are:
 - Climate Country Teams Key player in the implementation of all national activities as well as the in-country components of regional activities; coordination of the implementation of activities delivered by consultants and external agencies; and implementation, and reporting of results, of national activities to SPREP;
 - CROP including SPREP, SOPAC (CHARM Programme); the Pacific Islands Forum Secretariat, USP- Climate science training activities; SPC, USP;
 - AusAID and NZAid:
 - Private Sector/Consultants;
 - The World Bank and ADB as national banks and financing Institutions;
 - World Meteorological Organization (WMO), UNEP, FAO;
 - NOAA, the East-West Center;
 - NGOs.
- 61. The UNDP-Samoa Country Office will be the designated Implementing Agency, responsible for financial and substantial oversight, monitoring, evaluation, administrative and technical backstopping throughout the PDF-B and FSP, coordination with other UNDP initiatives.

- 62. The project will be executed in accordance with UNDP National Execution (NEX) procedures whereby strict monitoring of performance by the Project Management Office (PMO) and the Samoa Country Office through national progress reports prior to the release of project funds for targeted activities.
- 63. SPREP will coordinate the development of the PDF-B phase and will ensure that all project activities are coordinated with related initiatives and are complementary to related activities already undertaken in each PIC.
- 64. The execution arrangements for the FSP will be developed and agreed upon during the PDF-B exercise. During the PDF-B phase, a process of selecting a suitable EA for project implementation will be carried out. By work programme inclusion, the selection process will be described and justified in detail. The EA to be selected will not only be charged with political responsibility but also with operational experience in the appropriate development sector on the ground, The selected EA will coordinate with UNDP in the implementation of the project activities and project monitoring and evaluation, and will be responsible to UNDP for the achievement of the project objectives, for all project reporting requirements, including the submission of work plans and financial reports. All UNDP execution modalities will be reviewed and evaluated.
- 65. A proposed management arrangement for the FSP which will be examined during the PDF-B exercise is to view the PACC as a continuation of the GEF, UNDP, SPREP and PICs collaboration on strengthening the capacity of PICs to deal with the challenges of climate change initiated through the PICCAP and CBDAMPIC projects. As such, the key implementing and coordination arrangements (Country Teams and a regional Project Advisory Committee) will be maintained to sustain the momentum and synergies created over almost ten years of effort. The execution of the project activities will be based on the "Country Team Approach", which will also be applied during the PDF-B phase.
- 66. While the project is a regional one due to co-financing constraints among others, the implementation will mostly be in-country activities utilizing as much as possible available local expertise and resources and regional and international expertise where necessary thereby ensuring a greater sense of PIC ownership, greater impacts and more visibility. The Climate Country Teams that have been established during the PICCAP and the appointed National Coordinators, which PICs have reported to be very effective in creating a closer and more productive working relationships among climate change/environment officials, will be maintained as this is pivotal to the success of the project. With overall coordination from NCs and overall guidance from CCTs, four (4) relevant ministries and agencies will ensure technical implementation of adaptation activities in their sector, e.g., Ministry of Agriculture for the food production and food security component.
- 67. The Project Advisory Committee consisting of representatives regional organizations in the Pacific and UNDP will provide overall guidance and approval of key project activities, including fund commitments and co-financing arrangements. The UNDP office in Apia will carry out the GEF oversight with support from UNDP-GEF RCU. UNDP-GEF New York will

be a member of the PAC to ensure conformity of the project with Global Strategic Objectives of the UNDP-GEF portfolio.

68. The PMO that the selected EA will create will be responsible for the overall project operation and financial management and reporting in accordance with the rules and regulations for NEX/DEX projects. It will be comprised of the CTA/Project Manager and four task specialists to implement the components of the PACC, and will be under the supervision of the EA. Regional or international experts will support the PMO as and when needed to undertake the project activities. The PMO will coordinate with all the project partners, particularly those implementing parallel projects whose results feed in, or are integral parts, of the PACC. The following figure shows what is envisioned to be the PACC project implementation organizational arrangement.

CHART 1: ORGANIZATIONAL ARRANGEMENTS:



PART II - PROJECT DEVELOPMENT PREPARATION

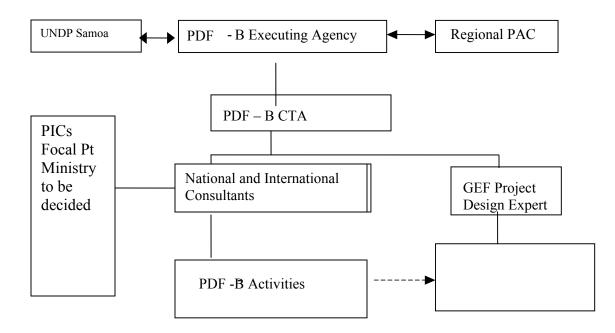
A - DESCRIPTION OF PROPOSED PDF ACTIVITIES

1. The following proposed project development activities are aimed at producing the relevant base line data/information and other important inputs that will be used in identifying, designing and developing detailed national activities that will make up the proposed FSP Project. These PDF activities are intended to establish the appropriate mechanisms that will facilitate the smooth coordination, implementation, monitoring & evaluation and management of relevant activities that will be identified for the proposed regional full project on implementing adaptation measures in the Pacific.

Activity 1: Establishment of Implementation Arrangements for the PDF-B Exercise

- 2. A regional planning and consultative meeting will be held with key regional and national stakeholders to ensure that the PDF-B activities are clear and that the process required for the development of the full PACC project brief is well understood and agreed to. Relevant institutional arrangements at both regional and national levels will be identified and prepared, as well as project management processes and reporting in terms of undertaking the PDF-B exercise and later the drafting of the PACC Project Brief.
- 3. The meeting will establish a regional project advisory committee (PAC) that will be composed of representatives of environment ministries/departments or relevant agencies (e.g., disaster control or response centers) in each participating PIC, as well as from relevant regional organizations. It will also establish the PDF-B Team, comprised of the PDF-B exercise CTA and regional/international adaptation consultants, and a GEF project design expert. The PDF-B Team is the core group that will implement the PDF-B activities.
- 4. The following is the proposed implementation and management arrangements for the PDF-B exercise.

CHART 2: : IMPLEMENTATION AND MANAGEMENT ARRANGEMENTS



Activity 2: Adaptation activities feasibility

5. This activity will:

- Confirm development baselines in key climate sensitive sectors (building on existing information);
- Confirm additional cost of climate change adaptation activities;
- Identify and evaluate adaptation projects implementation requirements and barriers to implementation;
- Identify courses of actions for the removal of barriers to the successful implementation of adaptation implementation;
- Layout the specific country adaptation activities.

6. The Proposed means of carrying out the above activities include:

- Desk studies of previous, ongoing and planned efforts/initiatives on adaptation to climate change in the region to identify gaps and areas of complementarities and to compare data and experiences in the PICs with those of other developing countries, particularly SIDS in other regions of the world;
- Country missions for collecting relevant information on ongoing and planned adaptation activities in the PICs, how these are implemented, problems encountered, benefits derived, and socio-economic & environmental baseline data through interviews, surveys, etc; and,
- Conducting consultation meetings with stakeholders and project target groups regarding identified baseline socio-economic development projects to determine specific in country expanded adaptation features.

3) Review Financing Mechanisms for Adaptation Initiatives

- 7. This activity will involve the evaluation of mechanisms for adaptation project financing and the design of interventions addressing financing issues for adaptation initiatives in the participating PICs. A review of the existing funds and financial institutions that provide funding for socio-economic development projects in the region, including bilateral and multi-lateral funds, private funds, government, and banks will be made in order to determine the potentials for financial assistance for adaptation projects, including climate-related disaster relief, and climate-related disaster preparedness/recovery. The evaluation guidelines and investment criteria of these existing funds will be reviewed and assessed to identify the gaps between expectations of lending institutions and expectations of borrowers, and the reasons for difficulties in obtaining financing. Part of this activity is the review and assessment of a number of financing schemes for supporting socio-economic development projects based on other countries experience and lessons, as well as domestic experience in the participating PICs.
- 8. A survey of financial services, which include financial risk management products, and financial resources involved in dealing with climate change-related damages and adaptation will also be carried out. An evaluation of the region's insurance sector capacity to provide PICs

access to insurance and disaster preparedness/recovery resources will also be carried out to provide information relevant to the design of PACC activities addressing financing issues on adaptation.

9. Coordination meetings with financial institutions in the participating countries and in the region will be carried out to work out with them the establishment of a sustainable financing scheme that is best suited to each country. This activity will also involve the design of the interventions that will be implemented in the PACC Project focusing on interventions that would lead to facilitation of financing for adaptation initiatives. The intended component of the PACC project that will be designed is expected to facilitate sustained financing of adaptation initiatives in each PIC and in the Pacific region.

Activity 3: Report Preparation

10. In this activity, a report providing a synopsis of the results from Activity 2 is the key output. Description of detailed in country activities with identified costs and benefits, as well as the confirmed funding commitments (and/or other complementary activities) is also expected. Indicators for the M&E and for Adaptation Learning Mechanism will be incorporated into separate section.

Activity 4: Project Formulation Workshop

- 11. This activity will involve the conduct of a regional workshop with all the stakeholders to disseminate the outputs of the PDF-B activities (as described in the regional report), and endeavor to build up national and local support for long-term sustainability of the envisioned PACC Project. This workshop will also and especially intend to "formulate" the FSP.
- 12. The findings and recommendations in the regional report will be the bases for the design of the PACC Project. An official consensus regarding the intended objectives of the project, as well as the interventions to be included to achieve these objectives, should be established among key stakeholders.
- 13. Specific Activities will include:
 - definition of project approach and methods
 - project design through the below matrix
 - establishment of a LFA matrix on the below format
 - layout of a viable execution arrangement
 - plan for resource mobilization activities/consultation meetings with other cofunders/donors for the PACC Project to leverage GEF funding
 - development of a monitoring and evaluation plan on the basis of the LFA Matrix.
 - delineation of the responsibilities of the group(s) that will implement each relevant activity.

Activity 5: PACC Executive Summary and Project Document Preparation

- 14. The components of the PACC Project will be finalized after consolidating and evaluating findings from the findings of the project formulation workshop. A consultant that is well versed in GEF procedures and SCCF project design and project development will be contracted to prepare the PACC Executive Summary and Project Document following the format required by UNDP-GEF.
- 15. The draft PACC Executive Summary and Project Document will be distributed for comments and recommendation to the participating countries and the regional organizations. The Project Document will then be finalized, incorporating the pertinent comments and recommendations. The participating countries will endorse the Project Document in this meeting before it is submitted to the GEF, through UNDP, for consideration for funding.

Activity 6: PACC Regional Workshop

16. The PACC Project Document will be presented by the PDF-B exercise executing agency to a regional workshop participated in by representatives of the participating countries and the regional organizations, NGOs, donor agencies, financing institutions, the media and other relevant actors. The regional workshop will be the final consultation on the PACC Project Document, prior to project document signing and actual project implementation.

B-PDF BLOCK B OUTPUTS

17. The main outputs of the project development work that will be conducted under the proposed PDF-B exercise are the PACC Project Document and Executive Summary. The important deliverables of the different PDF activities are the following:

OUTPUT 1: IMPLEMENTATION ARRANGEMENTS FOR THE PDF-B EXERCISE

- Established Regional PAC for the PDF-B exercise
- Appointed PDF-B Team members
- Established and operational PDF-B office with logistical support systems
- Established and operational modalities between PDF-B Team and National Focal Points in the participating PICs
- Periodic meetings to monitor and evaluate PDF-B exercise progress

OUTPUT 2: COMPREHENSIVE REPORT

- 18. The report will include the findings of activity 2, among others, the following:
 - Detailed baseline profile
 - Results of the technical & feasibility evaluations of the adaptation programmes and implementation mechanisms appropriate for countries
 - Detailed in- country adaptation activities (per country profile)

- Assessments of existing financing mechanisms to adaptation programme development and implementation
- Assessment of potential financing mechanisms for sustainable adaptation programmes
- Indicators
- Learning

OUTPUT 3: PROCEEDINGS OF THE PROJECT FORMULATION WORKSHOP

- 19. The proceedings will document the results of the Project Design Workshop and will include among others:
 - project approach and methods
 - project objectives, outcomes and outputs in the below matrix
 - LFA matrix on the below format
 - execution arrangement: agreed appropriate structure and mechanism for the coordination of FSP implementation.
 - plan for resource mobilization activities/consultation meetings with other cofunders/donors for the PACC Project to leverage GEF funding
 - monitoring and evaluation plan on the basis of the LFA Matrix.
 - delineation of the responsibilities of the group(s) that will implement each relevant activity.

OUTPUT 4: PACC EXECUTIVE SUMMARY & PROJECT DOCUMENT

- Executive Summary This will be prepared following the official GEF format, and submitted to the GEF for funding consideration.
- Project Document –This will be prepared using the official UNDP Project Document format, and submitted to the GEF together with the Executive Summary. It will include a total work plan and budget and a table of annual targets for project implementation review (PIR) purposes.

OUTPUT 5: PROCEEDINGS OF THE REGIONAL WORKSHOP

20. The proceedings will document the final consultations with the participating countries and all the other project stakeholders and will contain the final version of the PACC Project Document. Furthermore, it will contain a practical framework for monitoring and evaluation of the PACC Project implementation, as described also in the PACC project Document.

C - JUSTIFICATION

- 21. The design of an effective project of this magnitude and scale requires an extremely substantial preparatory work to:
 - undertake a comprehensive data collection;
 - define the project goal, purpose, and outcomes:

- formulate the project in detail;
- obtain the involvement of all stakeholders including the private sector and governments;
- identify and establish the appropriate project implementation and management arrangements;
- delineate the responsibilities among the project stakeholders and key actors; and
- secure agreements for co-financing of the project.
- 22. The magnitude of the envisioned PACC Project, the importance of this unique project, and the long-term regional ramifications clearly justifies the pre-project activities to ensure a solid and content working plan and project organization. Due to the challenging tasks and multitude scopes that need to be addressed during project development, a GEF PDF-B grant, instead of a PDF-A grant is requested. With the number and scope of project development activities, GEF funding through a PDF-B grant is considered reasonable. The PDF-B exercise will come up with the design of the PACC Full Size Project.

D - TIMETABLE

23. The proposed PDF-B exercise will be carried out for a period of 6 months. The schedule of activities of the PDF-B exercise is shown in table below, starting implementation by April 2006 and completed by end of October 2006. The GEF Full Size Project Brief will be submitted for the GEF Work Programme in June 2007.

PDF-B PROJECT PREPARATION WORKPLAN	March 2006 November 2006											
OUTPUTS/ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12
Establish implementation arrangements for PDF-B			*									
Undertake Adaptation activities feasibility			*	*	*							
Prepare regional report						*						
Formulate the project through a workshop							*					
Prepare executive summary and project document								*	*	*		
Undertake Regional workshop											*	

E - BUDGET

24. The total cost of the PDF-B exercise is US\$ 370,000. The amount of UNDP-GEF PDF-B Grant requested is US\$ 350,000 which will cover for the services of national and international consultants, finance part of the travel costs of consultants, as well as organizing workshops and consultative meetings in as stipulated in the activities section. SPREP will contribute about US\$10,000 in kind that will mainly cover its administration costs. Participating countries'

counterpart share in terms of in kind contribution amounts to cover for office accommodation, assigned personnel, provision of data and information, meetings and other incidental requirements. UNDP Samoa's contribution is in kind and technical backstopping along the PDF-Exercise and PDF-B activities as needed.

PDF-B Exercise Budget and Workplan

Award ID: tbd Award Title: PIMS 2162 CC PDF-B Pacific Adaptation to Climate Change (PACC) **Project ID: tbd** Project Title: PIMS 2162 CC PDF-B: Pacific Adaptation to Climate Change (PACC) Amou GEF Outcome/Atlas Responsible Source of ERP/ATLAS Budget Total nt Atlas Code Funds **Activity** Party Description/Input (US\$) (US\$) 2006 **GEF** 71200 **International Consultant** 10,000 Establishment of 71600 Travel 30,000 **Implementation** SPREP arrangements for the 20.000 74500 Misc. Expenses **PDF-B** exercise sub-total 60,000 GEF International Consultant 71200 30,000 **GEF** Travel 20.000 **Adaptation Activities** 71600 SPREP Feasibility 74500 30.000 **GEF** Misc. expenses sub-total 80,000 **GEF** International Consultant 10,000 71200 Regional report **SPREP GEF** 74500 Misc. expenses 10,000 **Preparation** 20,000 sub-total **GEF** 71200 International Consultant 30.000 **GEF** 74500 20,000 **Project Formulation** Misc. Expenses SPREP workshop GEF 71600 Travel 30,000 80,000 sub-total **PACC** executive **GEF** 71200 **International Consultant** 30,000 **Summary** and SPREP **Document** project **GEF** 20,000 74500 Misc. Expenses **Preparation** 50,000 Sub-total **GEF** 71600 Travel 30,000 10,000 **GEF** 71200 **International Consultant PACC** Regional SPREP Workshop **GEF** 74500 20,000 Misc. Expenses Sub-total 60,000

Co-financing Sources				
Name of Co-financier (source)	Classification	Туре	Amount (US\$)	Status
SPREP	Regional Organization	In Kind	10,000	Confirmed
UNDP-Apia	Donor	In Kind	10,000	Confirmed
Sub-Total Co-financing			20,000	

350,000

Annex I: Economic, Social and Environmental issues in nine PACC PICs

Country	Issue	Cause
1. Fiji	Economic: Exports disproportionately	Vulnerable, as a small island state. Slow
	dependent on garments, tourism and sugar.	restructuring of sugar industry. Tourism
	High Unemployment . Budget deficit.	dependent on Australia and New Zealand.
	Social: Brain-drain in health and education	Political instability. Emerging poverty.
	sectors. Relatively low access to sanitation and	
	safe water sources.	
	Environmental: Deforestation. Land	Commercial logging. Uncontrolled fires.
	degradation. Soil erosion. Biodiversity loss.	Encroachment on marginal lands. Mining.
	Water degradation and limited access to	Impacts of climate change and increased
	potable water. Depletion of coastal fisheries.	cyclone frequency. Marine pollution. Lack of
	Vulnerability to natural disasters. Endangered	waste collection and disposal systems and
	coral reefs.	deficiencies in rural and urban infrastructure.
2	F	Over-fishing.
2.	Economic: Dependence on "Compact" with	Vulnerable, as a small island state. Poorly
Micronesi	the US. Limited private sector.	maintained infrastructure.
a (Fodorated	Social: Poverty. High income inequality.	Unemployment. Lack of access to sanitation
(Federated	Migration. Low primary enrollment rates. Environmental: Water degradation and limited	and safe water.
States of)		Impacts of climate change. Groundwater
	access to potable water. Coastal erosion.	salinization. Inadequate solid waste
	Biodiversity loss. Vulnerability to droughts and floods and rising sea levels.	management infrastructure.
3. Nauru	Economic: Collapse of economy. State-owned	Vulnerable, as a small island state. Corrupt
3. Nauru	enterprises pose burden on national budget.	governance. Lack of commitment to reform.
	Dependence on FDI. Economic sanctions as a	Mismanagement. Strikes, sabotage, and other
	result of non-cooperation in action against	disruptions in production and shipping of
	money laundering. Phosphate reserves nearly	phosphates.
	exhausted.	r
	Social: Frequent fuel, power, and water	Poverty. Youth unemployment. Political
	shortages. Increased cost of living. Education	instability.
	and health services suffer chronic skilled staff	, and the second
	shortages. Host for asylum seekers.	
	Environmental: Land and soil degradation.	Mining. Pollution. Impacts of climate change.
	Marine biodiversity and habitat loss. Coastal	Over-fishing. Groundwater salinization.
	erosion. Water degradation and limited access	Pressures on urban infrastructure.
	to potable water. Vulnerability to natural	
	disasters.	
4. Papua	Economic: Disproportionate reliance on oil,	Political instability. Poor infrastructure.
New	gas and mining sectors. High inflation. Debt	Mismanagement of public funds.
Guinea	around 90 % of GNI. Small domestic market	
	and private sector .	

	Social: Poverty. Low life expectancy. High incidence of malnutrition among children, pregnant and lactating women. Crime.	Low public expenditure on public services in previous decades. Sparse population, rugged terrain and remoteness of villages complicate service delivery. Weak legal and justice institutions.
	Environmental: Deforestation. Land degradation. Soil erosion. Biodiversity loss. Water degradation and limited access to potable water. Local depletion of coastal fisheries. Vulnerability to natural hazards.	Commercial logging. Land clearance. Mining. Impacts of climate change. Population growth and deficiencies in rural and urban infrastructure. Over-fishing.
5. Samoa	Economic: Disproportionate dependence on fresh fish exports. Interregional disparity. Growing dependence on remittances. External debt around half of GDP.	Vulnerable, as a small island state. Partially monetized economy. Poor infrastructure, narrow income base.
	Social: Hardship. Out-migration for economic purposes. Increasing school fees and drop-out rates. Increasing drug use, domestic violence, and youth suicide. Slum formation. Land disputes. Widening gap between rural and urban incomes.	Land scarcity. Monetization of economy. Rural under-employment.
	Environmental: Deforestation. Soil erosion. Degradation of inland and marine waters. Marine biodiversity and habitat loss. Local depletion of coastal fisheries. Vulnerability to droughts and other natural hazards.	Expansion of commercial agriculture and pollution from agricultural run off. Encroachment on marginal lands. Overfishing. Hunting (sea-turtles).
6. Solomon Islands	Economic: Disproportionate reliance on timber exports. Debt around half of GNI. Small private sector. Post-conflict reconstruction.	Lack of accountability in governance. Recovery from civil unrest.
	Social: Poverty, violence, government malfeasance, and endemic crime have undermined stability and civil society. Low enrollment rates. High incidence of malaria.	Rapid population growth. Lack of access to sanitation in rural areas. Recovery from ethnic conflict.
	Environmental: Deforestation. Soil erosion. Water degradation and limited access to potable water. Endangered, dead or dying coral reefs and wetlands. Biodiversity loss. Local depletion of coastal fisheries. Vulnerability to droughts and other natural hazards.	Commercial logging. Land clearance. Mining. Impacts of climate change. Population growth and deficiencies in rural and urban infrastructure. Over-fishing (sea turtles). Impacts of climate change. Destructive fishing practices.
7. Tonga	<i>Economic:</i> Disproportionate reliance on squash and fish exports. Disproportionate trade deficit. Inflation.	Vulnerable, as a small island state. Partially monetized economy.
	Social: Youth unemployment. Rising crime rates.	Monetization of economy and breakdown of traditional social structures. Dissent among youth regarding traditional nobility-commoners system. Democracy and press freedom.

	Environmental: Deforestation. Soil erosion. Degradation of inland and marine waters. Biodiversity loss. Local depletion of coastal fisheries. Vulnerability to droughts natural hazards.	Expansion of commercial agriculture and pollution from agricultural run off. Encroachment on marginal lands. Indiscriminate collection of coral and shells. Invasion of exotic species. Over-fishing, hunting particularly of native sea turtles.
8. Tuvalu	<i>Economic:</i> Government expenditure dominates direction of economic activity. Public service dominates labor market. Small private sector. Remittances overseas workers contribute 1/5 of GNP.	Vulnerable, as a small island state. Weak financial market.
	Social: Poverty. Primary and secondary education in decline.	Rapid population growth. Lack of access to sanitation.
	Environmental: Marine biodiversity and habitat loss. Water degradation and limited access to potable water. Coastal erosion. Vulnerability to natural disasters. Inundation by sea water.	Impacts of climate change. Pollution. Over- fishing. Deficiencies in rural and urban infrastructure.
9. Vanuatu	Economic: Low FDI. Lack of competition and/or effective regulation in key sectors such as shipping and utilities. External debt more than ¼ of GDP. Need to revise tax structure.	Vulnerable, as a small island state. Political instability. Weak legal system. Insufficient legal provisions for foreign investors. Poor civil service. Poor and "expensive" infrastructure (high costs). Offshore banking centre.
	Social: Low literacy and enrollment rates with considerable gender disparity. Increasing (youth) unemployment and informal sector. Land disputes. Money laundering.	Rapid population growth. Half of the rural population living below the poverty line. Multi-lingual.
	Environmental: Deforestation. Land degradation/soil erosion. Water degradation and limited access to potable water. Biodiversity and habitat loss. Depletion of coastal fisheries. Vulnerability to droughts and natural hazards.	Commercial logging. Land clearance. Impacts of climate change. Over fishing. Deficiencies in rural and urban infrastructure.