### **GTZ** Appraisal Mission

## COPING WITH CLIMATE CHANGE IN THE PACIFIC ISLAND REGION (CCCPIR)

Main Report

April 2010

### **Table of Contents**

	IOT	$\sim$ $\sim$	400	- 1		-
L	.151	OF.	<b>ABR</b>	EVI	ΑH	ONS

1	EXECUTIVE SUMMARY	1
2	INTRODUCTION	5
3	THE CONTEXT OF MANAGING THE IMPACT OF CLIMATE CHANGE IN PACIFIC ISLAND COUNTRIES: BASELINE SITUATION	7
3.1 3.1.1 3.1.2 3.1.3 3.1.4	Background on the Pacific Geographic, physical and socio-economic diversity Marine- and Land-based Natural Resources Energy Sustainable Tourism	7 7 8 9 10
3.2	Policy Framework	11
3.3	Institutional Framework	13
3.4	Synopsis of Problem Situation	15
3.5	Donor Assistance and its Coordination	16
4	PROPOSED TECHNICAL ASSISTANCE	18
4.1	Approach	18
4.2 4.2.1 4.2.2	Objectives and Indicators Overall Programme Objective Objectives of Programme Components (Outcomes)	19 19 20
4.3	Target Groups and Other Beneficiaries	22
4.4	Institutional Partners and Other Actors	23
4.5	Coordination with other TA	24
4.6	Regional coverage	28
4.7 4.7.1	Expected Impacts (impact chain) Component 1: Capacity Development in Climate Change in CROP	28
4.7.2	agencies Component 2: Mainstreaming adaptation to climate change and developing adaptation strategies	28 29
4.7.3 4.7.4 4.7.5 4.7.6 4.7.7 4.7.8	Component 3: Implementing adaptation to climate change activities at all levels, from government departments to communities Component 4: Tourism and Climate Change Component 5: Sustainable Energy Management Component 6: REDD Programme Indirect Results	29 30 30 31 31 31
4.8	Risk Analysis	32
4.9 4.9.1 4.9.2	Proposed Project Implementation Design Project Management Architecture Inputs	33 33 33

### **Appendices**

#### LIST OF ABREVIATIONS

ACCPIR Adaptation to Climate Change in the Pacific Island Region, GTZ

ADB Asian Development Bank

ADO Automotive diesel oil used in power generation.

AOSIS Alliance of Small Island States

AusAID Australian Agency for International Development

BMU Federal Ministry for the Environment, Conservation and Nuclear Safety

CBA Community Approach

CBD Convention on Biological Diversity
CBF Community Based Forestry
CBO Community-based Organisation
CCA Climate Change Adaptation
CCA Community Conservation Area

CCCPIR Coping with Climate Change in the Pacific Islands Region Project

CCOP Committee for Coordination of Joint Prospecting for Mineral Resources in

South Pacific Offshore Areas (SOPAC)

CCZM Conservation and Coastal Zone Management

CDM Clean Development Mechanism

CDM Clean development mechanism, a special instrument under the Kyoto Protocol

CER Certified Emission Reduction

CETC Community Education and Training Centre (part of SPC, Fiji)

CIF Climate Investment Funds

CLIMAP Climate Change Adaptation Programme for the Pacific (ADB)

COP Conference of Parties

CPS Country Partnership Strategies (ADB)

CRGA Committee of Representatives of Governments and Administration (SPC)

CROP Council of Regional Organisations in the Pacific

CTF Clean Technology Fund

DG Director General

DPCC Development Partners for Climate Change (Suva, Fiji)

DRM Disaster Risk Management
DRR Disaster Risk Reduction

DSAP Development of Sustainable Agriculture in the Pacific (EU Programme)

DSM Demand Side Management EDF European Development Fund

EE Synonym for energy efficiency measures

EEZ Exclusive Economic Zone

EIA Environmental Impact Assessment

EU European Union

EWG Energy working group of CROP FAO Food and Agriculture Organisation

FFA Forum Fisheries Agency

FLEGT Forest Law Enforcement, Governance and Trade

FOC Forum Officials Committee FSchM Fiji School of Medicine

FSM Federated States of Micronesia

FSPI Foundation for the Peoples of the South Pacific

G+T+D Generation, Transmission and Distribution infrastructure of a power industry

GCCA Global Climate Change Alliance (EU)

GEF Global Environmental Facility

GHG Green House Gases

GIS Geographic Information System
GTZ German Technical Co-operation
HDI Human development index of the UN

ICI International Climate Initiative (BMU)

ICT Information and Communication Technology

ICZM Integrated (Community-based) Coastal Zone Management

IFI

IFI International Finance Institutions

IPCC Intergovernmental Panel on Climate Change

IPP Independent Power Producers

IT Information Technology

IUCN International Union for the Conservation of Nature

JCS Joint Country Strategy

JICA Japan International Cooperation Agency
KfW Development Bank, Germany

kWh Kilowatt hour, standard commercial unit to sell electricity

kWp Kilowatt "peak" the standard commercial unit to state PV capacity installation.

LC Local currency

LMBNR Land and Marine Based Natural Resources

LRD Land Resource Division of the SPC

LULUCF Land Use, Land Use Change and Forestry

LUP Land Use Planning M&E Monitoring and Eva

M&E Monitoring and Evaluation
MDG Millennium Development Goal

MECM Ministry of Environment, Conservation and Meteorology

MENA Middle East and North Africa

MLNRE Ministry of Lands, and Natural Resources, and Environment Vanuatu

MRV Measurement, Reporting and Verification

MWh Megawatt hour of electricity equal to 1000 kWh of electricity NACCC National Advisory Committee on Climate Change, Vanuatu

NAMAS Nationally Appropriate Mitigation Actions
NAPA National Adaptation Programme of Action
NC National Communication (UNFCCC)
NGO Non-Governmental Organisation

NZ New Zealand

NZAID New Zealand Agency for International Development
OCHA UN Office for the Coordination of Humanitarian Affairs

ODA Official Development Assistance

PACC Pacific Adaptation to Climate Change project (GEF)

PACE-SD Pacific Centre for Environment and Sustainable Development (USP)

PALM Pacific Islands Leaders Meeting (Japan/PIF)

PCCR Pacific Climate Change Roundtable

PDD Project Design Document PEA Project Executing Agency

PIANGO Pacific Islands Association of Non-Governmental Organisations

PIC Pacific Islands Country

PICCAP Pacific Islands Climate Change Assistance Programme (GEF)

PICTs Pacific Island Countries and Territories
PIDP Pacific Islands Development Programme

PIEP Pacific Islands Energy Policy developed in 2002 by the CROP energy working

group

PIESAP Pacific islands energy strategic action plans 2005 -2007

PIF Pacific Island Forum

PIFACC Pacific Islands Framework for Action on Climate Change

PIFS Pacific Island Forum Secretariat

PI-GCOS Pacific Island Global Climate Observation System

PIGGAREP Pacific Islands Greenhouse Gas Abatement through Renewable Energy

Project

PIN Project Identification Note

PLF Plant Load Factor of a power plant expressed as ratio of total annual kWh

generation over total kW installed x 8760 hours

PNG Papua New Guinea
PPA Pacific Power Association
PPAC Pacific Plan Action Committee
PPP Public Private Partnerships

PREPA Pacific Islands Regional Energy Policy for Action PRIP EU Pacific Regional Indicative Programme

PV Photovoltaic, process of generation of electricity by direct conversion of the

sun's radiation into electricity.

R&R Rules and Regulations of a notified Act, directive or policy

RAO Regional Authorizing Officer of the EU

RE Renewable Energy

REDD Reduced Emissions from Deforestation and Degradation

RIF Regional Institutional Reform

SAR System Average Rate, in local currency / kWh, defined as ratio of all power

utility income from sales of electricity divided by the amount of kWh delivered

to the transmission grid.

SCF Strategic Climate Fund

SciCOFish Scientific support for the management of coastal and oceanic fisheries in the

Pacific Islands region

SG Secretary General

SIDS Small Island Development States

SNC Second National Communication under UNFCC

SOPAC (South) Pacific Islands Applied Geoscience Commission

SPBEA South Pacific Board for Educational Assessment

SPC Secretariat of the Pacific Community

SPEC South Pacific Bureau for Economic Co-operation SPOCC South Pacific Organisations Coordinating Committee SPREP South Pacific Regional Environment Programme

SPTO South Pacific Tourist Organisation

STAR Science, Technology and Resources Network (SOPAC)

STE Short Term Experts

TAG Technical Advisory Group (SOPAC)

TC Technical Cooperation

TCSP Tourism Council of the South Pacific

TIM Tourism Industry Members

TL Team Leader

TNC The Nature Conservancy
TOR Terms of Reference
UN United Nations

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

USA United States of America
USD United States Dollar
USP University of South Pacific

WB World Bank

Wp Watt peak the unit in which wholesale and retail prices are stated for PV

panels. One kWp = 1000 Wp

WRM Water Resources Management WWF World Wide Fund for Nature

#### 1 EXECUTIVE SUMMARY

Within the context of an additional commitment of the German Federal Ministry for Economic Cooperation and Development (BMZ) for the ongoing ACCPIR Project GTZ commissioned an appraisal mission in order to investigate the options for extending it regionally and thematically. The regional scope of the mission includes all independent member states of the Secretariat of the Pacific Community (SPC). The thematic scope of the mission focused on climate change adaptation strategies for land- and marine based natural resources, adaptation options in the tourism sector and with regard to mitigation potentials to renewable energies as well as energy efficiency issues. Despite constraints in terms of time covering the whole South Pacific region, the regional institutional framework being under "reconstruction" and, the multitude of, hardly manageable donor initiatives in the field of climate change the team finally was confident that sufficient information was available to assess the climate change context of the region and to come up with a proposal which adds value to ongoing and planned climate change activities at the regional and national level.

The report first provides <u>background information on the Pacific region</u> outlining the baseline situation for the intended project intention in terms of geographic, physical and socio-economic diversity, the sector specific situations and, the policy, institutional and donor framework.

Pacific islands are among the countries most vulnerable to climate change globally, with considerable differences in the level of vulnerability between and within countries. Adaptive capacities in terms of human resources to analyse risks, identify adaptation options and steer implementation as well as institutional arrangements to effectively plan and coordinate implementation are very limited. Technical CROP agencies at the regional level, whose institutional framework is currently being reviewed and restructured, partly supplement national capacities, and have started providing climate change advisory services to member countries in the area of climate change adaptation, but cannot yet offer sufficient support to countries (in terms of sufficient data, techniques and capacities). This is valid also for energy and tourism advisory services.

At national level strategic and operational frameworks to guide and implement adaptation priorities are largely absent, while many countries have declared climate change adaptation and integration into national planning a priority. Line ministries and agencies in the impacted sectors, have not yet developed strategies to approach neither climate change nor integrated climate change into their operations. Community approaches are common in the region, but only reach a small part of communities to date.

The conjunction of low adaptation capacity in sustainable management of land and marine based natural resources, energy and tourism with existing climate extremes and future changes (core problem) and intensive climate impacts is threatening or impeding respectively the region's sustainable development. It leads to increasing negative impacts of natural disasters, food and water shortages, energy disruptions, economic losses, poor livelihoods, and further degradation of natural resources.

<u>Donor commitment and assistance</u> with regard to adapt to and mitigate climate change in the region has been and is very significant. The Pacific at large is a major and growing recipient of donor assistance in the field of climate change. The mission was faced with an unmanageable multitude of climate change related projects in the past, presence and as pipeline initiatives. In fact, no consistent coherent set of information on past, ongoing and/or envisaged project activities is available. It can be concluded, that nobody at present has a sufficient overview of number, scope and expected impact of climate change related projects and their contributions to the PIFACC.

There are various <u>fora for donor and/or stakeholder coordination</u>. However, they don't cover the whole regional spectrum and all have their own and data bases different from each other. Though they are very helpful in exchanging information and experiences they don't have the capacity of joint planning and monitoring of activities and impacts. The overall framework for coordination and monitoring is the PIFACC for which also an action plan was prepared. All donor funded climate projects and initiatives refer to the PIFACC, but a mapping of contributions (inputs, outputs and/or outcomes) does not exist. There are no joint planning processes and/or a joint logical framework which includes the donor programme contributions and its related budgets. The overall mechanism for coordination and monitoring of PIFACC implementation is the Pacific Climate Change Roundtable (PCCR) including all donors and stakeholders of the civil society. Meetings so far have not very effective. A number of shortcomings were taken up during the last PCCR in October 2009 and need to be addressed.

Based on the analysis of the baseline situation a <u>programme of extended technical assistance</u> is being proposed. As far as the <u>methodological approach</u> is concerned the basic multi-level approach used by the current regional SPC/GTZ project is recommended to be continued. The approach implies working with regional partner institutions, being strengthened, at country national and sub-national levels. Due to the insufficient human and financial resources in the countries which are a constitutive element not exclusively of the small island countries the regional component is a critical element for long term sustainable development.

Widening the thematic scope and considering different institutional partners and beneficiaries has led to distinguish six different project components including adaptation and mitigation issues: (1) Capacity Development at Regional Level; (2) Mainstreaming and Developing Adaptation Strategies; (3) Implementing Adaptation Measures (natural Resources) including Community Level; (4) Sustainable Tourism and Climate Change; (5) Sustainable Energy Management and; (6) REDD. Since the mitigation potential of the region is relatively insignificant it is proposed that adaptation to climate change with a focus on sustainable management of land and marine based natural resources be addressed as the focal area. The thematic extension including GHG mitigation action areas has led to propose a new name of the Programme into "Coping with Climate Change in the Pacific Island Region".

Capacity building for climate change adaptation at different institutional and regional/national levels is addressed through the first three components. Component 4 on sustainable tourism will strengthen private and public Pacific Island entities in introducing and implementing innovative adaptation approaches for the tourism sectors while the energy component 5 will address the awareness for more cost effective, climate proof and sustainable investments in the energy sector. Finally REDD component 6 addresses the potential for carbon financing

establishing governance and communication mechanisms, the MRV system and, relevant legal framework.

As an optional complementary component a special, flexible demand-driven small-grant schemes, jointly managed by GTZ, SPC and the German Embassies overlooking the region are proposed for consideration. It would complement Component 3 focussing on community based operations.

The multi-level approach is consistent with the PIFACC. However, the PIFACC does not structure and map all climate projects in a common implementation plan and/or collective budget frame. Nor does yet exist an agreed process of reporting as part of donor coordination and harmonization. Accordingly, though the proposed programme is moving towards a programme based approach according to OECD standards, it does not yet fulfil all the required criteria.

The proposed TA intends to achieve the following objectives:

Overall Objective: "The Capacities of Pacific Island Countries are Strengthened to Cope

with the Adverse Effects of and Reduce their Contribution to Climate Change, as Fundamental Aspect of Sustainable Development and

Natural Resources Management".

Component 1: "The capacities in climate change management of CROP agencies

which are part of the institutional partnership architecture are

strengthened"

Component 2: "Selected Pacific Islands have climate change adaptation strategies and

mainstreaming processes in place to implement adaptation relating to LMBNR according to agreed priorities and as an integral part of

development and sectoral planning."

Component 3: "Selected Pacific countries have successfully implemented and

assessed adaptation measures in relation to land or marine based natural resources, building up experiences and contributing to their

adaptation priorities."

Component 4: "Pacific Island tourism entities (Public/Private) develop and partially

implement novel CC adaptation approaches."

Component 5: "The sustainability, reliability and cost effectiveness of climate proof

energy services is improved."

Component 6: "REDD readiness process has been accomplished and pilot projects

implemented"

Climate change in the Pacific region impacts on the whole population of the Pacific Community. Therefore, the particularly vulnerable parts of the population in all selected member countries as well as particularly affected member of the business communities have to be considered as target groups.

As result of the institutional analysis it was suggested that the Secretariat of the Pacific Community (SPC) continues to be the <u>implementing and main executing agency</u> incorporating SPREP and other organisations into the project by cooperation agreements. Collaboration with SPC and SPREP should be based on the Memorandum of Cooperation

signed by both institutions. SPC is not only the oldest, but also the largest CROP agency with a well recognised track record of services to member countries. However, like other CROP agencies SPC finances have not a long-term sustainable membership base. SPC attempts to obtain an increased share of core funding with the aim of being financially sustainable with regard to core management positions. Given the limited financial capacity of Island member countries this will largely depend on the metropolitan member countries and donors to engage in long term financing of a regional organisation having proved a high level of performance and accountability. In addition to SPC, SPREP, PIFS, South-pacific.travel, PPA and USP will be major partners in project execution, SPREP, having mandated to be the lead agency for climate change and to coordinate and monitor the PIFACC.

Coordination with other donor technical assistance will be great challenge and ultimately be determined during the start up of the programme extension due to the multitude of donor engagement and pipeline initiatives. Current know initiatives of major donors (Australia, New Zealand, EU (10<sup>th</sup> EDF GCCA), GEF/UNDP, Japan, ADB and World Bank) and other relevant ones are described in the report. Regionally, all independent PICTS are covered. The regional coverage should, however, not be uniform across the countries or with predetermined budget allocations but rather demand driven and according to the priorities set by the countries themselves and coordinated with the actions and initiatives of other donors.

At the end of the appraisal report the <u>impact chain</u> of the programme including indirect results (with DAC/BMZ classifications) is described. It is followed by a <u>risk analysis</u> and the description of <u>project implementation design</u> (management architecture and inputs required). Risks are at acceptable levels and/or manageable. The thematic and regional extension suggest to link the Programme to SPC's new Climate Change Coordinator operating under the Deputy DG at Noumea and, a regionally decentralised management structure for the Programme with current Programme's Head Office staying at Suva as well as a new Technical Advisor placed at remote located SPREP. Including the current project the total budget will add up to €14.2 million to contribute to an extended programme life time of five years up to 2015.

#### 2 INTRODUCTION

The Government of the Federal Republic of Germany through the Federal Ministry for Economic Cooperation and Development (BMZ) has extended its commitment to support Pacific Island Countries to cope with the effects of climate change. It has allocated another 10 Mio. EURO to the already ongoing SPC/GTZ regional program "Adaptation to Climate Change in the Pacific Island Region (ACCPIR)" extending the overall financial envelope to 14.2 Mio. EURO. At the same time the European Union has strongly emphasised its commitment with regard to putting a high priority on climate change in its cooperation with ACP countries as spelled out in the Joint ACP-EU Declaration on Climate Change from May 2009. Within this context GTZ commissioned an appraisal mission in order to investigate the options for extending ACCPIR regionally and thematically. The emphasis was in looking into options of widening the regional and thematic scope rather than appraising a given proposal of a partner country or respective institutions. Thus, in a strict sense the mission had more the character of a scoping study.

The regional scope of the mission includes all independent member states of the Secretariat of the Pacific Community (SPC) namely Federate States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. The thematic scope of the mission focused in line with the current project on climate change adaptation strategies for the main economic sectors and integration of climate change in respective sector strategies and policies. However, in addition to land based adaptation (agriculture, forestry and land use planning) the scope was widened to marine based adaptation and tourism. Finally, renewable energy and energy efficiency were part of the appraisal mission as many of the countries in Pacific are committed to change energy supply and invest in energy efficiency. Thus, also mitigation of climate change was taken into consideration though not as a main focus since in the global context reduction of carbon emissions in the region are insignificant accounting for less than 0,1% of global GHG emissions<sup>1</sup>. Nevertheless, the Pacific Islands Countries (PIC) don't just want demand significant reductions in GHG emissions in their interest, but also show that they themselves take this issue seriously at the same time benefitting from higher energy efficiency and expansion of renewable energies. Therefore, renewable energy and energy efficiency issues were included in the appraisal mission.

The mission comprised of the following five professionals:

Dr. Günter Schmidt,	Head of Mission (independent consultant), coordination, institutional and donor coordination framework
Dr. Nana Künkel	GTZ, International Expert for Adaptation to Climate Change and Policy Mainstreaming
Lindsay Chapman	SPC, International Expert for Fisheries and Climate Change
Dr. Albrecht Kaupp	GTZ, International Expert for Renewable Energy and Mitigation
Klaus Lengefeld	GTZ, International Expert for Sustainable Tourism and Climate Change

<sup>&</sup>lt;sup>1</sup> ADB (2009), p. 14

During the field work the mission was supported by the ACCPIR team. The mission visited the Pacific region between February 15-28 (tourism expert in Samoa and Palau) and March 5 – 31, 2010. After three days at Suva, Fiji, where SPC and other important regional agencies are located as well as representations of major donors the mission split up into two sub-teams in order to visit as many Inlands countries as possible. About two weeks later the team joined again in Samoa where SPREP was visited. The mission then returned to Suva, Fiji, for final interviews, also with country delegations and to summarise findings which were presented and discussed with SPC in a workshop before the results finally were presented to the donor community.<sup>2</sup>

The mission team met during the visit with representatives of all 12 independent PICTs, altogether more than 100 persons<sup>3</sup> and reviewed as far as many documents provided as hard copies or electronically. Taking into account the time required for travelling within the region, that in some countries at the same time other donors visited the same partner institutions it was not feasible to get all desired appointments and meetings as planned, some of them were cancelled at short notice. Time available at the meetings which usually were group meetings seldom exceeded 90 minutes. Therefore, the mission had to compromise sometimes on the width and depth of interviews.

Despite those constraints the team finally was confident that sufficient information was available to assess the climate change context of the region and to come up with a proposal which adds value to ongoing and planned climate change activities at the regional and national level. At the same time it was apparent that coordination is a permanent challenge given the multitude of donors and initiatives and fine tuning will be required during project execution. This report is to a large extent a summary report which draws on the analysis of the separate sector or thematic reports elaborated by the team members. Details can be found there while the summary focuses on providing the base for the project design to be submitted to the German Federal Ministry for Economic Cooperation and Development.

The team members finally want to express their sincere thanks to all those who were able to meet the mission and dedicated their valuable time to explain context and features of climate change related regional issues for the Pacific region. Special thanks go to the ACCPIR team<sup>4</sup> who assisted the mission in many ways, logistically and with their knowledge of the regional and technical climate change context. Without their assistance the mission could not have succeeded.

<sup>&</sup>lt;sup>2</sup> For details see the agenda of the mission in Appendix ...

<sup>&</sup>lt;sup>3</sup> See contact data base, Appendix

<sup>&</sup>lt;sup>4</sup> Hermann Fickinger, Christine Fung, Christopher Barlett and last, but not least Andrea Matthias who was in charge of the complex logistics.

# 3 THE CONTEXT OF MANAGING THE IMPACT OF CLIMATE CHANGE IN PACIFIC ISLAND COUNTRIES: BASELINE SITUATION

#### 3.1 Background on the Pacific

### 3.1.1 Geographic, physical and socio-economic diversity

There are 22 Pacific Island countries and territories (PICTs) in the Pacific region, excluding Hawaii and the United States possessions (Figure 1). The 22 PICTs have an area of exclusive economic zones (EEZs) totalling 29.3 million km², while the total land area is just over 550,000 km², giving a ratio of ocean to land of 53:1. The mid-year 2008 population figures for the region was around 9.5 million people. Of the 22 PICTs, one country, Papua New Guinea accounts for 83% of the land area and 63% of the total population.

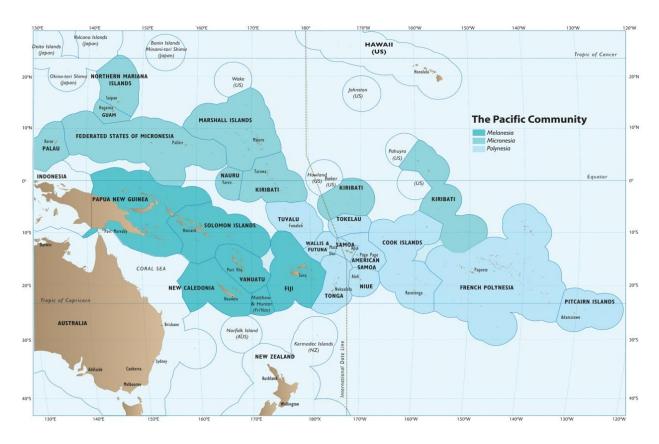


Figure 1: The Pacific Region showing the 22 PICTs and their EEZs.<sup>5</sup>

The appraisal mission is focused on the 12 independent member states of the Secretariat of the Pacific Community (SPC) namely Federate States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.

-

<sup>&</sup>lt;sup>5</sup> Bell et. Al. (2010)

The vast area covered by the Pacific Community is one of great geological, biological, ethnic-culturally and social diversity. In recognition of those differences historically three subregions are distinguished – Melanesia, Micronesia and Polynesia. The countries have a mix of high islands and atolls. In the western Melanesian countries high islands dominate the landscape whereas in Micronesia and Polynesia further north and eastwards the islands are typically smaller and atolls in various stages of evolution. The larger size of Melanesian countries and the prevailing weather conditions have in addition to fisheries provided opportunities for agriculture, forestry and mining (Fiji, PNG, Solomon Islands and Vanuatu). Due to their size and limited land based resources Micronesians and Polynesians generally have a strong affinity with the sea and fishing. The difference in resource endowment is also reflected in the socio- economic diversity of the countries. But in almost all PICTs fisheries play an outstanding role. In some Islands tourism plays a major role due to their coastal and ocean resources. Several smaller atoll countries are heavily dependent on remittances from family members working abroad.

#### 3.1.2 Marine- and Land-based Natural Resources

Coastal communities in the Pacific are without doubt some of the most vulnerable to climate change effects in the world. The limited land area in some countries and low profile of atolls (many only 3m above sea level at high tide) exacerbate the vulnerability of these locations, and the governments and people of these countries have limited capacities and resources to cope at all levels.

Given the economic, demographic and geographic conditions, Pacific Islands face a number of general vulnerabilities:

- high growth rates and densities
- poorly developed infrastructure
- limited natural, human and economic resources
- high dependence on marine resources
- high sensitivity to changes in water supply and demand
- economies vulnerable to external forces (changing terms of trade, trade liberalisation, migration flows)
- coral reef and mangrove ecosystems whose health and productivity of have considerable impact on people's well-being and livelihoods

The key vulnerabilities can be summarised as follows<sup>6</sup>:

- Sea level rise is expected to exacerbate inundation, storm surge, erosion and other coastal hazards, thus threatening vital infrastructure, settlements and facilities that support the livelihood of island communities.
- Deterioration in coastal conditions, e.g. through erosion of beaches and coral bleaching, is expected to affect local resources.
- By mid-century, climate change is expected to reduce water resources in many small islands, e.g. in the Pacific, to the point where they become insufficient to meet demand during low-rainfall periods.

-

<sup>&</sup>lt;sup>6</sup> Cf. 4th IPCC Report.

 With higher temperatures, increased invasion by non-native species is expected to occur, particularly on mid- and high-latitude islands.

Land- and marine-based natural resources will be affected by sea level rise, which will reduce the land area available for habitation, and may affect the availability and quantity of underground fresh water (water lense). Salt water intrusions into agricultural land will limit the crops that can be produced. Increases in sea water temperature and acidification of the ocean will greatly affect the marine environment and biodiversity, both with coral and other habitats (sea grasses, mangrove forests) and the fish resources (reef finfish and invertebrates) within the marine environment. The regional tuna resource that many countries rely on for economic development and local consumption may also be affected with early predictions indicating that the main body of tuna will move more to the east under such conditions. This would have a negative impact on the countries in the western Pacific, and possibly positive effects on countries in the eastern Pacific.

The Pacific is also experiencing more severe and extreme weather conditions, with stronger or more intense cyclones and flood and drought conditions. More intense rainfall may attribute to higher siltation of lagoons depending on land management practices and related soil erosion. Less rainfall, especially in the dry season, will affect the people unless adequate water storage is available to ride out drought conditions.

In many locations, especially around main or large urban centres, over-harvesting of resources has occurred, especially commercial invertebrate species and favoured finfish species, so any increased stress on these resources as a result of climate change will have a devastating effect.

#### 3.1.3 Energy

Ensuring the energy supply for transport and power generation is next to food security one of the most critical and most costly items in the PICs development since it directly affects the PICs ability to further develop their fragile economies. Present PICTs request for support in the energy sector are focused on economic and sustainable development.

Improved energy independence, energy efficiency, demand side management<sup>7</sup>, and utilization of indigenous energy resources are strategies which always have been and will be improving the resilience of a society facing energy supply issues. These may or may not be related to climate change issues and are in any case "no regret adaptation and mitigation measures".

Energy supply in Pacific Island Countries for electricity generation and for transport is mostly based on fossil fuel oil imports which had been highly vulnerable to price shocks and also occasional supply interruptions in this hurricane prone region. Electricity production accounts for roughly 40% of petroleum use in the region. In the three Melanesian countries overall electrification rates remain very low, typically about 20%. PICs power tariffs are relatively high compared to the EU-27 system average rates, and in contrast very high compared to

<sup>&</sup>lt;sup>7</sup> Demand side management (DSM) refers to all measures reducing the energy consumption of end users without lowering well being or level of productive use

the MENA region countries. These high tariffs obviously ask for an introduction of renewable based electricity generation that is already cost effective or close to grid parity.

The United Nations Human Development Index (HDI) is closely correlated to the per capita electricity consumption. The latter is an inclusive and pro poor indicator reflecting the participation of the poor at economic development. Annual per capita electricity consumption<sup>8</sup> is between 160 and 1000 kWh except for Palau, Marshall Islands and Nauru indicating the need to increase per capita electricity generation and consumption, albeit in a very efficient and climate proof way, for PICs that are below 1000 kWh.

The lack of enabling frameworks for a sustainable and climate proof future energy supply mix is one of the major bottlenecks. Main shortcomings in core subject areas are:

- (i) poorly targeted energy cost subsidies,
- (ii) no tariff regulators,
- (iii) power utilities reluctant to provide free access to the grid,
- (iv) no feed-in-tariffs,
- (v) few efforts to shift "bad" subsidies into "good" subsidies,
- (vi) reluctance to comply with national and regional energy policies,
- (vii) too few private sector investors,
- (viii) lack of compliance with environmental impact assessment rules as well as climate change strategies relevant for the energy sector, and
- (ix) no institutionalized regional watchdog following up on effectiveness and compliance with many energy policies.

Increased dependency on fossil fuels for electricity generation and transport is not inevitable and may, if not solved, become a more serious problem with respect to affordability and availability for all sectors of the society in the future. Renewable energy, thus, has appropriately addressed as part of the fuel mix reducing emissions and at the same time increasing energy efficiency in the region.

#### 3.1.4 Sustainable Tourism

The Pacific in general is not a destination for massive tourism, except in the few areas with major hotel concentrations such as Nadi and Denarau in Fiji. These are also the areas where most of the hotels managed by global hotel players such as Starwood-Sheraton or ACCOR are to be found, whereas the majority of the hotels in the region are small to medium and locally owned and operated.

According to the most recent (2009) research sponsored by World Bank's IFC, International Finance Corporation, all Pacific Island Countries (including the dependant territories) together had nearly 2000 accommodation properties with a total of 34,000 rooms. The average hotel size was 17 rooms. 80% of these hotels are locally owned and operated, whereas only 20% run by foreign hotel companies. With regard to the foreseen new

<sup>8</sup> These figures need to be compared to about 7000 for the EU, 15,000 for the USA and Kuwait. We consider per annual per capita consumption of below 600 kWh as a serious barrier for inclusive growth and economic development and a signal to support increase of electricity consumption in an efficient way keeping energy modesty in mind.

accommodation investments, there is a clear tendency towards bigger hotels, expansion of existing hotels and luxury/boutique resorts. On the other hand, many local owners of smaller hotels want to sell their properties, because they are not able to manage these profitably and do the necessary reinvestments to maintain their standards.

Air transport in the Pacific highly depends on six airlines who offer more than 95% of the regions international connections: Air Pacific/Qantas (Fiji), Air Vanuatu, Aircalin, Virgin/Pacific/ Polynesian Blue and Continental Micronesia. New Caledonia's Aircalin shares are in majority owned by French Caisse d'Epargne, so only two of these airlines do have a majority of Pacific ownership: Air Pacific and the government-owned Air Vanuatu, and both face major economic problems. Air Vanuatu is at the edge of bankruptcy, and Qantas trying to sell their Air Pacific shares.

Other regional tourism companies relevant for climate change are dive and other marine tourism operators and cruise ship lines.

Although tourism is not among the seven single sectors considered as the most relevant for climate change, it is in principle directly composed of the four sectors transport, energy, buildings and waste. It has direct linkages with two other sectors, i.e. agriculture and forestry. Tourism with these sectoral linkages is a major emitter of greenhouse gases, especially from air and ground transport, energy consumption, buildings and waste. On the other hand, tourism, in particular sun & beach, nature and marine tourism (eco/forest, diving, cruise tourism etc.) is one of the sectors most suffering from the impact of climate change: rising sea levels and increased storm/tide irregularities which endanger beach-near tourism infrastructure. Climate irregularities lead also to water shortages, disappearing biodiversity, both marine (coral reefs and the immense marine species diversity) and land-based (rain-and other forests, wetlands, animal sanctuaries etc.) which pushes off visitors.

Any approach to tourism and climate change will have to consider this ambiguous role of the world's most important economic sector in terms of turnover and non-agricultural jobs. This is especially true for the Pacific Region, where tourism is for most countries the most important foreign exchange earner, but highly vulnerable especially on low-lying island states, and on the other side – given the fact that tourism is overwhelmingly using mid- to long-haul flights, non-renewable energies etc. – also an important source of climate relevant emissions. World Bank and EIB and others local banks have major hotel investments in their portfolio for the South Pacific. None of these tourism investment vehicles and credit facilities has any consideration on climate change risks so far.

#### 3.2 Policy Framework

All leading politicians of the Pacific Islands Countries are aware of the implications of the current and anticipated changes in the Pacific climate. At many occasions they have expressed their concern and called on the international community to take and intensify actions for mitigating GHG emissions and for increased assistance to address the challenges through adaptation measures. In 2000 a first Pacific Islands Framework for Action on Climate Change, Climate Variability and Sea Level Rise 2000 – 2004 was adopted and updated to the current Pacific Islands Framework for Action on Climate Change 2006 – 2015 (PIFACC) which was endorsed by Pacific Islands Leaders in 2005. The PIFACC provides like

the first Framework a strategic platform for policy and decision makers as well as for partnerships for climate change initiatives at the regional and national level. With the Niue Declaration on Climate Change (2008) Pacific Leaders expressed newly their concern and committed the Community to continue to develop pacific-tailored approaches to combating climate change, consistent with their ability to actively defend and protect their own regional environment, with appropriate support of the international community. And again one year later at the 40<sup>th</sup> Pacific Islands Forum in Cairns they adopted the "Pacific Leaders Call for Action on Climate Change". Thus, climate change ranks very high on the Pacific political agenda and technical assistance from Development Partners (donors) are explicitly welcomed.

The concept of mainstreaming <u>climate change adaptation</u> and the need for good policy frameworks are widely acknowledged and taken up by the PIFACC: The Framework strongly calls for mainstreaming climate change adaptation: It states: Appropriate adaptation measures integrated into national/sectoral sustainable development strategies or their equivalent and linked to the budgeting process (Outcome 1.4) and Climate change considerations mainstreamed into national policies, planning processes, plans and decision-making at all levels and across all sectors (Objective 2.1). Also at the national level several countries have made clear policy statements at the highest government level that can now be mainstreamed into sectoral policy, and then down to state, provincial, community policies; or operationalised in national adaptation strategies. This is e.g. reflected in. Kiribati's National Framework for Climate Change and Climate Change Adaptation; completed in April 2010.

Points of departure in many countries are National Adaptation Programmes of Action (NAPAs), which are being produced by Least Developed Countries (LDCs) under the United Nations Framework Convention on Climate Change (UNFCCC), and National Communications, the national reports of all countries that are signatories to the UNFCCC. While NAPAs identify urgent and immediate adaptation needs of LDCs, which can receive funding through the UNFCCC's Least Developed Countries Fund and any other bi- and multilateral support, the National Communications describe vulnerabilities to and impacts of climate change and report on action taken by countries to address them, without usually being meant as national strategies. As many countries in the Pacific are currently working on their second National Communications, the country teams set up to elaborate them are working on developing adaptation strategies, where appropriate. However, encompassing climate change adaptation strategies are lacking in most countries.

As far as the <u>energy sector</u>, including mitigation is concerned, PICs have developed well written regional and national energy policy plans clearly identifying present deficiencies and challenges. Major energy issues are addressed in the latest draft of the regional energy policy for the pacific islands (REPPI) of 5 March 2010. Some PICTs also prepared medium term action plans. However, none of them offer a confirmed or realistic budget to achieve the benchmarks or targets. So far some progress has been achieved with respect to improved enabling framework conditions "to let this all happen" as envisioned or planned by the energy

-

<sup>&</sup>lt;sup>9</sup> At the same time AOSIS, of which PICTs and CARICOM states are the major members, called at their Climate Change Summit in September 2009 upon the international community "to undertake urgent, ambitious and decisive action to significantly reduce emissions of all green house gases, including fast action strategies, and to support SIDS, and other particularly vulnerable countries, in their efforts to adapt to the adverse impacts of climate change, including through the provision of increased levels of financial and technological resources.

policies. There is an expectation by PICs that even financially attractive investments in measures recommended by national energy policies are to be grant supported which may be the very reason while good energy policies and donor intentions are often poorly implemented and become non-sustainable. One major issue in this context is the lack of enabling frameworks for a sustainable, inclusive and climate proof future energy supply mix while acknowledging the need to adhere to the regional energy policy of the pacific islands as well as national energy policies.

With regard to tourism there has been so far no significant effort to establish a regional tourism (product) development strategy. Joint regional tourism efforts have so far focused on promotion and marketing, mainly the South Pacific Village at trade fairs, on joint projects and cooperation with development partners such as EU and on regional capacity building for product development. South-pacific travel (SPTO), the proposed regional counterpart organization for the tourism component, does not consider yet climate change on their agenda to support tourism capacity building in their member countries. However, like for the individual countries, sustainability issues have also become a major part of SPTO's agenda for regional tourism development support. Except for the Samoa Tourism Development Plan 2009-2013, climate change is not taken up so far in any of policy or planning documents of the other targeted countries (Fiji Vanuatu, Palau). Thus, the consideration of climate change issues in the tourism plans and strategies is non-existing. However, even though climate change is not considered in tourism development plans, the fact that sustainability is considered for each of the four targeted countries a key element for future tourism development and promotion gives a good basis to integrate climate change issues as part of sustainable development of tourism.

#### 3.3 Institutional Framework

Under the umbrella of the Council of <u>Regional Organizations</u> in the Pacific (CROP) operate eleven independent inter-governmental organisations. In the context of the appraisal mission the most relevant organisations are the Pacific Islands Forum Secretariat (PIFS), Secretariat of the Pacific Community (SPC), Pacific Islands Applied Geoscience Commission (SOPAC), Secretariat of the Pacific Regional Environment Programme (SPREP), South-pacific.travel, previously known as South Pacific Tourism Organisation (SPTO), the Pacific Power Association (PPA) the University of the South Pacific (USP) and the Pacific Islands Forum Fisheries Agency (FFA). <sup>10</sup>

The institutional framework is presently subject of a significant restructuring process, i.e. the Regional Institutional Framework Review which was initiated with the Pacific Plan 2005 aiming at improving regional coordination and its effectiveness and efficiency. The major change at present is the dissolution of SOPAC and the transfer of its functions and programmes to SPREP and SPC which was formalised during the appraisal mission on March 31, 2010.<sup>11</sup>

2010.

11 According to the plan of implementation, the transfer of all operation is supposed to be completed until end of

<sup>&</sup>lt;sup>10</sup> For more detailed analysis see report on Institutional and Donor Framework.

The regional organisations were created at different times over several decades in response to different needs with different memberships, governance structures and mandates. Thus, regional framework is not a result of a designed coherent structure rather than a frame fitted around existing institutions and relationships. Different mandates, competing interests, donor funding etc. have absorbed a lot of energies of CROP agencies management and led, despite CROP, to distortions and overlapping programmes and activities. This is especially, but not exclusively true for cross-cutting issues such as climate change.

Despite those institutional constraints the collective capacity of the regional organizations to deliver scientific and technical services to the Pacific Community member countries is generally valued as of relative high standard. Provided the financial resources are at hand the organisations are able to attract recognised international professionals. The capacity in principle is limited almost exclusively by the constraints of insufficient human and financial resources. With the exception of organisations pillared by the private sector and/or companies (e.g. PPA and south-pacific.travel) all technical CROP organisations are not financially independent and sustainable. Donors including "metropolitan" member countries finance almost completely all operations of the major CROP organisations (95 – 98%). Major contributors are Australia and New Zealand as regional powers. In consequence, strategic, long term planning and securing related human professional resources is restricted to a great extent. Under such circumstances projects often find themselves in an "island situation" with weak links to the partner organisation.

As far as climate change related issues are concerned SPC and SPREP have to be seen as the major players in designing the institutional architecture for project implementation. SPREP has been given the lead function for climate change in the region whereas SPC has been given the lead for the energy sector (transfer from SOPAC). SPC, having as focal points or partners respectively sectoral public ministries and entities at the country level can unlike SPREP enter the community level, if required, through decentralized structures. This and its capacities suggest that SPC continues to be the main implementing agency incorporating SPREP and the other organisations into the project by cooperation agreements.

SPREP as well as SPC are confronted with a very complex world of climate change project or programme architecture in the region which needs to be managed and coordinated and/or have just started to integrate climate change into their programmes and technical services. Data bases and monitoring systems on vulnerabilities to and impacts of climate change on land and marine based natural resources in Pacific are largely lacking and appropriate advisory tools still remain to be developed and implemented. Thus, their technical capacities to support and advise member states need still to be strengthened. This holds also for the other CROP organisations.

In <u>member countries</u> structures and regulatory frameworks for climate change related initiatives are usually in place and understanding and awareness of climate change exists at the government level, partly as legacy of the Pacific Islands Climate Change Assistance

<sup>12</sup> See again the Appraisal Sector Report: Adaptation to Climate Change related to Marine and Land based Natural Resources.

Project (PICCAP) funded by GEF (1997 – 2001). However, as far as the institutional capacities in the member countries is concerned, findings suggest that mandates and segregation of functions often are not clarified sufficiently as at the regional level leading to overlaps and conflicts. Institutional capacities, not only in the small island countries, are generally insufficient and heavily strained by the multitude of climate related initiatives and projects. In consequence the dependence of PICTs on support offered by regional organisations and/or donors is high. Project implementing at the community level usually relies heavily on partnerships with NGOs and civil society groups. NGOs have been gradually been increasing in numbers over the years but often are still personally and financially weak. Implementation capacity, thus, is limited. They will, nevertheless, have to assume an important role in community based projects, but also require external funding and need to be strengthened with regard to dealing with climate change issues.

#### 3.4 Synopsis of Problem Situation

Pacific islands are among the countries most vulnerable to climate change globally, with considerable differences in the level of vulnerability between and within countries. Coastal communities, atoll islands, and the densely populated and low-lying deltaic regions on larger islands are particularly vulnerable to even small changes in climatic variables, especially sea level rise and climate variability, including drought conditions and tropical storms. Vulnerability is constituted by high population densities and growth rates, scarce natural resources particular land and water, high exposure to natural hazards because of small and low-lying land mass and geographical location in cyclone and typhoon zones, poorly developed infrastructure, limited human and economic resources because of poverty and small size of countries, high external dependency of economies.

The high pressure on land and marine based natural resources already leads to unsustainable use of these resources, reduces the natural resistance of ecosystems, weakens the functions of ecosystems as natural shields against natural disasters and threatens livelihoods of communities depending on them. It has been reported by the IPCC<sup>13</sup> that climate change has already worsened this situation, and natural resource management in most Pacific Islands is largely unprepared for future changes through climate change. Impacts of natural disasters have worsened. Due to often ineffective planning of both land and water resources the impacts from climate change like drought, flooding, and extreme weather events are exacerbated. High costs of energy as well as its inefficient use, fragmentation of CROP energy programmes, limited cooperation among members and ineffectiveness of the CROP energy working group hamper the resilience and mitigation capacity of Pacific Islands Countries. Tourism is for most countries the most important foreign exchange earner, but highly vulnerable especially on low-lying island states, and on the other side – given the fact that tourism is overwhelmingly using mid- to long-haul flights, non-renewable energies etc. – also an important source of climate relevant emissions.

Adaptive capacities in terms of human resources to analyse risks, identify adaptation options and steer implementation as well as institutional arrangements to effectively plan and

<sup>-</sup>

Mimura et al (2007) report in the Chapter on Small Island States of the IPCC Fourth Assessment Report: Although emitting less than 1% of global greenhouse gases, many small islands have already perceived a need to reallocate scarce resources away from economic development and poverty alleviation, and towards the implementation of strategies to adapt to the growing threats posed by global warming.

coordinate implementation are very limited in these small countries. The information base on climate change adaptation and vulnerabilities is insufficient and, where it exists, awareness of and skills to use information is lacking in relevant departments. Technical CROP agencies at the regional level partly supplement national capacities, and have started providing climate change advisory services to member countries in the area of climate change adaptation, but cannot yet offer sufficient support to countries (in terms of sufficient data, techniques and capacities). This is valid also for energy and tourism advisory services.

Awareness about the risks climate change is posing to development is very high in the region as reflected in regional and national climate policies and statements and requests for support on climate change related problems by communities. However, the existing Pacific Islands Framework on Climate Change (PIFACC) is weakly monitored and lack of coordination prevents fully exploiting economies of scale and adding full value. At national level strategic and operational frameworks to guide and implement adaptation priorities are largely absent, while many countries have declared climate change adaptation and integration into national planning a priority. Line ministries and agencies in the impacted sectors, including those dealing with land and marine based natural resources, have not yet developed strategies to approach climate change nor integrated climate change into their operations. Community approaches are common in the region, but only reach a small part of communities to date.

The conjunction of low adaptation capacity in sustainable management of land and marine based natural resources, energy and tourism with existing climate extremes and future changes (core problem) and intensive climate impacts is threatening or impeding respectively the region's ability to cope with climate change challenges. Land and marine based natural resources, energy and tourism play an important role for sustainable development in the region, but are already largely impacted by climate change and countries in the region are insufficiently prepared for future changes. Low adaptive capacity and climate impacts lead to increasing negative impacts of natural disasters, food and water shortages, energy disruptions, economic losses, poor livelihoods, and further degradation of natural resources.

#### 3.5 Donor Assistance and its Coordination

Donor commitment and assistance with regard to adapt to and mitigate climate change in the region has been and is very significant. The Pacific at large is a major and growing recipient of donor assistance in the field of climate change. Australia is the dominant donor followed by UNDP, the EU, New Zealand, GEF and ADB. Other important funding agencies/donors include FAO, Japan and the World Bank. If all energy related projects are into account the ranking might be different.

The mission was faced with an unmanageable multitude of climate change related projects in the past, presence and as pipeline initiatives.<sup>14</sup> Therefore, it was a challenge if not impossible to get a sound overview over the magnitude of assistance and especially of its impacts. Despite various matrices on climate change connected projects no consistent coherent set of information on past, ongoing and/or envisaged project activities is available.

\_

<sup>&</sup>lt;sup>14</sup> For examples see all sector reports.

There are significant data gaps and existing information usually is input focussed and pipeline information is missing almost altogether.

Almost none of existing lists or matrices on climate change projects displays the relationship to the PIFACC, the Pacific Island Framework for Action on Climate Change (2006 – 2015), supposed to serve as a regional framework for climate change related initiatives and projects. It can be concluded, that nobody at present has a sufficient overview of number, scope and expected impact of climate change related projects and their contributions to the PIFACC. Hence, the situation with regard to project and donor coordination and assessing the impact with regard to the PIFACC is far from being satisfactory.

There are various fora for donor and/or stakeholder coordination, e.g. in Fiji, Samoa and PNG. However, they don't cover the whole regional spectrum and all have their own and data bases different from each other. These coordination groups are very helpful in exchanging information and experiences but don't have the capacity of joint planning and monitoring of activities and impacts. The overall framework for coordination and monitoring is the PIFACC for which also an action plan for activities on the regional and national level was prepared. However, though all donor funded climate projects and initiatives refer to the PIFACC a mapping of contributions (inputs, outputs and/or outcomes) does not exist. There are no joint planning processes and/or a joint logical framework which includes the donor programme contributions and its related budgets.<sup>15</sup>

The overall mechanism for coordination and monitoring of PIFACC implementation is the Pacific Climate Change Roundtable (PCCR) including all donors and stakeholders of the civil society. However, overall the PCCR, and the meetings which have been held, so far seem to be largely ineffective in terms of contributing to the intended purpose of the PCCR. A number of shortcomings were taken up during the last PCCR in October 2009 and need to be addressed. Generally, the challenge of promoting and managing the PIFACC is widely recognised, similarly the need for greater regional coordination.

\_

<sup>&</sup>lt;sup>15</sup> Therefore, the Programme has to be classified with regard to DAC coding as PBA/PGF 0.

#### 4 PROPOSED TECHNICAL ASSISTANCE

#### 4.1 Approach

The basic multi-level approach used by the current regional SPC/GTZ project is proposed to be continued. This means working with regional partner institutions, being strengthened, at country national and sub-national levels. Due to the insufficient human and financial resources in the countries which are a constitutive element not exclusively of the small island countries the regional component is a critical element for long term sustainable development. Widening the thematic scope and considering different institutional partners and beneficiaries has led to distinguish six different project components including adaptation and mitigation issues. Since the mitigation potential of the region is relatively insignificant it is proposed that adaptation to climate change with a focus on sustainable management of land and marine based natural resources be addressed as the focal area of the technical cooperation. This addresses key vulnerabilities and adaptation options to enhance and sustain sustainable development in view of climate change, and responds to regional and national priorities. It also fills an important gap in the landscape of donor support. In addition adaptation and mitigation measures with regard to the energy and tourism sectors are addressed taking into account their importance for sustainable development of member countries. Including the intervention of the ongoing programme in addressing the potential for REDD the following six components are proposed:

Component 1: Capacity Development at Regional Level

Component 2: Mainstreaming and Developing Adaptation Strategies

Component 3: Implementing Adaptation Measures (natural Resources) including Community Level

Component 4: Sustainable Tourism and Climate Change

Component 5: Sustainable Energy Management

Component 6: REDD

Capacity building for climate change adaptation at different institutional and regional/national levels is addressed through the first three components. The experiences from the local level or private sector actors (tourism/energy) feed back into national and regional level design of framework conditions and climate change advisory services. National level implementation experiences likewise inform regional coordination and advice.

At the regional level coordination on and mobilisation of climate change adaptation initiatives will be improved, and capacities of technical CROP agencies to support and advise member states to plan for and implement adaptation will be strengthened (Component 1). This includes mainstreaming climate change into corporate strategies and advisory tools and exchange between stakeholders in adaptation in the region.

Component 2 addresses the national level: National coordination bodies for climate change, line ministries or respective entities and nongovernmental institutions will be strengthened to put in place adaptation strategies, operationalise and integrate existing strategies into national and sector strategies, plans and policies, budgeting and standard procedures in the line ministries.

Component 3 intends to build up experiences based on implemented adaption approaches and thus, strengthen the capacities to identify and implement adaptation options, to set up the necessary institutional arrangements and to apply adaptation techniques within the sectors.

Component 4 on sustainable tourism will strengthen private and public Pacific Island entities in introducing and implementing innovative adaptation approaches for the tourism sectors (in major and community tourism sites) and related areas (coastal & marine management, landuse, water, energy, waste, supply chains etc.). For major tourism sites this will be implemented in the form of Public Private Partnership (PPP) initiatives.

The energy component 5 will create awareness for more cost effective, climate proof and sustainable investments in the energy sector. The results of these activities are brought into policy discussion and financial circles of the regional energy groups and partner organisations. Finally REDD component 6 addresses the potential for carbon financing establishing governance and communication mechanisms, the MRV system and, relevant legal framework.

As an optional complementary component a special, flexible demand-driven small-grant schemes, jointly managed by GTZ, SPC and the German Embassies overlooking the region are proposed for consideration. <sup>16</sup> It would complement component 3 focusing on community based operations. It could address in very flexible way urgent expressed ad-hoc demands of local communities not covered by the project planning framework.

The multi-level approach is consistent with the PIFACC which provides the framework for the interventions of CROP organisations and the PICTs. Direct relationships can be established with the programme design outlined below. However, the PIFACC does not structure and map all climate projects in a common implementation plan and/or collective budget frame. Nor does yet exist an agreed process of reporting as part of donor coordination and harmonization. Accordingly, though the proposed programme is moving towards a programme based approach according to OECD standards, it does not yet fulfil all the required criteria.

#### 4.2 Objectives and Indicators

#### 4.2.1 Overall Programme Objective

The overall objective for the proposed programme is designed to capture the effect of the perceived outcomes of all the components, including achievements of strengthening adaptation and mitigation actions. It relates directly to the vision of the PIFACC that pacific island people, their livelihoods and the environment are resilient to the risks and impacts of climate change. Towards this vision the overall objective of the programme is proposed to be

"The Capacities of Pacific Island Countries are Strengthened to Cope with the Adverse Effects of and Reduce their Contribution to Climate Change, as Fundamental Aspect of Sustainable Development and Natural Resources Management".

Successful project implementation would be verified by the following indicative indicators:

\_

<sup>&</sup>lt;sup>16</sup> For proposed design see appendix 1

- Advisory services on CC developed by SPC and SPREP are increasingly requested and delivered
- 2. The number of climate proofed joint country strategies (JCS; SPC-SPRP-Country) has increased by x and subsequent implementation has been carried out by at least x%
- 3. Lessons learned from pilot projects and novel adaptation approaches in tourism are applied in x cases (communicated and institutionalised)
- 4. Public and/or private investments in relevant sectors (natural resources and tourism) consider the national and regional adaptation priorities in x countries
- 5. At least 5 demand driven projects consistent with national and regional energy policies including climate change policies aiming at improving sustainability, reliability and/or cost effectiveness reach financial closure.
- 6. At least 2 contracts for carbon financing in REDD signed

### 4.2.2 Objectives of Programme Components (Outcomes)

Expected outcomes and indicators for the different components are proposed as follows:

#### Component 1:

"The capacities in climate change management of CROP agencies which are part of the institutional partnership architecture are strengthened"

#### Indicators:

- The concerned sectors of SPC and SPREP systematically integrate CC adaptation & mitigation concerns into its strategic approach & advisory services.
- X advisory products on climate change including mainstreaming LMBNR developed and applied in SPC
- An innovative monitoring system on effects of adaptation advice is used by at least one division of respective CROP agencies
- Monitoring tool for PIFACC implementation is applied (SPREP)
- Climate change Portal for the Pacific established & jointly managed by CROPs
- X countries plan small-scale (community) fishery development based on projected effects of climate change to the tuna resource and other marine resources.
- Countries use high quality advice by SPC and SPREP on CC to take effective adaptation decisions (in ad-hoc requests)

#### Component 2:

"Selected Pacific Islands have climate change adaptation strategies and mainstreaming processes in place to implement adaptation relating to LMBNR according to agreed priorities and as an integral part of development and sectoral planning."

#### Indicators:

- National adaptation strategies or adaptation strategies for land and marine based natural resources are adopted by five countries, which have taken first steps to implement them;
- Existing strategies, planning documents and related processes related to natural resource management integrate climate change adaptation in 5 countries;
- Standard procedures for climate proofing development planning processes at national or sub-national level are applied in 3 countries.

#### Component 3:

"Selected Pacific countries have successfully implemented and assessed adaptation measures in relation to land or marine based natural resources, building up experiences and contributing to their adaptation priorities."

#### Indicators:

- Adaptation techniques, institutional arrangements, and priority adaptation measures related to land and marine based natural resources, and as identified in relevant national documents, are applied and implemented in at least 8 countries on a pilotbasis.
- 20 communities have identified and partly implemented adaptation approaches in an integrated cross-sectoral manner, addressing gender and conservation concerns.
- Experiences from implementing adaptation in different countries are assessed and shared within the region on a continuous basis.

#### Component 4:

"Pacific Island tourism entities (Public/Private) develop and partially implement novel CC adaptation approaches."

#### Indicators:

- The tourism climate change approach is used in a least 2 existing and 2 new tourism sites in a joint effort of the private and public sector (PPP).
- 6 community-based tourism initiatives apply the tourism climate change adaptation approach.
- In at least 2 countries tourism strategies take up/ integrate climate change into the developed approach.

#### Component 5:

PICTs have economically and financially assessed national energy strategies and plans as well as projects/initiatives which aim at shifting present investment subsidies into generation subsidies, consistent with climate change and regional energy policy guiding principles.

#### Indicators:

- At least 5 national economic and financial reports jointly prepared by stakeholders have been endorsed and applied as described.
- Concept and strategy paper jointly prepared by all stakeholders are accepted to be tested in principle.

- At least 5 financial grade papers prepared and submitted to IFI through concerned partner authorities.
- At least 15 demand driven projects consistent with national and regional energy policies including climate change policies aiming at improving sustainability, reliability and/or cost effectiveness are identified and processed.

#### Component 6:

"REDD readiness process has been accomplished and pilot projects implemented"

#### Indicators:

- MRV system is established (2012)
- Institutional & legal framework is established (2012)
- Governance & communication mechanisms established (2012)
- x pilot projects implemented (2015)

The majority of the indicators are indicative at this stage of programme design. They will have to be fine-tuned and values to be attached as soon as baseline data will be available with a sufficient degree of confidence.

#### 4.3 Target Groups and Other Beneficiaries

Climate change in the Pacific region impacts on the whole population of the Pacific Community. Therefore, the particularly vulnerable parts of the population in all selected member countries as well as particularly affected member of the business communities have to be considered as target groups. Depending on the project components, rural and coastal communities affected by weather conditions (droughts, floods), sea-level rise and warming up of ocean temperature are of special interest. Women and women groups are particularly important in the rural and coastal community context.

Rural households are also the main target group of the energy component. Except for Nauru (with a 100% urbanized population) about 87% to 30% of the PIC population lives in rural areas. None or unreliable energy services are the rule and not the exception. On the other handelectricity consumers in urban areas will have to be seen as target groups as well. Implementation of national and regional energy policies affect all households and commercial users.

Adaptation affects almost all industrial sectors due to potentially changing interregional and interseasonal marketing patterns, relocation of agro-industries and fish processing plants, construction companies involved in climate proofing of buildings and infrastructure as well as utility and tourism companies (hotels, tour operators) and their service providers. Therefore, a wide range of government and also private sector entities are ultimately also benefitting from the proposed programme and thus, are target groups. As particularly prominent among them are those companies or entities operating in the rural and coastal communities and those of the energy and tourism sector represented by PPA and south-pacific.travel.

#### 4.4 Institutional Partners and Other Actors

As result of the institutional analysis it was suggested that the <u>Secretariat of the Pacific Community (SPC)</u> continues to be the implementing and main executing agency incorporating SPREP and other organisations into the project by cooperation agreements.

SPC is the oldest of the CROP agencies with full membership of all PICTs. It has been established back in 1947 as a technical assistance, training and research organisation under the Canberra Agreement. Working languages are English and French. The Headquarter is located in Noumea, New Caledonia; regional offices are located in Suva, Fiji Islands and in Pohnpei, Federated States of Micronesia (FSM). In addition a number of field offices have been established in other countries and territories.

The governing body is the Conference of the Pacific Community (Conference) which meets every two years. The Conference may, as required, be represented by a committee - the Committee of Representatives of Governments and Administration (CRGA). The CRGA usually meets annually, in the "between Conference" years and is empowered to make decisions. SPC's Focal Points (formal points of contact) tend to be Departments (or equivalents) of Foreign Affairs or Finance/Planning. Sectoral contact points are government's line ministries/departments.

SPC is led by three executives, the Director General and two Deputy Director Generals. Its scope of work is essentially unlimited in terms of sectoral content. As a result of the ongoing regional institutional review process SPC's organisation is currently undergoing a restructuring process. Major functions of the dissolved SOPAC are integrated into SPC. Instead of three SPC will in future be structured into five strategic divisions, plus a corporate services division. Except for tourism SPC will cover all relevant sectors for the proposed programme, including energy.

SPC is not only the oldest, but also the largest CROP agency with a well recognised track record of services to member countries. Total human resources before the regional institutional reforms added up to almost 400 staff members (2008 figures), of which 52% are recruited internationally. Budget figures show that on average each professional manages a budget of almost 350.000, at the upper end up to 600,000 US\$ (health). The magnitude ultimately depends on the related project funding which determine and restrict to a certain extent the scope of services of recruited professionals.

Around 80% and even more (2009) of SPC's funding is tied to projects and programmes referred to as non-core or extra-budgetary funding. Total funding in 2009 amounted to more than 75 million US\$. In comparison to 2005 funding and expenditures more than doubled indicating a significant growth over the last years. With the integration of SOPAC programmes this trend continues.

Core funding is almost exclusively absorbed by the administrative costs (administration and programme management/support). This situation is not unique to SPC but indicates that SPC finances have not a long-term sustainable membership base. Island member countries contribute or rather are able to contribute not even 2% of the total budget. Major contributors are Australia and New Zealand who contributed the last three years 34 and 12% respectively, i.e. more than 45% of the total budget, followed by the EU (13%) and member country France (6%). Altogether, the core budget is funded to 90% by the metropolitan member countries Australia (33%, New Zealand (20%), France (20%) and USA (17%). The

relative high contribution of France and USA reflects that all dependent PICTs are also members of SPC.

SPC attempts to obtain an increased share of core funding with the aim of being financially sustainable with regard to core management positions. Given the limited financial capacity of Island member countries this will largely depend on the metropolitan member countries and donors to engage in long term financing of a regional organisation having proved a high level of performance and accountability.

In addition to SPC, SPREP, PIFS, South-pacific.travel, PPA and USP will be major partners in project execution, SPREP, having mandated to be the lead agency for climate change and to coordinate and monitor the PIFACC being the most important one next to SPC. SPREP as specialised environmental organisation is much smaller than SPC with 60 – 70 staff members and a turnover of around USD 7 Mio. The financing structure in relative terms is similar to that of SPC. The same holds for PIFS which will be involved as far as upstreaming climate change issues into regional and international policies are concerned. South-pacific.travel and PPA are partners in addressing specific sectoral issues of energy and tourism and USP in training as well as project executer of AusAID and EU projects. In addition there are a number of working groups under the CROP and for energy the Donor/IFI working group which will be involved as required.

Partner institutions at the national level will be the focal points of SPC and SPREP which tend to be the sectoral line ministries and the ministries or corresponding entities for environment and conservation. At sub-national level provincial and community public entities as well NGOs will be partners for project implementation. For the tourism component the business organizations of the tourism industry (hotel, tour operator, small and medium tourism business, community-based tourism organizations) and – as far as these are part of it – the Chambers of Commerce and Industry will be considered.

#### 4.5 Coordination with other TA

As pointed out before, coordination with other donor technical assistance will be great challenge and ultimately be determined during the start up of the programme extension due to the multitude of donor engagement and pipeline initiatives. However, beyond any doubt the following major Initiatives, programmes and projects will have to be taken into account at the regional and national level:

- Australia (AusAID): ICCAI International Climate Change Adaptation Initiative (ICCAI)
  The initiative encompasses four principal components:
  - 1. <u>Science</u>: with the objective to improve scientific information on, and understanding of, climate change impacts in the Pacific.
  - 2. <u>Strategic planning and vulnerability and adaptation assessments</u>: with the objective to enhance partner country capacity to assess key climate vulnerabilities and risks, formulate appropriate adaptation strategies and plans, and mainstream adaptation into decision making.
  - 3. <u>Priority actions, financing implementation of priority adaptation</u> measures which include
    - i. Assist in implementing priority adaptation measures at community, national and regional levels

- ii. Developing national capacity to increase resilience to climate change impacts in the longer term
- iii. Coordinate with activities of partner countries, other donors, multilateral agencies and regional organisations
- Multilateral funds: Contribution to multilateral adaptation funds including e.g. contribution to the World Bank/SCF Pilot Program on Climate Resilience (PPCR)

Projects of special importance within this initiative include: Pacific Adaptation Strategy Assistance Programme (PASAP), Pacific Climate Change Science Programme with USP, an community-based adaptation small grants programme, a vulnerability assessment on climate change effects on fisheries in the Pacific, and monitoring the vulnerability and adaptation of coastal fisheries to climate change, with the latter two being regional projects implemented by SPC. In addition, under component 3 various actual and planned interventions aim at strengthening SPREP and PIFS which have to be taken into account. AusAID is also financing a smaller (less than 1 Mio Euro) project to develop strategies for tourism and climate change at country policy level, which is relevant. This project is led by the Victoria University of Melbourne.

New Zealand: NZAID's Pacific Regional Natural Resources and Disaster Management Programme (fourth pillar of NZAID's Pacific Strategy)

The programme focuses on reducing vulnerability through sustainable natural resource management and disaster management. The following outcome areas are intended to contribute to climate change adaptation:

- Enhanced access to water resources
- 2. Enhanced preparedness for, and response to natural disasters
- 3. Effective management of interlinked environmental issues by communities and governments

NZAid has focused on mainstreaming adaptation climate change in all its support programmes and projects in the relevant sectors and supports community based as well as the small grants programme of UNDP-GEF (cf. below).

European Union: Global Climate Change Alliance (GCCA) and 10th EDF

The EU is one of the major donors in the region, and especially with regard to climate change as pointed out above. In the recent Joint ACP-EU Declaration on Climate Change and Development (May 2009) the intention was underlined to develop and/or shape meaningful cooperation activities through appropriate instruments and initiatives in the field of climate change referring inter alia to the GCCA. Furthermore it was agreed to work on the basis of Inter-ACP cooperation under the 10th EDF naming as a priority the design of support programmes in the climate change domain. For the support of the GCCA €40 million were earmarked, thereof €10 million for the Pacific Island ACP members, for energy around USD 20 million are invested.

The 10th EDF has committed a total of 95 million Euros by the European Commission under Regional Indicative Programme for the Pacific for 2008 – 2013 to develop new regional projects focusing on strengthening Regional Economic Integration and Sustainable Management of Natural Resources and the Environment. Among the projects recently announced is SciCOFish (Scientific support for the management of

coastal and oceanic fisheries in the Pacific Islands region)17. It has strong linkages to the proposed programme extension, especially the coastal component of the project where monitoring of coastal resources is a key component.

The GCCA focuses on five areas: implementing concrete adaptation measures; reducing emissions from deforestation; helping poor countries take advantage from the global carbon market; helping poor countries to be better prepared for natural disasters, and integrating climate change into development cooperation and poverty reduction strategies for which the Commission had earmarked €40 million over the period 2008-10.

At the meeting between EU and Pacific ACP Countries during the Leaders Forum in Cairns 2009 it was decided to develop and implement a regional programme on climate change in seven PICT Small Island States, i.e. Kiribati, Tuvalu, Nauru, Marshall Islands, Palau, and the Cook Islands and Niue. The focal areas correspond directly and intimately with the focus of the proposed programme extension. Hence, close cooperation is required. The EU programme, however, has not been designed yet. Because the intimate relationship between both programmes co-financing of the GTZ programme with the EU - GCCA budget funds are under discussion. Such agreements with the aim of pooling funds or basket financing lend themselves to close cooperation since they facilitate to have a common planning framework. Every attempt should, therefore, be made to merge the EU GCCA funding with envisaged GTZ programme funding.

- Global Environmental Facility (GEF): Pacific Adaptation to Climate Change (PACC), Community-Based Adaptation and Energy Projects
  - PACC is a project under the Special Climate Fund implemented through UNDP and with SPREP as executing agency. It is seen as umbrella of nationally driven and implemented adaptation pilot projects. The project is being implemented in 13 Pacific countries. The regional component envisaged in the PACC includes oversight, technical backstopping and facilitation of the exchange of lessons learned and best practices.
  - "Community-Based Adaptation Projects" is a five-year UNDP programme which is also funded by the Global Environment Facility (GEF).
  - The GEF Small Grants Programme is working with communities to combat the most critical environmental problems, among them climate change. AusAID, NZAID, UN Volunteers, local NGOs are some of the partners in this project (cf. above).
  - PIGGAREP Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project: implemented by SPREP
  - Energy projects are implemented mostly through World Bank, IFC, ADB, UNDP amounting up to approximately USD 50 million.
- Japan (JICA): Cool Earth Partnership/PALM5 Action Plan

Japan within its "Cool Earth Partnership" announced at the G8 Hokkaido Summit (2008) has committed around USD 10 billion worldwide to adaptation and access to

-

<sup>&</sup>lt;sup>17</sup> PIFS press release, March 3, 2010.

clean energy (USD 2 billion) and mitigation (USD 8 Billion). With the PICTs Japan maintains a special relationship underlined through regular "Pacific Islands Leaders Meeting (PALM). In the last meeting (PALM5) in May 2009 special attention was also given to climate change. In the Action Plan attached several projects with regard to adaptation to the climate change, renewable energy, and environmental conservation as well as energy infrastructure are mentioned which require consultation and coordination. In the land and marine area, projects include capacity enhancement for coral reef monitoring in Palau and Vanuatu, a study for the assessment of ecosystem, coastal erosion and protection/rehabilitation of damaged area in Tuvalu, and the strengthening of community-based disaster management in Fiji and the Solomon islands. In energy projects JICA invests around USD 115 million.

ADB: Climate Change Implementations Plan for the Pacific 2009 – 2015 (CCIP) – Mainstreaming Climate Change in ADB Operations

With this plan ADB follows mostly an approach to climate proof or prepare for climateresilient design for selected projects of all ADB investments in relevant sectors, and supporting partner countries in this process providing assistance to climate change initiatives into national policies. In addition it is seen as framework for leveraging additional climate change investment funds.

Coordination is particularly required for the following projects:

- Promoting Climate Change Adaptation in Asia and the Pacific (co-financed by Japan Special Fund and UK)
- Strengthening Coastal and marine Resources Management in the Coral Triangle of the Pacific, and
- Mainstreaming climate change mitigation and adaptation in ADB's country partnership strategies (CPS)
- Energy projects amounting to around USD 50 million.

#### World Bank:

The World Bank is a major implementer for GEF and UNDP and as ADB leverages own resources with other donor contributions. It especially operates two climate trust funds, the Clean Technology Fund (CTF) and Strategic Climate Fund (SCF). Special attention for cooperation requires the regional Pilot Program on Climate Resilience (PPCR) a pilot target program of the Strategic Climate Fund (SCF), so far for three PICs (Samoa, Papua New Guinea and, Tonga).

Federal Ministry for the Environment, Conservation and Nuclear Safety (BMU): International Climate Initiative (ICI)

Currently this initiative includes five projects which have to be taken into account for cooperation, among them particularly the Pacific Mangrove Initiative, Management for Climate Change and Livelihood in the Pacific, implemented by IUCU Oceania, PREVENT implemented by the Potsdam Institute for Climate Impact Research and, the Coral Triangle Initiative in Papua New Guinea and Solomon Islands, managed by TNC.

There might be many more projects as pointed to coordinate and cooperate with. Which and to what extent need to be specified at the stage of operational planning.

#### 4.6 Regional coverage

Representatives of all independent member states (see also chapter two) expressed their interests to be considered as partners in the envisaged programme extension. Thus, it is proposed to include all independent member states in the Programme extension. The regional coverage should not be uniform across the countries or with predetermined budget allocations but rather demand driven and according to the priorities set by the countries themselves and coordinated with the actions and initiatives of other donors. Orientation on the potential regional distribution provides the analysis of priorities and gaps of the sector reports. According to the high demand expressed in the field of climate adaptation it is proposed to implement in each country at least one of the components 2 and 3 on pilot scale. in most of the countries both components (support to planning and implementation of adaptation projects). The tourism component will focus on the four main tourist destinations: Fiji, Vanuatu, Samoa and Palau. The experiences and good practices developed can be taken to the regional level and other countries as well as up streamed into regional policies or national policies in other countries. The energy component will focus on a number the smallest islands (Tuvalu, Kiribati, Nauru, Vanuatu and Tonga). REDD will concentrate for the moment exclusively on Fiji. However, as expressed before, the final regional distribution for all components will depend on the demand and country priorities and of course on the overall budget available.

#### 4.7 Expected Impacts (impact chain)

### 4.7.1 Component 1: Capacity Development in Climate Change in CROP agencies

Technical CROP Agencies will be assisted by outputs in organisational development as well as in the development of their capacity to monitor and coordinate, especially the PIFACC (SPREP). Other outputs will improve coordination and cooperation inter alia through joint JCS. Furthermore, their advisory capacities will be developed further by activities such as trainings on adaptation skills on the use of climate information products; development of advisory tools on adaptation techniques, provision of and training on climate proofing priority setting. Studies and improved knowledge procedures, strategy development, management on vulnerabilities to and impacts of climate change regarding LMBNR in the Pacific, including on specific species, crops, agricultural production systems etc. will be carried out. Other outputs relate to support for the development of impact-oriented monitoring systems for adaptation activities, for use in CROPs and to the support to member countries on monitoring. CROPs and relevant actors will be supported by improved learning and exchange in the region (face-to-face and virtual networks, platforms). Staff and organisational units in regional organisations will have stronger skills, networks and tools available and use these capacities to more effectively coordinate and provide services to member states on coping with climate change. Services of CROP agencies are used by member countries institutions, civil society, international experts and organisations (Use of outputs). This leads to strengthened capacities in climate change management of CROP agencies and thus contributes to a strengthening of the institutional partnership architecture (Direct Result).

# 4.7.2 Component 2: Mainstreaming adaptation to climate change and developing adaptation strategies

National coordinating bodies for adaptation to climate change and line ministries dealing with LMBNR and CCZM are supported in developing and operationalising national adaptation strategies for LMBNR (specialist inputs on adaptation strategy development including analyses of LMBNR related impacts and vulnerabilities, costing studies, provision of methods for prioritising adaptation options, policy advice and support to stakeholder consultation processes, proposals for adaptation strategies; Generation of knowledge and capacity building to stakeholders). They are further supported in integrating adaptation concerns into sectoral planning, esp. agriculture, forestry, fisheries, water, and land use, and cross-sectoral plans, e.g. food security and disaster risk reduction strategies through specialist inputs on adaptation on sectoral impacts of CC and adaptation techniques and options, proposals on reviews of sector policies and plans to integrate climate change concerns, training on tools for climate proofing, development of guidelines and procedures for climate proofing; capacity building. Advisory services also concern sub-national procedures for climate proofing standard procedures or regulations such as land use planning, local development planning, or resource management plans (Outputs). Coupled with the commitments of the countries concerned and the skills gained, national stakeholders use the information and proposals to agree high quality and thoroughly consulted adaptation strategies and/or to inform sectoral strategies, policies and plans at national and planning procedures at sub-national level. Member states request and use climate services and information provided by CROP agencies for strategy development and integrating climate change in the respective sectors (Use of outputs). As a direct result, countries have climate change adaptation strategies in place and mainstream adaptation to climate change across levels to implement adaptation relating to sustainable management of LMBNR according to agreed priorities and as an integral part of development and sectoral planning. (Direct result)

# 4.7.3 Component 3: Implementing adaptation to climate change activities at all levels, from government departments to communities

Line ministries dealing with LMBNR, which to date have very limited capacities on climate change, are supported in implementing adaptation priorities, developing institutional arrangements and applying adaptation techniques and approaches in the respective sectors (and cross-sectoral approaches). Communities are directly supported in planning, implementation and learning on adaptation. This is achieved through the design and application of appropriate adaptation activities supported through specific and targeted pilot projects, ensuring stakeholder participation at every stage to maximise ownership at all levels. Short term TA will be required to maximise the implementation of adaptation activities with capacity building within communities, especially targeting gender issues and disadvantaged groups (those most vulnerable). Through ongoing assessments of pilot projects that exhibit ownership by the communities involved, it will be possible to make changes or adjustments where necessary to maximise the success and sustainability of the adaptation intervention. Dissemination of results, both successes and failures, through a range of media (publications, videos, radio etc) is an integral part of the project to share lessons learned to maximise the impact of the project (Outputs). It is also anticipated that

other communities will see the success of interventions and seek to undertake similar activities, with the project assisting, possibly through the promotion of a small grants scheme (<u>Use of outputs</u>). The project thus helps to reduce the negative impacts of climate change through assisting government departments and communities to adapt and build resilience to the effects of climate change. As a consequence, SPC Member State capacity for dealing with the impacts of climate change in many areas is strengthened as an integral component of the sustainable management of natural resources (<u>Direct result</u>).

### 4.7.4 Component 4: Sustainable Tourism and Climate Change

Key outputs include a map of tourism & climate "hotspots" for existing and new major tourism sites, using existing risk profile information and vulnerability maps to assess their climate change impact and risks including all direct (such as rising sea levels, more and stronger storms and typhoons, higher temperatures, draughts and other meteorological irregularities) and indirect impact (coral bleaching, changes in marine biodiversity, erosion, less local food supply etc.). For each site, a tourism climate action group with all relevant stakeholders (public and private sector, communities, NGOs) for sustainable development and climate change is established, and innovative climate change approaches in the form of a tourism & climate action plan are developed.

For community tourism sites, a similar climate change map is prepared and a local climate action group is established (wherever possible as part of the appropriate community adaptation activities supported through specific and targeted pilot projects under Component 3). At policy level, a climate check of tourism development policies, strategies and guidelines and concrete proposals how to address priority climate issues within these policies, strategies and guidelines.

These outputs will be used by the tourism climate action groups as a basis to organize the required process to make their tourism system more climate resilient and to reduce its climate change impact, and to take the "lessons learnt" for the mainstreaming of climate change in tourism development strategies, which will be used by policy makers to prepare proposals to introduce climate change considerations into tourism policies, strategies and guidelines (use of outputs).

The <u>outcome/direct result</u> of using these project outputs is that Pacific Island tourism entities (public/private) develop and partially implement novel climate change adaptation approaches.

<u>Indirect result</u> is that the private and public stakeholders of the tourism system in the sites with successfully implemented approaches to make it climate-proofed are able to maintain its role as driver of a sustainable, pro-poor economy and contributor to sustainable use and conservation of natural resources even under climate change conditions. This experience can be used by stakeholders in other tourism sites in the country and throughout the Pacific as a basis for coping with climate change. (impact).

#### 4.7.5 Component 5: Sustainable Energy Management

<u>Outputs</u> will be produced in the three actions areas. In key actions area 1 (policy advice) the participants at the national level are advised on the financial and economic implications of

their national energy policy. These advisory services lead to produce jointly prepared national economic and financial reports to implement the published national energy policies Proposals will serve for PIC decision makers as basis for the negotiation process with donor agencies (<u>use of output</u>). Support and negotiations will result in national reports being adopted and applied (<u>direct result</u>)

In key action area 2 (financial advice) for smaller PICTs strategies and delivery mechanisms to shift the present unsustainable and costly investment subsidies for energy services into acceptable levels of subsidies, or cross subsidies for services and consumption will be prepared and discussions with stakeholders and the Pacific Donor Energy Group together with relevant CROP agencies supported (outputs). Concept and strategy papers will be used for negotiations leading to financial grade papers and business plans (use of outputs). Strategies in two selected small PICTs will be implemented with the financial support by members of the Pacific Energy Donor Group, e. g. Tuvalu or Kiribati (direct result). The latter is an option if at least € 10 Million are made available to cover incremental costs until grid parity is reached.

Key action area 3 (capacity development to assist demand driven request complying with the regional energy guiding principles) provides support to develop a pipeline of indigenous energy services project proposals and, to mainstream proper assessment of adaptation/mitigation measures in the energy sector (outputs) Proposals will be used for joint negotiations with CROP groups and the Pacific Donor Energy Group as well as mainstreaming proper assessment methodologies (use of outputs). As a result demand driven projects aiming at improving sustainability, reliability and/or cost effectiveness are identified and processed and standards for assessments will be available (direct results).

#### 4.7.6 Component 6: REDD

Support to develop a tailored REDD policy and strategic action plan, to develop Measuring, Reporting & Verification (MRV) capacities, a Carbon Financing Instrument for Fiji and to design and implement REDD pilot projects (outputs) allow potential sellers and the designated national authorities to negotiate the proposal for a carbon financing instrument with potential buyers (use of outputs). In conclusion the REDD Readiness Process can be seen as accomplished and pilot projects being implemented (outcome). As a direct result (outcome) at the project objective's level, 2 contracts for carbon financing of REDD are expected to be signed.

#### 4.7.7 Programme

The interaction of all components ultimately direct impacts on the programme level in such a way that the capacities of Pacific Island countries are strengthened to cope with the adverse effects of and reduce their contribution to climate change as a fundamental aspect of sustainable development and natural resource management (direct effect overall objective).

#### 4.7.8 Indirect Results

Improved adaptation to climate change increasing inter alia food security, decentralised renewable energy as well as the linkages to a sustainable tourism development positively

affects living conditions of the poor population. With a community based approach for pilot areas poor and vulnerable are part of project implementation. However, the effects due to the regional approach working through the institutional framework are mainly indirectly. (Code Poverty Orientation: MSA)

One of the important outcomes of the programme is the strengthening of the regional and sub-regional institutional framework to increase the enabling and implementing capacities for climate change issues. Improved co-operation between the CROP agencies and Pacific Island national focal points and communities is crucial to related interventions and will improve governance in a participatory manner. (Code Participatory Development and Good Governance: G1)

The focus on community based approaches will particularly address and include the criterion of gender equality and will have respective positive effects. Furthermore, tourism is a sector that offers specific opportunities for female employment both in more basic service jobs and in higher level positions. Many mid-level positions both in the hospitality industry, tour operators and travel agencies are already taken by women. (Code Gender Equality: GG1)

The programme aims at improved sustainable management of land- and marine based natural resources adapted to climate change as well as mitigating against GHG emissions through renewable energies and adaptation to climate change in tourism related sectors. The overall objective includes sustainable development and natural resources management as fundamental aspect of the Programme. (Code Environmental Sustainability: UR2) At the same time, it is expected that especially the marine based management component will have positive effects on protecting mangroves and coral reefs. (Code Biodiversity: BIO2). However, no significant impacts on desertification are to be expected (Code Combating Desertification: DES0).

Supporting climate-proof sustainable tourism is oriented towards promoting tourism for the Pacific Island countries. In doing that the project aims also at improving trade relationships, but this is not a primary goal of the Programme. (Code Trade Development: TD1).

#### 4.8 Risk Analysis

The main risks to be considered are (i) political instabilities at the regional and national level, (ii) competing interests among CROP agencies and thus lack of cooperation, (iii) conflicting interest of donors and PICTs in regional policies (energy) (iv) limited and strained institutional capacities at all administrative levels of PICTs and, for the tourism component (vi) crisis in world tourism.

i. The risk of political instability is always given as the coup in Fiji in December, 2006 has shown. Many island states are characterized by frequent changes in Government and political intrigues which are able to paralyse the political scene for weeks and months. Such risks cannot be controlled or influenced. They might impact on regional policies and decisions and might also affect CROP organisations. On the other hand it also has been demonstrated that the general consensus with regard to climate change issues has not suffered by such incidents. At the national level changes in Government are often accompanied by changes in the upper levels of the public sector administration (State Secretaries, Head of Departments, Director General etc.) Experiences from the preceding forestry projects have shown that usually project

- implementation is not severely affected. Thus, the risk for the proposed programme is seen as rather low.
- ii. Competing interest and lack of cooperation has certainly reduced effectiveness and efficiency of regional technical services. The major underlying factors have been and are being addressed by the Pacific Plan and the subsequently initiated RIF review process. Though not all conflicts and factors will be fully controlled the related risks are valued low. At the same time improved coordination is particularly addressed by component 1 of the Programme.
- iii. Conflicting interest of donors and PICTs in regional energy policies might constrain programme's achievements due to the different actors involved. The number of donors and projects supporting energy policy and action plans under various thematic subjects such as clean energy, renewable energy, and efficient energy and climate relevant adaptation and mitigation schemes is large and fragmented. Efforts to regionalize and harmonize approaches, even with neighbouring regions, are helped usually by a strict regulatory and impact oriented monitoring system. This can be addressed by the programme. Thus, the risk of failing to mitigate those short comings is at a medium.
- iv. Limited and strained institutional capacities in PICTs posing a major threat with regard to project implementation and sustainability of outcomes achieved if those capacities are not supplemented by regional and donor resources. As has been shown this is a constituent characteristic of most countries of the Pacific Community. Programme resources can militate against those risks.
- v. A crisis in world tourism, especially mid- to long-haul which is most vulnerable to considerations of security, health (pandemics) and other risks including climate change could affect the regional industry. However, they are to be considered as limited taken into account the huge geographic area covered by the tourism component and the diversity of landscapes, coastlines, marine areas, weather conditions which will help to balance these risks to a manageable level.

#### 4.9 Proposed Project Implementation Design

#### 4.9.1 Project Management Architecture

The regional and thematic extension of the CCCPIR Programme requires three major changes with regard to the institutional integration of the Programme:

Firstly, so far, due to the exclusive focus on land based natural resources the project is embedded in SPC's Land Resources Division at Suva. Land based management will play still a very important role. However, marine based resources and integrated SOPAC functions into SPC will be important future components. At the same time SPC is recruiting a Climate Change Coordinator placed under the DDG Noumea. This asks for linking the Programme to the central level with the CC Coordinator as counterpart. Since the coordinator will be active cross all divisions and Suva being the second major SPC location where most LBNR activities and the energy programme of SPC will be managed, Suva should remain the Programmes' head office.

Secondly, the programme will assist SPREP, being the CROP lead agency in climate change, in strengthening its role to play in mainstreaming, institutional coordination and

managing the PIFACC. SPREP's location is very remote to that of SPC (Noumea and Suva). Therefore, to assist SPREP to improve its institutional capacity (component 1) and to have programme implementation and donor initiatives well coordinated, a LTA advisor to SPREP seems to be imperative.

Thirdly, the programme will have to assist up to 12 PICs (compared to 3 PIC in the current project). Hence, the staff members will have to be present in selected PIC member countries and/or based at a central location in the different sub regions like Micronesia. It is therefore recommended to second a LTA (GTZ/SPC) to the SPC Regional Office of Pohnpei, established to cover better the Micronesian island countries. Without being permanently present there the member countries in the north could not be served effectively and efficiently losing a lot of energy and momentum in costly and enduring travelling.

The above considerations suggest a regionally decentralised management structure for the Programme. Thus, the Programme's Head Office would continue at Suva with advisors in Samoa and SPC Regional Offices and/or at country level as required by project activities (currently Vanuatu and Tonga). At the country level, this may include locally-recruited staff for specific community-level adaptation activities.

#### 4.9.2 Inputs

Given the extended approach and proposed outcomes an extended project period of five years is suggested. Thus, with the kick-off expected to be early 2011 the overall project period would run from 2009 to 2015. The total CCCPIR Programme budget would add up to €14.2 million including the current ACCPIR funding.

The current project personnel force is proposed to be supplemented by following positions (Person/months):

Position/Location	Component 1 – 3 Capacity Development Regional Level, Mainstreaming and Implementing Adaptation Measures	Component 4 Tourism	Component 5 Energy
GTZ LTA, SPC, SPTO GTZ Office Fiji	120	36	15
GTZ LTA, SPREP Samoa	60		
GTZ SPC Pohnpei Office:	60		
International STE	50	25	18
SPC Experts (Officers)			
Land based NR	60		
Marine based NR	60		
Locally employed staff incountry to oversee projects	240		

Apart from equipment, travel and office operation cost the following special financing is being proposed:

•	Small Grants Scheme/Local Subsidies (LMBNR)	900,000
•	Modelling CC effects on tuna:	500,000
•	Integrated PPP (tourism)	400,000
•	PPP counterpart contribution (tourism)	400,000
•	Special Small Grants Fund	500,000

As pointed out elsewhere an option is to fund the project activities partly by providing a financial contribution to SPC (e.g. through a Financing Agreement). In doing that SPC would be strengthened in its regional core function to supplement national capacities. Proposing funding of SPC experts is taking care already of this goal. Staff at SPC's regional offices and locally employed staff could to a great extent also be employed by SPC rather than the GTZ.

## **Appendices**

- 1. Proposal for a Specific Small Grants Scheme under the CCCPIR Regional Programme, jointly managed together with Relevant German Embassies
- 2. Selected References and Other Sources of Information
- 3. Programme of Appraisal Mission
- 4. Persons Met During the Appraisal Mission

## **Appendix 1**

Proposal for a Specific Small Grants Scheme under the CCCPIR Regional Programme, jointly managed together with Relevant German Embassies

#### 1 INTRODUCTION

The Terms of Reference ask for a proposal to establish a specific fund under the SPC/GTZ Programme management structure jointly managed with the relevant Regional Embassies. German Embassies worldwide dispose of Small Grants Schemes for small/micro projects in the framework of bilateral technical cooperation. The aim of such schemes is to provide local institutions and communities with means to activate their own potentials and thus improve their livelihood themselves. This approach is very much in line with community based approaches constituent in participatory development and also envisaged in the Programme. In this context such a facility is included as programme component under CCCPIR. It is seen as a relatively flexible demand-driven scheme within the thematic focus of the overall CCCPIR Programme and therefore envisaged to complement the community based activities within the Programme. It could address in a flexible way ad-hoc demands of local communities not covered by the project planning framework.

#### 2 ELIGIBILITY

#### 2.1 Target Countries, Groups and Projects

The facility should support community related projects of independent PICTs associated with schools, churches, non-governmental organisations and other social institutions or associations preferably working with communities. There should be no specific allocation to any PICT or subject area. Allocation instead should b preferably be demand driven supported by advertisement for the funds.

#### 2.2 Eligible Projects

Eligibility criteria for funding will be jointly formulated and should be few. Criteria will be in line with the overall objective of the CCCPIR Programme. Among the criteria it is recommended to focus on "value added" avoiding duplication or expansion.

#### 2.3 Operational Model

#### (1) Size of Small Grants Scheme

In is proposed to establish a Fund in the magnitude of €500.000. This takes into account that the CCCPIR Programme itself needs to and will have a significant small grants scheme for its strong community based activities.

#### (2) Accountability and Governance of the Small Grant Scheme

- ➤ The Scheme will be managed as a Trust Fund Scheme by GTZ and used in accordance with the objectives of the Ministry of Foreign Affairs.
- The scheme will be governed jointly by the CCCPIR Programme and the respective Embassies (Manila, Canberra, and Wellington). Pre-selection of proposals received by the Embassies, followed by consultation with the GTZ CCCPIR Programme Manager for a final decision for funding may be sufficient. This would minimize administrative costs and procedures for project selection, follow up on project activities, documentation of what has been achieved and publishing of the outcomes.

#### (3) Promotion of the Scheme

Promotions will be done by announcements of the fund through Embassies and GTZ public relation channels and brochures. Furthermore it is recommended to prepare a prospectus for the fund and distribute it through proper channels reaching the community based target groups.

#### (4) Applications

A standard brief application form will be developed following the guidelines put forward in the prospectus. There may be a need to assist certain beneficiaries in proposal formulation

#### (5) Financial Management

Financial Management of approved projects and disbursement of funds will be according to GTZ accounting and contract rules for small scale projects. Audits will follow established GTZ Standards.

#### (6) Reporting

Reporting to GTZ will be done according to contract or MOU signed with project owner/implementer. Furthermore, GTZ will report to the Embassies and will prepare for each completed project a summary leaflet for public consumption in accordance with GTZ and Embassy publication standards and public relation rules.

#### **Appendix 2: Selected References and Other Sources of Information**

- ADB (2009), ADB's approach to assisting the Pacific (2010 2014), ADB, October 2009.
- ADB (2009), Mainstreaming Climate Change in ADB Operations, Climate Change Implementation Plan for the Pacific (2009 2015), Pacific Studies Series, Manila
- ADB (2009), The Pacific, Economic Outlook 2009.
- ADB, (2010), Pacific economic monitor, February 2010.
- ADB. (2005), Climate Proofing: A Risk-based Approach to Adaptation, Summary for Policy and Decision Makers. Pacific Studies Series, Manila, Philippines.
- ADB. (2009), ADP support to the Coral Triangle Initiative. Brochure on the CTI put out by ADB, Publication Stock No. ARM090460, May 2009.
- Anon. Undated. List of projects covering land and marine resources and conservation. Excel spreadsheet provided by the Government of Palau.
- Anon. Undated. Palau's priority list covering water and energy. 5 page document provided by the Government of Palau
- Anon. Undated. Phoenix Islands Protected Area (PIPA). Brochure produced by the Ministry of Environment, Lands and Agriculture Development, Tarawa, Government of Kiribati.
- Anon. Undated. Water resources Ngerikiil watershed. 4 page document provided by the Government of Palau.
- AusAID, (2004), Pacific Regional Aid Strategy 2004-2009, 2004.
- Bell, Johann D. (2010), Draft Chapter 1, The Pacific Community, fisheries, aquaculture and climate change: an introduction. Uncorrected page proofs, SPC, Noumea.
- CROP-EWG (2004), Pacific islands energy policy, November 2004.
- Economics of Climate Adaptation Working Group, (2009), Shaping climate-resilient development. A framework for decision-making.
- EIB (2009), European investment bank in the Pacific, EIB regional brochure, 2009.
- EuropeAid (2010), The ACP-EU Energy Facility, EC, 10th EDF, 2010.
- EuropeAid, (2009), The ACP-EU Energy Facility, improving access to energy services for the poor in rural and per-urban areas, 2009.
- FSM. (2004), Strategic Development Plan 2004 2023. The next 20 years: Achieving Economic Growth and Self-Reliance. Three volume set. Government of the Federated States of Micronesia, Pohnpei, FSM.
- GCCA (2008), Global Climate Change Alliance, Identification Fiche, 30 October 2008.
- GEF UNDP (2006), Pacific Islands Adaptation to Climate Change (PACC), Request for Intersessional Work Programme Inclusion under the Special Climate Change Fund
- Gigli S. (2008), GTZ Appraisal Mission "Managing the Impact of climate change on land resources in the Pacific", Working Paper 3, Communication and Knowledge Management in a Pacific German Climate Change Programme.

- Gigli S. and Sem G. (2008), GTZ Appraisal Mission "Managing the Impact of climate change on land resources in the Pacific", Working Paper 2, Roles and Responsibilities on Climate Change in the Pacific.
- Gillett, R., (2009), Fisheries in the economies of the Pacific Island countries and territories. Asian Development Bank, Mandaluyong City, Philippines.
- Government of Australia (2010), Engaging our pacific neighbours on climate change: Australia's approach, Australian Government, 2010.
- Government of Fiji, (2006), National Energy Policy, Department of Energy, Ministry of Energy and Mineral Resources, Fiji Islands November 2006.
- Government of Fiji. (2007), Strategic Development Plan (2007–2011). Government of the Fiji Islands, Suva, Fiji.
- Government of FSM, (1997), Climate Change National Communication, 1997. National Government of the Federated States of Micronesia, Pohnpei, FSM.
- Government of Japan, (2008), Japan's basic policy regarding its assistance based on "Cool Earth Partnership", January 2008
- Government of Kiribati, (2007), National Adaptation Programme of Action (NAPA). Government of Kiribati, Tarawa, Kiribati.
- Government of Kiribati, (2008), Kiribati Development Plan 2008–2011. Government of Kiribati, Tarawa, Kiribati.
- Government of Nauru, (2005), Nauru's National Sustainable Development Strategy 2005–2025. Government of Nauru.
- Government of Palau, (2007), National Capacity Needs Self-assessment for Environmental Management. Office of the President through the Office of Environmental Response and Coordination (OERC), Government of Palau. 45 pages.
- Government of Palau, (2009), Palau's Medium Term Development Strategy Action for Palau's Future 2009–2014. Government of Palau, Koror, Palau.
- Government of PNG, (2007), Medium-term Development Strategy (2005–2010). Government of Papua New Guinea, Port Moresby, Papua New Guinea.
- Government of Samoa, (1999), First National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Report prepared by Samoa's National Climate Change Country Team, Department of Lands, Surveys and Environment, Government of Samoa, Apia, Samoa.
- Government of Samoa, (2005), National Adaptation Programme of Action (NAPA) for Samoa. Ministry of Natural Resources, Environment and Meteorology, Government of Samoa, Apia, Samoa.
- Government of Samoa, (2007), National Capacity Self Assessment for Samoa. National Environmental Capacity Strategy and Action Plan, Ministry of Natural Resources and Environment, Government of Samoa, Apia, Samoa.
- Government of Samoa, (2007), Samoa National Energy Policy 2007, Ministry of Finance.

- Government of Samoa, (2008), Strategic Action Plan 2008 of Samoa National Energy Policy, Ministry of Finance.
- Government of Samoa, (2008), Strategy for the Development of Samoa 2008–2012, ensuring sustainable economic and social progress. Government of Samoa, Apia, Samoa.
- Government of Samoa. Undated. Draft Second National Communication to the United Nations Framework Convention on Climate Change (UNFCCC). Ministry of Natural Resources and Environment, Government of Samoa, Apia, Samoa.
- Government of the Republic of the Marshall Islands (2009), National Energy Policy and Energy Action Plan, Ministry of Resources and Development, September 2009.
- Government of the RMI (2002), Strategic Development Plan Framework covering the period 2003–2018 (VISION 2018). Government of the RMI, Majuro, Marshall Islands.
- Government of the RMI, (2000), Initial Communication under the United Nations Framework Convention on Climate Change. Republic of the Marshall Islands Environmental Protection Authority, Government of the RMI, Majuro, Marshall Islands
- Government of the Solomon Islands, (2008), Medium-term Development Strategy (2008–2010). Government of the Solomon Islands, Honiara, Solomon Islands.
- Government of the Solomon Islands, (2008), National Adaptation Programme of Action (NAPA). Government of the Solomon Islands, Honiara, Solomon Islands.
- Government of Tonga, (2006), Tongan Strategic Development Plan eight (2006/07–2008/09). Government of Tonga, Nuku'alofa, Kingdom of Tonga.
- Government of Tuvalu (2009), Tuvalu National Energy Policy, Ministry for Public Utilities and Industries, August 2009.
- Government of Tuvalu, (2005), Te Kakeega II 2005–2015, National Sustainable Development Plan. Government of Tuvalu, Funafuti, Tuvalu.
- Government of Tuvalu, (2007), National Adaptation Programme of Action (NAPA). Government of Tuvalu, Funafuti, Tuvalu.
- Government of Vanuatu, (2007), National Adaptation Programme of Action (NAPA). Government of Vanuatu, Port Vila, Vanuatu.
- Hay J. E. (2009), Assessment of the Implementation of the Pacific Islands Framework for Action on Climate Change (PIFACC), SPREP October 2009.
- Hay J. E. (2009), Institutional and Policy Analysis of Disaster Risk Reduction and Climate Change Adaptation in the Pacific Island Countries, Draft Report, prepared for the United Nations international system for Disaster Reduction and the United Development Programme, March 2009.
- Hughes, A.V. (2005), Strengthening Regional Management, A Review of the Architecture for Regional Co-operation in the Pacific, Report to the Pacific Islands Forum, August 2005.
- JICA Climate Change (Adaptation/Mitigation) related projects, flyer, 2010.
- JICA, Palm5, (2009): Islanders Hokkaido Declaration, May 2009
- Johnston, P. (2008), Coordination and Implementation Mechanisms for Regional Energy and Pacific ACP-EDF-10 Energy Initiatives, prepared for SOPAC, July 2008.

- Medrana, R. (2009), Australian Funding for Climate Change in the Pacific Region, AusAID, October 2009
- Mimura, N., L. Nurse, R.F. McLean, J. Agard, L. Briguglio, P. Lefale, R. Payet and G. Sem, (2007), Small islands. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 687-716.
- Morrell, W. J. (2009), United Nations Climate Change Scoping Study, Opportunities to Scope up Climate Change Support to Pacific Island Countries, Summary Report, July 2009.
- NZAID (2008), Programme Strategy for Pacific Regional Natural Resources and Disaster Management Programme, Draft for External Consultation, September 2008
- OERC, (2002), First national Communication to the United Nations Framework Convention on Climate Change. Office of Environmental Response and Coordination (OERC), Office of the President, Government of Palau.
- OFP, (2009), Scientific Committee meeting of the Western and Central Pacific Fisheries Commission. Fisheries Newsletter # 129 (May–August 2009), Oceanic Fisheries Programme, Secretariat of the Pacific Community, Noumea, New Caledonia. Pp 4–5.
- Pacific Energy Donor/IFI working, Terms of Reference for the Pacific Energy Donor/IFI Working Group, 18 Nov 2008.
- Pacific Power Association, (2007 2009), Publication Volumes of 2007, 2008 and 2009.
- Petersen, L. (2008), GTZ Appraisal Mission "Managing the Impact of climate change on land resources in the Pacific", Appraisal Report: Programme Design.
- Petersen, L., (2008), GTZ Appraisal Mission "Managing the Impact of climate change on land resources in the Pacific", Working Paper 4, Counterpart Organisation and Programme Implementation.
- PIFS (2007), Forum Communiqué Thirty-Eighth Island Forum, Nuku´Alofa, Tonga 16 -17 October 2007.
- PIFS (2008), Forum Communiqué Thirty-Ninth Island Forum, Alofi, Niue, 19 20 August 2008.
- PIFS (2009), Forum Communiqué Fortieth Island Forum, Cairns, Australia 5 6 August 2008.
- PIFS, (2009), Annual Report 2008.
- Regional Energy for the Pacific Islands, working draft, 05 March 2010
- Reimaan National Planning Team, (2008), Reimaanlok: National Conservation Area Plan for the Marshall Islands 2007–2012. Published by N. Baker: Melbourne, Australia.
- Sem G. (2008); GTZ Appraisal Mission "Managing the Impact of climate change on land resources in the Pacific", Working Paper 1, Climate Change in the Pacific Islands: Impacts and Scope for Action.
- SOPAC CATD, (2009), Biofuel project, ,Brochure 2009

- SOPAC (2005), Disaster Risk Reduction and Disaster Management, A Framework for Action 2005 2015, SOPAC Miscellaneous Report 613, Suva.
- SOPAC (2005), Strategic Plan (2005 2009), SOPAC Miscellaneous Report 600
- SOPAC (2005), Strategic plan 2005 -2009, SOPAC, July 2005.
- SOPAC (2009), Annual Report 2008.
- SOPAC (2010), Regional Institutional Framework (RIF) Reform transfers SOPAC functions into SPC and SPREP. Press Release 31 March 2010.
- SPC (1999), The Canberra Agreement and Related Resolutions Adopted by Conference, 5<sup>th</sup> ed., July 1999.
- SPC (2005), Declaration de Tahiti Nui.
- SPC (2008), Corporate Plan (2007 2112).
- SPC (2008), Fish and food security. Policy Brief 1/2008, Secretariat of the Pacific community, Noumea, New Caledonia.
- SPC (2009), Annual Report 2008.
- SPC (2010), Pacific islands regional energy policy for action (PREPA), April 2010.
- SPC. Undated. Impact of climate change on fisheries in the Pacific. New Project Brief, Secretariat of the Pacific community, Noumea, New Caledonia.
- SPREP (2005), Pacific Islands Framework for Action on Climate Change (PIFACC).
- SPREP (2006), Pacific Islands Action Plan on Climate Change (2006-2015).
- SPREP (2009), Annual Report 2008
- SPREP (2009), Review of economic and livelihood impact assessment of, and adaptation to, climate change in Melanesia, January 2009.
- SPREP. 2009. 2008 Annual Report of the Secretariat of the Pacific Regional Environment Programme. SPREP, Apia Samoa.
- Unnamed (2010), Matrix of Energy Sector Grant Support to PICs: Indicative Only, 18 February 2010.
- Wickham, Frank et.al (2009), Institutional capacity within Melanesian countries to effectively respond to climate change impacts, with focus on Vanuatu and the Solomon Islands, SPREP, Apia, Samoa.
- World Bank, (2009), World Bank Group Solomon Islands Energy Program, Portfolio Overview, October 2009.
- Zieroth, G. et al (2007), Biofuel from coconut resources in Rotuma, October 2007.

## Appendix 3

**Programme of Appraisal Mission** 

### 1. COMMON SCHEDULE

Meeting schedule of full team meetings

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
Mon 8/03			
SUVA			
8:30	Dr Hermann Fickinger	GTZ ACCPIR	Director & Senior Adviser
	Dr Christopher Bartlett	GTZ ACCPIR	Climate Change Adviser - Vanuatu
	Ms Christine Fung	GTZ ACCPIR	Land Use Planning & Facilitation Specialist
11:00	Mr Solo Mara	Ministry of Foreign Affairs	Permanent Secretary
	Mr Shaheen Ali	Ministry of Foreign Affairs - Economics & Trade Division	Acting Director
	Ms Setaita Tupua	Ministry of Foreign Affairs - Economics & Trade Division	Economic Planning Officer
14:00	Mr 'Aleki Sisifa	Secretariat of the Pacific Community (SPC) - Land Resources Division	Director
	Mr Amena Yauvoli	SPC	Regional Manager - Northern Pacific
	Mr Inoke Ratukalou	SPC - Land Resources Division	Land Management and Resources Policy Adviser
	Dr Ken Cokanasiga	SPC - Land Resources Division	Animal Heath Adviser
	Ms Marita Manley	SPC - Land Resources Division	Agriculture and Forest Policy Adviser
	Ms Sushil Narayan	SPC - Land Resources Division	Administration Coordinator
	Mr Emil Adams	SPC - Land Resources Division	Information Officer
	Fereti Autmurirava	SPC - Land Resources Division	Plant Health Technician
	Mr Cenon Padolina	SPC - Land Resources Division	Forest Genetics Officer
	Dr Narendra Singh	SPC - Health Programme	Public Health Adviser
16 – 18	Internal meeting		
Tue 9/03			
8:30	Dr Jimmie Rodgers	SPC	Director General
10:00	Mr Wiepke van de Goot	Delegation of the European Commission for the Pacific	Head of Delegation
	Ms Annick Villarosa	Delegation of the European Commission for the Pacific	Head of Natural Resources & Environment
	Ms Cristina Casella	Delegation of the European Commission for the Pacific	Natural Resources & Environment
	Mr Lennaic	Delegation of the European Commission for the Pacific	Head of Energy
14:30	Minoru Tamura	Japan International Cooperation Agency	Project Formulation Adviser (Environment)
	Mr Shinya Tamio	Japan International Cooperation Agency	Assistant Resident Representative
	Mr Fumiaki Saso	Japan International Cooperation Agency	Project Formulation Adviser (Environment)
15:30	Ms Coral Pasisi	Pacific Islands Forum Secretariat	Regional and International Issues Adviser
16 – 18	Internal meeting		
Wed 10/03			
8:30	Mr Paul Fairbain	SOPAC (Pacific Islands Applied Geoscience Commission)	Manager- Community Lifelines Project
	Mr Rupeni Mario	SOPAC	Energy Adviser
	Mr Jens Kruger	SOPAC	Physical Oceanographer, Oceans and Islands Programme

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
18:00	Departure Nadi		
18:05	Arrival Noumea		
Sun 21/03			
APIA	One day behind		
19:35	Arrive Apia		
Mon 22/03		2222	
8:00	Mr David Sheppard Mr Kosi Latu	SPREP SPREP	Director Deputy Director
	Mr Stuart Chape	SPREP	Programme Manager, Island Ecosystems
	Mr Jeffrey Kinch	SPREP	Coastal Management Adviser, Island Ecosystems
	Mr Solomone Fifita	SPREP	Project Manager, Pacific Islands Greenhouse Abatement – Renewable Energy Project (PIGGAREP)
	Mr Fine Faitehina Tutuu Lao	SPREP	Climate Change Adaptation Officer (CCAO)
	Mr Dean Solofa	SPREP	Pacific Islands Global Climate Observing System (PI-GCOS) Officer
	Mr Ewan Cameron	SPREP	Pacific Year of Climate Change Campaign Coordinator
	Mr Peter Murgatroyd	SPREP	Information Resource Centre Manager
23:40	ETD Apia		
Wed 24/03	(lose 1 day crossing date	line)	
1:35	ETA Nadi		
13:45 14:15	ETD Nadi ETA Suva		
SUVA	2.77.04.4		
15:30	Mr Ryan Medrana	Australian High Commission - AusAID	First Secretary Climate Change
	Ms Romaine Kwesius	Australian High Commission - AusAID	Counsellor, Development Cooperation (Regional, Kiribati, Tonga), Development Cooperation Section
Thu 25/03			
8:30	Ms Asenaca Ravuvu	UNDP – Multi Country Office	Environment Team Leader
	Mr Thomas Lynge	UNDP	Environment and Energy Policy Specialist
	Jensen Ms Jessica Robbins	UNDP – Pacific Centre	Knowledge Management Officer
10:00	Dr Mahendar Kumar	ADB	Climate Change Advisor
11:30	Mr Ifereimi Dau	Fiji Department of Energy	Director
	Mr Peceli Nakavulevu	Fiji Department of Energy	Principal Scientific Officer
Parallel			
11:30	Nauru country delegate Mr Monte Depaune	Nauru Fisheries and Marine Resources Authority (NFMRA)	Manager, Coastal Fisheries
14:00	Mr Gordon Chang	Pacific Power Association	Deputy Executive Director
16 – 18	Internal meeting		
Fri 26/03	Tongo delegation		
9:00	<u>Tonga delegation</u> Hon. 'Akau'ola	Prime Minister's Office	Renewable Energy Co-ordinator
	Mr Lano Fonua	Prime Minister's Office	Energy Technical Advisor

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
	Mr 'Asipeli Palaki	Ministry of Environment and Climate Change	Acting Director
11:00	Tuvalu delegation		
	Mr.Solomona Lotoala	Ministry of Natural Resources, Energy and Environment -Environment Division	Biodiversity Officer
	Mr Samuelu Telii	Fisheries Division	Fisheries Extension and Development Officer
	Mr. Nielu Meisake	Ministry of Environment, Energy & Tourism - Energy Division	Acting Energy Planner
14:00	Mrs Fekita 'Utoikamanu	SPC	Deputy Director General
Sat 27/03			
9 - 6pm	Internal discussion Debriefing Preparation		
Sun 28/03			
9:00	Solomon Islands delegati	on_	
	Mr George Hiele	Ministry of Foreign Affairs	Permanent Secretary
	Mr Rence Sore	Ministry of Environment, Conservation and Meteorology	Permanent Secretary
	Mr Luma Darcy	Ministry of Energy & Mines	Permanent Secretary
11-6pm	Internal discussion Debriefing Preparation		
Mon 29/3			
9:00	SPC – GTZ Workshop fo	r strategic project frame	
14:00	Debriefing Preparation		
Tue 30/3			
9:00	Debriefing presentation to	Donors, SPC, & SOPAC	
14:00	Wrap up with ACCPIR		
Wed 31/3	End of mission		
7:10	ETD Suva		
7:40	ETA Nadi		
	Flight to Germany		

## 2. Travel and meeting schedule: Fisheries & Adaptation Team (travels only) Dr Nana Künkel & Mr Lindsay Chapman (Kiribati, FSM, Samoa)

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
Wed 10/03 NADI			
11:30	Dr Mary Taylor	SPC - Land Resources Division	Centre for Pacific Crops and Trees (CePACT) Manager
	Mr Sairusi Bulai	SPC - Land Resources Division	Coordinator, Forest & Trees
14:00	Professor Patrick Nunn	University of the South Pacific	Pro Vice-Chancellor (Research and Innovation) / Professor of Oceanic Geoscience
	Mr Jai Karan	University of the South Pacific	Director, Development, Marketing and Communication
	Ms Kerry Mara	University of the South Pacific	Development Manager, Development, Marketing and Communication
Thu 11/03			
5:30	Depart for Tarawa, Kiribati		
7:30	Arrive Tarawa		
<b>TARAWA</b> 10:00	Ms Teboranga Tioti	Ministry of Environment, Lands and Agricultural Development (MELAD)	Deputy Secretary for environment and Agriculture Development
	Ms Nenenteiti Teanki-Ruatu	Environment Conservation Division, MELAD	Deputy Director
	Mr Nakibae Teuatabo	Environment Conservation Division, MELAD	Consultant (local) on climate change
11:30	Ms Tarsu Murdoch	Ministry of Environment, Lands and Agricultural Development (MELAD)	Secretary
14:00	Mr. Betarim Rimon	Office of the President	Secretary
	Ms Taua Eritai	Office of the President	Deputy Secretary
15:30	Mr Ueneta Toorua	Meteorology Division	Meteorology Officer
	Mr Tareti Kireua	Meteorology Division	Principal Climate officer
18:00	Mr Tukabu Teroroko	PIPA, MELAD	Director
	Mr Ray Pierce	Phoenix Islands Protected Area (PIPA), pest eradication	Ecological Consultant and Director, Eco Oceania Pty Ltd, Australia
	Ms Sue Miller Taei	Conservation International	Marine Programme Manager, Pacific Islands Programme
	Mr Paul Anderson	Secretariat of the Pacific Regional Environment Programme.	Marine Conservation Analyst
Fri 12/03			
9:00	Mr Bootii Nauan	Ministry of Fisheries and Marine Resources Development	Deputy Secretary
	Ms Kabure Yeeting	Mineral and Oceanography Unit	Officer in Charge
11:00	Mr Karibanany Taniuera	Ministry of Fisheries and Marine Resources Development	Senior Fisheries Officer, Aquaculture Unit
	Mr Paul Anderson	SPREP	Marine Conservation Analyst
	Mr Atonio Mulipola	Ministry of Agriculture and Fisheries	Assistant Chief Executive Officer
14:00	Ms Kinaai Kairo	Division of Agriculture Ministry of Environment, Lands and Agriculture Development	Director of Agriculture and Livestock
	Mr Bakineti Tokintekai	Kiribati Centre of Excellence	Coordinator
17:00	Ms Joanne Craigie	AusAID; Australian High Commission	First Secretary (development cooperation)
Sat 13/03			
12:05	Depart Tarawa		

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
15:05	Arrive Nadi		
Sun 14/3/			
1:40	Depart Nadi (to Pohnpei)		
5:10	Arrive Guam (transit)		
21:45	Depart Guam		
Mon 15/03 FSM			
2:35	Arrive Pohnpei		
10:00	Ms Aliti Vunisea,	SPC, North Pacific Office	Human Development Programme Adviser, Human Development Programme
	Ms Mereseini Seniloli	SPC, North Pacific Office	PEO Micronesia , Development of Sustainable Agriculture in the Pacific
	Mr Jalesi Mateboto	SPC Land Resources Division (Suva)	Community Technician, Forest and Trees programme
11:00	Mr Lorin S. Robert	Department of Foreign Affairs	Secretary
	Mr Jackson J. Soram	Department of Foreign Affairs	Deputy Assistant Secretary for Multilateral Affairs
	Mr Joe Kono	Office of Environment and Emergency Management	Consultant for the 2nd National Communication
	Ms Alissa Takesy	Office of Environment and Emergency Management	Protected Area Network Coordinator
	Mr Valentin Martin	Department of Resources and Development	Deputy Assistant Secretary, Coastal Fisheries and Marine Resources
	Mr John P. Wichep	Agriculture Unit	Plant and Animal Quarantine Specialist,
15:30	Mr Donald David	Pohnpei State Government, Marine Development	Chief of Marine Development, Pohnpei State
Tues 16/03			
9:00	RMI Delegation	0,000	<b>5</b> .
	Ms. Yumiko Crisostomo	Office of the President - Office of Environmental Planning and Policy Coordination (OEPPC)	Director
	Thomas Kijiner, Jr.	RMI - Ministry of Resources and Development	Secretary of Resources & Development
	Ms Florence Edwards	Marshall Islands Marine Resources Authority (MIMRA)	Chief, Coastal and Community Affairs
14:00	Palau Delegation	000	A si . Bi
	Ms Ngedikes Olai Uludong- Polloi	Office of Environmental Response and Coordination	Acting Director
Wed 17/03			
9:00	RMI/Palau delegation joint meeting		
11:00	Thomas Kijiner, Jr.	RMI - Ministry of Resources and Development	Secretary of Resources & Development
	Ms. Yumiko Crisostomo	Office of the President - Office of Environmental Planning and Policy Coordination (OEPPC)	Director
	Ms Florence Edwards	Marshall Islands Marine Resources Authority (MIMRA)	Chief, Coastal and Community Affairs
	Ms Ngedikes Olai Uludong- Polloi	Office of Environmental Response and Coordination	Acting Director
12:30	Mr Patterson Shed	Conservation Society of Pohnpei	Executive Director
	Mr Bill Raynor	The Nature Conservancy	Executive Director

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
	Ms Lucille Apis-Overhoff	United Nations Development Programme	Sub-regional coordinator, GEF Small Grants Programme Micronesia (ROP, FSM, RMI)
15:00	Mr Kevin P. Carley	The Peace Corps (USA)	Country Director Micronesia/Palau
16:00	Ms Marstella Jack	Legal Office	Attorney at Law, Kolonia, Pohnpei (working on climate change issues with women's groups)
Thur 18/03			
900	SPC Debriefing		
15:00	Depart Pohnpei		
17:20	Arrive Guam		
<b>Fri 19/03</b> 22:55	Depart Guam		
Sat 20/03			
8:30	Arrive Nadi		
Sun 21/03			
1:45	Depart Nadi for Samoa		
APIA Sat 20/03			
3:35	Arrive Samoa (1 day behind)		
Mon 22/03	, iiii e eaiiiea († aa, seiiiia)		
8:00	Mr David Sheppard	SPREP	Director
	Mr Kosi Latu	SPREP	Deputy Director
	Mr Stuart Chape	SPREP	Programme Manager, Island
	Mr Jeffrey Kinch	SPREP	Ecosystems Coastal Management Adviser, Island Ecosystems
	Mr Solomone Fifita	SPREP	Project Manager, Pacific Islands Greenhouse Abatement – Renewable Energy Project (PIGGAREP)
	Mr Fine Faitehina Tutuu Lao	SPREP	Climate Change Adaptation Officer (CCAO)
	Mr Dean Solofa	SPREP	Pacific Islands Global Climate Observing System (PI-GCOS) Officer
	Mr Ewan Cameron	SPREP	Pacific Year of Climate Change Campaign Coordinator
	Mr Peter Murgatroyd	SPREP	Information Resource Centre Manager
1330	Ms Olofa Tuaopepe	Ministry of Agriculture and Fisheries	Principal Fisheries Officer, Community- Based Fisheries Management
	Ms Joyce Samuelu Ah-Leong	Ministry of Agriculture and Fisheries	Principal Fisheries Officer
	Ms Maria Sapatu	Ministry of Agriculture and Fisheries	Senior Fisheries Officer
	Mr Toetu Pesaleli	Ministry of Agriculture and Fisheries	Senior Fisheries Officer
15:30	Ms Anne Rasmussen	Ministry of Natural Resources, Environment and Meteorology	Principal Climate Change Officer
Parallel	Mar Danierale D. I.	LINIDD	Oliverty Oherens B
14:15	Mrs. Peniamina D. Leavai	UNDP	Climate Change Programme Officer
	Mr. Kevin Petrini	UNDP	Climate Chnage Adaptation Officer, Small Grants Programme, Community Based Adaptation Programme
23:40	ETD Apia		
Wed 24/03	(lose 1 day crossing dateline)		
1:35 13:45 14:15 <b>SUVA</b>	ETA Nadi ETD Nadi ETA Suva		

# 3. Travel and meeting schedule: Institutional & Energy Team (travel only) Dr Günter Schmidt & Dr Albrecht Kaupp (New Caledonia, Vanuatu, Papua New Guinea, Samoa)

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
Thu 11/03			
NOUMEA	SPC		
Fri 12/03	3PC		
8:45	Departure Noumea		
PORT VILA	·		
10:20	Arrival Port Vila		
11:00	Mr Leo Moli	Vanuatu Energy Unit	Director / National Advisory Committee on Climate Change (NACCC) member
14:00	Mr. Donald Wouloseje	Vanuatu Civil Aviation Authority	Consultant/Energy Economist Chairman
15:00	Mr Jotham Napat	Vanuatu Meteorological Service	Director / Chairman, NACCC
	Mr Johnson Naviti	Office of the Prime Minister	Head, Aid Coordination & Negotiation Unit / Deputy Chairman, NACCC
16:45	Mr Adrien Mourgues	Délégation de l'Union européenne au Vanuatu	Attaché (Cooperation) - Programme Officer
Sat 13/03			
8:00	Mr Francois Py	UNELCO Power Utility	Renewable Energy Advisor
8:15	Site Visit: Efate Wind Farm		
10:00	Mr David Stein	Vanuatu Renewable Energy and Power Association (VANREPA)/Green Power	Director
15:00	Depart Vanuatu for Australia		
BRISBANE			
16:55	ETA Brisbane		
Tues 16/03			
BRISBANE	(GM & AK)		
13:45	Depart for Port Moresby		
Thur 18/03 PORT MORESBY	1		
9:00	Mr Udai R Pal	National Agricultural Research Institute (NARI)	Research Programme Leader
16:45	Mr David McLachlan-Karr	UNDP	Resident Coordinator of the UN System in PNG / Resident Representative of UNDP
	Ms Gwen Maru	UNDP	Programme Analyst (Energy and Environment)
Fri 19/03			
10:30	Mr. Kanawi Pouru	Papua New Guinea Forest Authority	Managing Director
	Mr Goodwill Amos	Papua New Guinea Forest Authority	Manager - Climate Change and REDD Branch
	Mr Dambis Kiap	Papua New Guinea Forest Authority	Manager - Policy & Planning
	Professor Simon Saulei	Papua New Guinea Forest Authority	Director - Forest Research Institute (FRI)
11:30	Mr Vore Veve	Department of Petroleum and Energy	Director

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
13:30	Mr Varigini Badira	Department of National Planning	Assistant Secretary - Special Programme
1530	Dr Kay Beese	Delegation of the EU to PNG	Branch Counsellor - Rural and Human Resources Development
	Mr Thomas Viot	Delegation of the EU to PNG	Attaché - Economics and Trade
Sat 20/03			
17:15 20:00	Depart Port Moresby Arrive Brisbane		
Sun 21/03	Danant Driahana		
12:25 19:45	Depart Brisbane Arrive Auckland		
Mon 22/03	7 invo 7 idolitana		
15:40	Depart Auckland		
Sun 21/03	<u> </u>		
APIA	One day behind		
19:35	Arrive Apia		
Mon 22/03			
8:00	Mr David Sheppard	SPREP	Director
	Mr Kosi Latu	SPREP	Deputy Director
	Mr Stuart Chape	SPREP	Programme Manager, Island Ecosystems
	Mr Jeffrey Kinch	SPREP	Coastal Management Adviser, Island
	Mr Solomone Fifita	SPREP	Ecosystems Project Manager, Pacific Islands Greenhouse Abatement – Renewable Energy Project (PIGGAREP)
	Mr Fine Faitehina Tutuu Lao	SPREP	Climate Change Adaptation Officer (CCAO)
	Mr Dean Solofa	SPREP	Pacific Islands Global Climate Observing System (PI-GCOS) Officer
	Mr Ewan Cameron	SPREP	Pacific Year of Climate Change Campaign Coordinator
	Mr Peter Murgatroyd	SPREP	Information Resource Centre Manager
Parallel			
14:15	Mrs. Peniamina D. Leavai	UNDP	Climate Change Programme Officer
	Mr. Kevin Petrini	UNDP	Climate Change Adaptation Officer, Small Grants Programme, Community Based Adaptation Programme
14:00	Ms Sili'a Kilepoa Ualesi	Ministry of Finance – Energy Unit	Energy Coordinator
15:30	Ms Anne Rasmussen	Ministry of Natural Resources, Environment and Meteorology (MNRE)	Principal Climate Change Officer
23:40	ETD Apia		
Wed 24/03	(lose 1 day crossing dateline	·)	
1:35	ETA Nadi		
13:45 14:15	ETD Nadi ETA Suva		
SUVA	LIA Suva		
3017.			

**4. Travel and meeting schedule: Tourism** *Dr Klaus Lengefeld (Samoa, Australia, Palau, Vanuatu, Fiji)* 

Air Transfer Brisbane/ Australia - Koror/Palau

Thu 25 Feb PALAU

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
Wed & Thur 17	7 & 18 Feb SAMOA		
	Ms Jennifer Bartlett	International Finance Corporation, Washington, USA	Tourism Specialist
	Mr. John Perrottet	Perrottet Partners Ltd	Director
	Mr. Jean Phillippe de Jong	EIB, European Investment Bank	Head, Regional Office Pacific
	Ms. Emma Wong	AusAid sponsored PT-CAP, Pacific Tourism - Climate Adaptation Project	Team Member
	Mr. Andrew Drysdale	Mentor Aviation Services (ex IATA)	Director
	Ms. Sonia Hunter	Samoa Tourism Authority	Chief Executive
	Mr. Michael Tokuru	Solomon Islands Visitors Bureau	General Manager
	Mr. Shaun Mann	International Finance Corporation, Washington,	Senior Tourism Investment Policy Officer
	Mr. Reece Proudfoot	Tourism Tonga	
	Mr. Chris Andrew	Greenlight Technology Group	
	Ms. Maaike Goebel	REEEP, Renewable Energy and Energy Efficiency Partnership, Regional Secretariat South East Asia and Pacific. Australia	
	Mr. Danial Rocheford	Kiribati National Tourism Office	Technical Advisor
	Mr. Dieter Semmelroth	TUI AG, Germany	Head of Hotel Finance
	Mr. Steward Moore	EC3 Global Pty. Ltd., Australia	CEO
Fri 19 Feb S	AMOA		
	Mr David Sheppard	Secretariat of the Pacific Regional Environment Programme (SPREP)	Director
	Gabor Vereczi	UNDP	Regional Technical Advisor for Pacif Climate Change Adaptation
	Mrs. Peniamina D. Leavai	UNDP	Climate Change Programme Officer
	Mr Espen Ronneberg	SPREP	Climate Change Advisor
	Mr. Frank Wickham	SPREP, Samoa	Human Resource Development / Training Officer
	Ms. Nive Margraff	Samoa Hotel Association	
	Ms. Nynette Sass	Samoa Hotel Association	
SATURDAY 20	Feb & SUNDAY 21 Feb		
	Air Transfer Samoa – Fiji – I	Brisbane/ Australia	
Mon 22 Februa	ary AUSTRALIA		
	Mr. Steve Noakes	Pacific Asia Tourism, PAT	Team Member of AusAid sponsored PT-CAP, Pacific Tourism - Climate
		EC3 Global Pty. Ltd. Australia (Consultancy	Adaptation Project CEO

& TIME	PERSON MET	ORGANISATION	DESIGNATION
	Mr. Darin de Leon,	Palau Visitors Authority	Managing Director
	Ms. Dorothee Ueda	Palau Visitors Authority	Administrator
	Mr. Jerome Esebei Temengil	Office of Environmental Response & Coordination OERC, Office of the President of the Republic of Palau	
Fri 26 Feb PAI	LAU		
	Mr. Yimnang Golbuu	Palau International Coral Reef Center, Palau Aquarium	Chief Researcher
	Ms. Blaire Phillips	Belau Tourism Association	Director
	Mr. Tmetuchl Baules	Palau Chamber of Commerce	Executive Director
	Ms. Sharon Sakuma	UNDP	Country Development Manager
	Mr. Noda Makoto	Japan International Cooperation Agency, Samoa	Resident Representative JICA, Samo
	Mr. Elbuchel Sadang,	Palau Conservation Society	Executive Director
	Mr. Anu Gupta, ,	Palau Conservation Society	Director of Conservation and Protected Areas
	Mr. David Idip,	PALARIS, Palau Automated Land and Resource Information System	Program Manager
	Mr. Darin de Leon,	Palau Visitors Authority	Managing Director
Sat 27 Feb PA			
	Excursion to the Southern R	Rock Islands and Atolls	
Sun 28 Feb P	ALAU		
	Mr. Steve Chinji Chibana	Coral Savers Foundation	President
	Ms. Lucy Sugiyama	F&B, Palau Pacific Resort	Environment Coordinator
	Mr. Ashok Tanna	F&B, Palau Pacific Resort	Director
	Ms. Tova Harel-Bornovski	Fish 'n Fins Dive Center and Ocean Hunter Dive Excursions	General Manager
Mon 01 + Tue:	s 02 Mar		
Mon 01 + Tues		Guam – Manila – Dubai – Frankfurt	
Mon 01 + Tue:			
	Return Flight Koror/Palau –		
Mon 01 + Tues Thur 18/03 PORT VILA	Return Flight Koror/Palau –		
Thur 18/03 PORT VILA 6.25	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation	ssion	
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation	nal Airport	Acting Director
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation	ssion	Acting Director President / Manager, Air Vanuatu
Thur 18/03 PORT VILA	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation  NUATU  Mr. Joe lautu	nal Airport  Vanuatu Tourism Office	-
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI 8:30 9:30	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation  NUATU  Mr. Joe lautu  Mr David Dick	nal Airport  Vanuatu Tourism Office  SHEFA Provincial Tourism Association	President / Manager, Air Vanuatu Sales
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI 8:30	Return Flight Koror/Palau – End of first part of the mis  Arrival Bauerfield Internation NUATU Mr. Joe lautu Mr David Dick Mr. Peter Whitelaw	nal Airport  Vanuatu Tourism Office  SHEFA Provincial Tourism Association  Vanuatu Dive Operators Association	President / Manager, Air Vanuatu Sales President
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI 8:30 9:30 11:00	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation  NUATU  Mr. Joe lautu  Mr David Dick  Mr. Peter Whitelaw  Mr. George Petro	vanuatu Tourism Office SHEFA Provincial Tourism Association Vanuatu Dive Operators Association Wan Smolbag Theatre Ministry of Trade, Tourism and Business	President / Manager, Air Vanuatu Sales President Manager, Environment Programme
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI 8:30 9:30 11:00	Return Flight Koror/Palau – End of first part of the mis  Arrival Bauerfield Internation NUATU Mr. Joe lautu Mr David Dick Mr. Peter Whitelaw Mr. George Petro Mr. Marokon Alilee	vanuatu Tourism Office SHEFA Provincial Tourism Association Vanuatu Dive Operators Association Wan Smolbag Theatre  Ministry of Trade, Tourism and Business Development Ministry of Trade, Tourism and Business	President / Manager, Air Vanuatu Sales President Manager, Environment Programme Director General
Thur 18/03 PORT VILA  6.25 Fri 19 Mar VAI 8:30  9:30 11:00  14:00	Return Flight Koror/Palau – End of first part of the mis  Arrival Bauerfield Internation NUATU Mr. Joe lautu Mr David Dick Mr. Peter Whitelaw Mr. George Petro Mr. Marokon Alilee Mr. John Shing Mr Brian Phillips	Vanuatu Tourism Office SHEFA Provincial Tourism Association Vanuatu Dive Operators Association Wan Smolbag Theatre  Ministry of Trade, Tourism and Business Development Ministry of Trade, Tourism and Business Development National Advisory Committee on Climate	President / Manager, Air Vanuatu Sales President Manager, Environment Programme Director General First Political Advisor to the Deputy Prime Minister
Thur 18/03 PORT VILA 6.25 Fri 19 Mar VAI 8:30 9:30 11:00	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation  NUATU  Mr. Joe lautu  Mr David Dick  Mr. Peter Whitelaw  Mr. George Petro  Mr. Marokon Alilee  Mr. John Shing  Mr Brian Phillips	Vanuatu Tourism Office SHEFA Provincial Tourism Association Vanuatu Dive Operators Association Wan Smolbag Theatre  Ministry of Trade, Tourism and Business Development Ministry of Trade, Tourism and Business Development National Advisory Committee on Climate	President / Manager, Air Vanuatu Sales President Manager, Environment Programme Director General First Political Advisor to the Deputy Prime Minister
Thur 18/03 PORT VILA  6.25 Fri 19 Mar VAI  8:30  9:30 11:00  14:00  15:30  Sat 20/03 VAN  7:00	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation  NUATU  Mr. Joe lautu  Mr David Dick  Mr. Peter Whitelaw  Mr. George Petro  Mr. Marokon Alilee  Mr. John Shing  Mr Brian Phillips  NUATU  Depart Port Vila to Tanna Island	Vanuatu Tourism Office SHEFA Provincial Tourism Association Vanuatu Dive Operators Association Wan Smolbag Theatre  Ministry of Trade, Tourism and Business Development Ministry of Trade, Tourism and Business Development National Advisory Committee on Climate Change	President / Manager, Air Vanuatu Sales President Manager, Environment Programme  Director General  First Political Advisor to the Deputy Prime Minister Secretariat
Thur 18/03 PORT VILA  6.25 Fri 19 Mar VAI  8:30  9:30 11:00  14:00  15:30  Sat 20/03 VAN	Return Flight Koror/Palau –  End of first part of the mis  Arrival Bauerfield Internation  NUATU  Mr. Joe lautu  Mr David Dick  Mr. Peter Whitelaw  Mr. George Petro  Mr. Marokon Alilee  Mr. John Shing  Mr Brian Phillips	Vanuatu Tourism Office SHEFA Provincial Tourism Association Vanuatu Dive Operators Association Wan Smolbag Theatre  Ministry of Trade, Tourism and Business Development Ministry of Trade, Tourism and Business Development National Advisory Committee on Climate	President / Manager, Air Vanuatu Sales President Manager, Environment Programme Director General First Political Advisor to the Deputy Prime Minister

LOCATION & TIME	PERSON MET	ORGANISATION	DESIGNATION
8:00	Mr. Sam Kau	Sunrise Bungalows	Manager
15:55	Depart Tanna to Port Vila		
Mon 22/03 VAI	NUATU		
8:00	Ms Jan Matheson	School of Tourism and Hospitality; Australia Pacific Technical College	Country Manager
10:00	Mr Tony Deamer	Vanuatu Tour Operators Association	President
11:00	Mr John Claasen	New Zealand High Commission	NZAID Manager
13:30	Mr George Borugu	National Tourism Development Office, Department of Tourism	Director
15:00	Ms. Joanne Wade	Vanuatu Hotels and Resorts Association	President
16:30	Mr Robert Hughes	CARE International	Country Director
	Ms Christine O'Sullivan	CARE Pacific, Indonesia and Timor Leste	Project Officer
Tue 23/03 VAN	IUATU		
3:05	Flight Port Vila – Nadi		
NADI			
19:00	Mr Joe Tuamoto	Fiji Visitors Board	CEO
Wed 24/03 FI	JI		
6:30	Nadi - Suva		
SUVA			
10:00	Mr Micheal Wong	Fiji Islands Hotels and Tourism Association	CEO
14:00	Mr Etika Rupeni	Oceanic Sustainable Tourism Alliance (OSTA)	
	Ms. Roshni Chand	FSPI, Foundation of the Peoples of the South Pacific International / OSTA	Regional Disaster Programme Manager
15:30	Mr Ryan Medrana	Australian High Commission - AusAID	First Secretary Climate Change
	Ms Romaine Kwesius	Australian High Commission - AusAID	Counsellor, Development Cooperation (Regional, Kiribati, Tonga), Development Cooperation Section
Thu 25/03 FIJ	II		
8:30	Ms Asenaca Ravuvu	UNDP – Multi Country Office	Environment Team Leader
	Mr Thomas Lynge Jensen	UNDP	Environment and Energy Policy Specialist
	Ms Jessica Robbins	UNDP – Pacific Centre	Knowledge Management Officer
10:00	Dr Mahendar Kumar	ADB	Climate Change Advisor
11:30	Mr Ifereimi Dau	Fiji Department of Energy	Director
	Mr Peceli Nakavulevu	Fiji Department of Energy	Principal Scientific Officer
14:00	Mr Chris Andrew	Green Light Technology Group	CEO
16 – 18	Internal meeting		
Fri 26/03 FIJI			
10:00	Prof. David Harrison	University of the South Pacific- School of Tourism and Hospitality	Head of School
12:30	Ms. Elizabeth Erasito	National Trust of Fiji	Director / Executive Officer, CEESP
	Protected Areas Committee		
14:00	Mrs Fekita 'Utoikamanu	SPC	Deputy Director General
15:00	Mr Sai Too Go	South Pacific Tourism Organisation	Planning Manager

LOCATION & TIME		PERSON MET	ORGANISATION	DESIGNATION
		Mr. Andrew Nihopara	South Pacific Tourism Organisation	Acting Director
		Mr. Michael Wilson	Holiday Inn Suva	General Manager
		Ms. Deborah Sue	Ridge to Reef Management	Principal consultant
Sat 27/03	FIJI			
9 - 6pm		Internal discussion Debriefing Preparation		
Sun 28/03	FIJI			
		Mr. Jack Stark Mr. Murray W. Thomson Mr. Philippe Ruetsch Mr. Jeffrey Hommel	Warwick International Hotels Warwick International Hotels Warwick International Hotels Rivers Fiji (Rafting Operator)	Resort Manager Regional Chief Engineer South Pacific General Manager Director
17:00		Internal discussion Debriefing Preparation		
Mon 29/3	FIJI			
9:00		SPC – GTZ Workshop for st	rategic project frame	
14:00		Debriefing Preparation		
		Carl Probert	NIU Industries, NIU Biofuels (Fiji) Ltd.	Director
		Richard Noss	NIU Industries, NIU Biofuels (Fiji) Ltd.	Project Manager
Tue 30/03	FIJI			
9:00		Debriefing presentation to D	onors, SPC, & SOPAC	
14:00		Wrap up with ACCPIR		
		Flight to Nadi		
Wed 31/3	FIJI			
		Ms Mereoni Lutuciri	ACCOR Sofitel Fiji, Denarau	Compliance Manager
		Mr Rigamoto Taito	Starwood - Sheraton Denarau	Director , Six Sigma
		Mr Gordon Wilson	Tanoa Hotels	Chief Executive
		Depart Nadi-Brisbane-Duba	-Frankfurt	

## Appendix 4

**Persons Met During the Appraisal Mission** 

#### LIST OF ALL PERSONS MET DURING APPRAISAL

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Tourism	AUSTRALIA	AusAid sponsored PT-CAP, Pacific Tourism - Climate Adaptation Project	Emma.wong@vu.edu.au	Team Member	Ms. Emma Wong
Tourism	AUSTRALIA	EC3 Global Pty. Ltd. Australia (Consultancy in Climate Change, Tourism Certification – Green Globe Earth Check)		CEO	Mr. Steward Moore Steward.moore@ec3global.com
Tourism	AUSTRALIA	EC3 Global Pty. Ltd., Australia	Steward.moore@ec3global.com	CEO	Mr. Steward Moore
Tourism	AUSTRALIA	Greenlight Technology Group	Chris.andrew@gltg.com.au		Mr. Chris Andrew
Tourism	AUSTRALIA	International Finance Corporation of the World Bank	jbartlett@ifc.org	Tourism Specialist	Ms. Jennifer Bartlett
Tourism	AUSTRALIA	Mentor Aviation Services (ex IATA)	aviab@unsw.edu.au	Director	Mr. Andrew Drysdale
Tourism	AUSTRALIA	Pacific Asia Tourism, PAT		Team Member of AusAid sponsored PT-CAP, Pacific Tourism - Climate Adaptation Project	Mr. Steve Noakes steve@pacificasiatourism.org
Tourism	AUSTRALIA	Perrottet Partners Ltd	John@perrottetpartners.com	Director	Mr. John Perrottet
Tourism	AUSTRALIA	REEEP, Renewable Energy and Energy Efficiency Partnership, Regional Secretariat South East Asia and Pacific, Australia	Maaike@cleanenergycouncil.org.au		Ms. Maaike Goebel
Tourism/ Energy	AUSTRALIA	REEEP, Renewable Energy and Energy Efficiency Programme, Greenlight Technology Group		Director	Mr. Chris Andrew Chris.andrew@gltg.com.au
Agriculture & Forestry	FEDERATED STATES OF MICRONESIA	Department of Resources and Development		Plant and Animal Quarantine Specialist, Agriculture Unit	Mr John P. Wichep jwichep@dea.fm
CROP	FEDERATED STATES OF MICRONESIA	SPC, North Pacific Office		Human Development Programme Adviser, Human Development Programme	Ms Aliti Vunisea,
CROP	FEDERATED STATES OF MICRONESIA	SPC, North Pacific Office		PEO Micronesia , Development of Sustainable Agriculture in the Pacific	Ms Mereseini Seniloli

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Donor	FEDERATED STATES OF MICRONESIA	The Peace Corps (USA)		Country Director Micronesia/Palau	Mr Kevin P. Carley kcarley@fsm.peacecorps.gov
Donor	FEDERATED STATES OF MICRONESIA	United Nations Development Programme		Sub-regional coordinator, GEF Small Grants Programme Micronesia (ROP, FSM, RMI)	Ms Lucille Apis-Overhoff micronesiasgp@mail.fm; lucillea@unops.org
Environment	FEDERATED STATES OF MICRONESIA	Conservation Society of Pohnpei		Executive Director	Mr Patterson Shed
Environment	FEDERATED STATES OF MICRONESIA	Department of Resources and Development		Protected Area Network Coordinator	Ms Alissa Takesy
Environment	FEDERATED STATES OF MICRONESIA	Office of Environment and Emergency Management	PO Box PS 69, Palikir Pohnpei 96941 Micronesia Tel: 691 320 8814/8815; Fax: 691 320 8936	Director	Mr Andrew Yatilman climate@mail.fm, andrewy@mail.fm
Environment	FEDERATED STATES OF MICRONESIA	Office of Environment and Emergency Management	PO Box PS 69, Palikir Pohnpei 96941 Micronesia Tel: 691 320 8814/8815; Fax: 691 320 8936	Consultant for the 2nd National Communication	Mr Joe Kono
Environment	FEDERATED STATES OF MICRONESIA	The Nature Conservancy (TNC)		Executive Director	Mr Bill Raynor
Fisheries	FEDERATED STATES OF MICRONESIA	Department of Resources and Development		Deputy Assistant Secretary, Coastal Fisheries and Marine Resources	Mr Valentin A. Martin
Fisheries	FEDERATED STATES OF MICRONESIA	Pohnpei State Government, Marine Development		Chief of Marine Development	Mr Donald David,
Policy and Planning	FEDERATED STATES OF MICRONESIA			Attorney at Law, Kolonia, Pohnpei (working on climate change issues with women's groups)	Ms Marstella Jack Johsna@gmail.com
Policy and Planning	FEDERATED STATES OF MICRONESIA	Department of Foreign Affairs		Deputy Assistant Secretary for Multilateral Affairs	Mr Jackson J. Soram
Policy and Planning	FEDERATED STATES OF MICRONESIA	Department of Foreign Affairs		Secretary	Mr Lorin S. Robert
CROP	Fiji	Pacific Islands Forum Secretariat	Private Mail Bag Suva	Regional and International Issues Adviser	Ms Coral Pasisi coralp@forumsec.org.fj

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
CROP	FIJI	Pacific Power Association www.ppa.org.fj	Goodenough St Suva Fiji Ph: 679 330 6022; Fax: 679 330 2038	Deputy Executive Director	Mr Gordon Chang gordonc@ppa.org.fj
CROP	FIJI	SOPAC	SOPAC Secretariat Private Mail Bag, GPO Suva +679 3381377	Physical Oceanographer, Oceans and Islands Programme	Mr Jens Kruger jkruger@sopac.org
CROP	FIJI	SOPAC	SOPAC Secretariat Private Mail Bag, GPO Suva +679 3381377	Energy Adviser	Mr Rupeni Mario
CROP	FIJI	SOPAC (Pacific Islands Applied Geoscience Commission)	SOPAC Secretariat Private Mail Bag, GPO Suva +679 3381377	Manager- Community Lifelines Project	Mr Paul Fairbain
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Public Health Adviser	Dr Narendra Singh NarendraS@spc.int
CROP	FIJI	SPC	P.O.Box Q Kolonia; Pohnpei Federated States of Micronesia 96941 Tel: +691 3207523 / Fax: +691 3205854	Regional Manager - Northern Pacific	Mr Amena Yauvoli AmenaY@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva Tel: 3370733	Deputy Director General - Fiji	Ms Fekita Utoikamanu FekitamoeloaU@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Animal Heath Adviser - Land Resources Division	Dr Ken Cokanasiga KenC@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Manager - Centre for Pacific Crops and Trees (CePACT), Land Resources Division	Dr Mary Taylor MaryT@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Plant Health Technician, Land Resources Division	Fereti Autmurirava FeretiA@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Forest Genetics Officer - Land Resources Division	Mr Cenon Padolina CenonP@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Information Officer - Land Resources Division	Mr Emil Adams EmilA@spc.int

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Land management and Resources Policy Adviser - Land Resources Division	Mr Inoke Ratukalou InokeR@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Community Technician, Forest and Trees programme	Mr Jalesi Mateboto
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Fiorest and Trees Adviser - Land Resources Division	Mr Sairusi Bulai SairusiB@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Agriculture and Forest Policy Adviser - Land Resources Division	Ms Marita Manley MaritaM@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail Bag Suva	Administration Coordinator - Land Resources Division	Ms Sushil Narayan SushilN@spc.int
CROP	FIJI	SPC	3 Luke Street Nabua Private Mail BagSuva	Director - Land Resources Division	Mr 'Aleki SisifaAlekiS@spc.int
CROP	FIJI	University of the South Pacific	Phone: (676) 323 2615 Fax: (679) 323 1551 Web: http://www.usp.ac.fj	Director, Development Marketing and Communications	Mr Jai Karan Karan_j@usp.ac.fj
CROP	FIJI	University of the South Pacific	Phone: (676) 323 2615 Fax: (679) 323 1551 Web: http://www.usp.ac.fj	Development Manager, Development Marketing and Communications	Ms Kerry Mara
CROP	FIJI	University of the South Pacific	Laucala Campus Tel. +679 3232688	Head of School - School of Tourism and Hospitality	Prof. David Harrison harrison_d@usp.ac.fj
CROP	FIJI	University of the South Pacific	Phone: (679) 323 2946 Web: http://www.usp.ac.fj/index.php?id=6482	Pro Vice-Chancellor (Research and Innovation); Professor of Oceanic Geoscience	Professor Patrick Nunn nunn_p@usp.ac.fj
Donor	FIJI	ADB - South Pacific Sub-regional Office	5th Floor, Ra Marama Building 91 Gordon Street Private Mail Bag-Suva, Fiji Islands Tel: + 679 3318101 Fax. + 679 3318074	Climate Change Adviser	Mr Mahendra Kumar
Donor	FIJI	Australian High Commission - AusAID	Princes Road Suva, Fiji Phone: +679 338 8360	First Secretary (Climate Change) - Development Cooperation Section	Mr Ryan Medrana ryan.medrana@dfat.gov.au

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Donor	FIJI	Australian High Commission - AusAID	Princes Road Suva, Fiji Phone: +679 338 8360	Counsellor, Development Cooperation (Regional, Kiribati, Tonga), Development Cooperation Section	Ms Romaine Kwesius romaine.kwesius@dfat.gov.au
Donor	FIJI	Delegation of the European Commission for the Pacific	Private Mail Bag, GPO Suva, Fiji Tel: +679 3313633 / +679 3300370	Head of Delegation	Mr Wiepke van de Goot
Donor	Fiji	Delegation of the European Commission for the Pacific	Private Mail Bag, GPO Suva, Fiji Tel: +679 3313633 / +679 3300370	Head of Natural Resources & Environment	Ms Annick Villarosa annick.villarosa@ec.europa.eu
Donor	Fiji	Delegation of the European Commission for the Pacific	Private Mail Bag, GPOSuva, FijiTel: +679 3313633 / +679 3300370	Natural Resources & Environment	Ms Cristina Casellacristina.casella@ec.euro.pa. eu
Donor	FIJI	Japan International Cooperation Agency	Level 8, Suva Central Building, corner of Pratt Street and Renwick Road, Suva, Fiji Tel: +679 330 2522; Fax +679 330 2452	Project Formulation Adviser (Environment)	Minoru Tamura
Donor	FIJI	Japan International Cooperation Agency	Level 8, Suva Central Building, corner of Pratt Street and Renwick Road, Suva, Fiji Tel: +679 330 2522; Fax +679 330 2452	Project Formulation Adviser (Environment)	Mr Fumiaki Saso, Saso.Fumiaki@jica.go.jp
Donor	FIJI	Japan International Cooperation Agency	Level 8, Suva Central Building, corner of Pratt Street and Renwick Road, Suva, Fiji Tel: +679 330 2522; Fax +679 330 2452	Assistant Resident Representative	Mr Shinya Tamio, Tamio.Shinya@jica.go.jp
Donor	FIJI	UNDP – Multi Country Office www.undp.org.fj	Level 8 Kadavu House 414 Victoria Parade Suva Tel: (679) 3312500 ext. 706; Fax: (679) 3301718	Environment Team Leader	Ms Asenaca Ravuvu asenaca.ravuvu@undp.org
Donor	FIJI	UNDP – Pacific Centre www.undp.org.fj	Kadavu House 414 Victoria Parade Suva Pacific Centre C/- UNDP Private Mail Bag, Suva, Fiji Ph: +679 330 0399 ; Fax: +679 330 1976	Environment and Energy Policy Specialist	Mr Thomas Jensen thomas.jensen@undp.org
Donor	FIJI	UNDP – Pacific Centre www.undp.org.fj	Kadavu House 414 Victoria Parade Suva Pacific Centre C/- UNDP Private Mail Bag, Suva, Fiji Ph: +679 330 0399 ; Fax: +679 330 1976	Knowledge Management Officer	Ms Jessica Robbins Jessica.robbins@undp.org
Energy	FIJI	Department of Energy	P.O. Box 2493 Government Buildings Suva Tel: 3386006; Fax: 3386301	Director	Mr Ifereimi Dau IDau@fdoe.gov.fj

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Energy	FIJI	Department of Energy	P.O. Box 2493 Government Buildings, Suva Tel: 3386006; Fax: 3386301	Principal Scientific Officer	Mr. Peceli Nakavulevu Pnakavulevu@fdoe.gov.fj; npeceli@fdoe.gov.fj
Environment	FIJI	National Trust of Fiji http://www.nationaltrust.org.fj/	3 Ma'afu Street, Domain Suva Phone: 3301 807; Fax: 3305 092	Director / Executive Officer, CEESP	Ms. Elizabeth Erasito nationaltrust@connect.com.fj; eerasito@nationaltrust.org.fj
Environment	FIJI	Ridge to Reef Management		Principal consultant	Ms. Deborah Sue DSue@R2RManagement.com.fj
Policy and Planning	FIJI	Ministry of Foreign Affairs	Level 9 Suvavou House Victoria Parade Suva Tel: (679) 3309662 / 3309663	Acting Director – Economics & Trade Division	Mr Shaheen Ali shaheen_ali@govnet.gov.fj
Policy and Planning	FIJI	Ministry of Foreign Affairs	Level 9 Suvavou House Victoria Parade Suva Tel: (679) 3309662 / 3309663	Permanent Secretary	Mr Solo Mara smara@govnet.gov.fj Tel: (679) 3309631
Policy and Planning	FIJI	Ministry of Foreign Affairs	Level 9 Suvavou House Victoria Parade Suva Tel: (679) 3309662 / 3309663	Economic Planning Officer	Ms Setaita Tupua
Tourism	FIJI	ACCOR Sofitel Fiji, Denarau		Compliance Manager	Mereoni Lutuciri, mereoni.lutuciri@accor.com
Tourism	FIJI	Fiji Islands Hotels and Tourism Association	42 Gorrie Street Suva Tel: 3302975	CEO	Mr Michael Wong
Tourism	FIJI	FSPI, Foundation of the Peoples of the South Pacific International / Oceanic Sustainable Tourism Alliance (OSTA)	FSPI – Regional Office Victoria Parade Suva Tel: 3312250	OSTA Rep.	Mr Etika Rupeni FSPI etika.rupeni@fspi.org.fj
Tourism	FIJI	FSPI, Foundation of the Peoples of the South Pacific International / Oceanic Sustainable Tourism Alliance (OSTA)	FSPI – Regional Office Victoria Parade Suva Tel: 3312250	Regional Disaster Programme Manager	Ms. Roshni Chand roshni.chand@fspi.org.fj
Tourism	FIJI	Holiday Inn Suva	Tel. +679 330 1600	General Manager	Mr. Michael Wilson Michael.wilson@ihg.com
Tourism	FIJI	NIU Industries, NIU Biofuels (Fiji) Ltd.	Tel. +679 666 3020, +679 324 0067	Director	Carl Probert Carl @niuindustries.com
Tourism	FIJI	NIU Industries, NIU Biofuels (Fiji) Ltd.	Tel. +679 666 3020, +679 324 0067	Manager	Richard Noss Project Richard@niuindustries.com
Tourism	FIJI	Rivers Fiji (Rafting Operator)	+679 345 0148	Director	Mr. Jeffrey Hommel

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Tourism	FIJI	South Pacific Tourism Organisation www.south-pacific.travel	Level 3, FNPF Place 343-359 Victoria Parade P.O. Box 13119, Suva Phone: +679 3304177; Fax: +679 3301995	Planning Manager & Webmaster   Planning and ICT	Mr Sai Too Go sgo@south-pacific.travel
Tourism	FIJI	South Pacific Tourism Organisationwww.south-pacific.travel	Level 3, FNPF Place 343-359 Victoria ParadeP.O. Box 13119, Suva Phone: +679 3304177; Fax: +679 3301996	Acting Director	Mr. Andrew Nihopara anihopara@south-pacific.travel
Tourism	FIJI	Starwood – Sheraton Denarau	Tel. +679 675 0000	Director , Six Sigma	Rigamoto Taito rigamoto.taito@sheraton.com
Tourism	FIJI	Tanoa Hotels	Tel. +679 672 0277	Chief Executive	Gordon Wilson Gordon@tanoahotels.com.fj
Tourism	FIJI	Warwick International Hotels	Warwick Fiji Resort, Korolevu, Coral Coast Tel. +679 653 0556	Resort Manager	Mr. Jack Stark jstark@warwickhotels.com
Tourism	FIJI	Warwick International Hotels	Warwick Fiji Resort, Korolevu Coral Coast Tel. +679 653 0558	Regional Chief Engineer South Pacific	Mr. Murray W. Thomson mthomson@warwickhotels.com
Tourism	FIJI	Warwick International Hotels	Warwick Fiji Resort, Korolevu Coral Coast Tel. +679 653 0555	General Manager	Mr. Philippe Ruetsch phruetsch@warwickhotels.com
Tourism	GERMANY	TUI AG, Germany	Dieter.Semmelroth@tui.com	Head of Hotel Finance	Mr. Dieter Semmelroth
Agriculture & Forestry	KIRIBATI	Division of Agriculture Ministry of Environment, Lands and Agriculture Development	P O Box 267, Bikenibeu TARAWA Tel: (686) 28 108; 28 211; Fax: (686) 28 121	Director of Agriculture and Livestock	Ms Kinaai Kairo kinaai_3@yahoo.com
Agriculture & Forestry	KIRIBATI	Kiribati Centre of Excellence		Coordinator	Mr Bakineti Tokintekai tokintekai@yahoo.com
Donor	KIRIBATI	Australian Agency for International Development (AusAID); Australian High Commission		First Secretary (development cooperation),	Ms Joanne Craigie , (joanne.craigie@dfat.gov.au)
Environment	KIRIBATI	Ministry of Environment Lands and Agricultural Development	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647; FAX:686 28334	Consultant (local) on climate change - Environment and Conservation Department	Mr Nakibae Teuatabo
Environment	KIRIBATI	Ministry of Environment Lands and Agricultural Development	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647 FAX:686 28334	Deputy Director, Environment and Conservation Department	Ms Nenenteiti Teanki-Ruatu nrtitaake@gmail.com; nenenteitir@environment.gov.ki

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Environment	KIRIBATI	Ministry of Environment Lands and Agricultural Development	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647 FAX:686 28334	Director, Environment and Conservation Department	Ms. Tererei Abete-Reema tererei.ecd@melad.gov.ki; tererei@yahoo.com
Environment	KIRIBATI	Ministry of Environment, Lands and Agricultural Development	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647 FAX:686 28334	Secretary	Ms Tarsu Murdoch secretary@melad.gov.ki
Environment	KIRIBATI	Ministry of Environment, Lands and Agricultural Development	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647 FAX:686 28334	Deputy Secretary for Environment and Agricultural Development	Ms Teboranga Tioti Teboranga@gmail.com
Fisheries	KIRIBATI	Ministry of Fisheries and Marine Resources Development (MFMRD)		Deputy Secretary	Mr Bootii Nauan bootiin@mfmrd.gov.ki ; mbnauan@gmail.com
Fisheries	KIRIBATI	Ministry of Fisheries and Marine Resources Development (MFMRD)	_	Senior Fisheries Officer, Aquaculture Unit	Mr Karibanany Taniuera
Fisheries	KIRIBATI	Ministry of Fisheries and Marine Resources Development (MFMRD)		Officer in Charge - Mineral and Oceanography Unit	Ms Kabure Yeeting Kaburey@mfmrd.gov.ki
Fisheries	KIRIBATI	Phoenix Islands Protected Area (PIPA), MELAD	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647 FAX:686 28334	Director	Mr Tukabu Terorokotukabutravel@yahoo.comtu kabut@melad.gov.ki
Fisheries	KIRIBATI	Phoenix Islands Protected Area (PIPA), pest eradication	PO Box 234, Bikenibeu Tarawa, Kiribati TEL:686 28647 FAX:686 28334	Ecological Consultant and Director, Eco Oceania Pty Ltd, Australia	Mr Ray Pierce, raypierce@bigpond.com
Meteorology	KIRIBATI	Meteorology Division http://informet.net/kirimrt	PO Box 486, Tarawa KIRIBATI Ph: (686) 26511 Fax: (686) 26089	Principal Climate Officer	Mr Tareti Kireua kirimet@tskl.net.ki ; T30MO@ranetasiapac.org
Meteorology	KIRIBATI	Meteorology Division http://informet.net/kirimrt	PO Box 486, Tarawa KIRIBATI Ph: (686) 26511 Fax: (686) 26089	Meteorology Officer	Mr Ueneta Toorua uenetat@gmail.com
Policy and Planning	KIRIBATI	Office of the President http://www.climate.gov.ki/	Tel: (686) 21183 Fax (686) 21902	Secretary	Mr. Betarim Rimon brimon@ob.gov.ki
Policy and Planning	KIRIBATI	Office of the President http://www.climate.gov.ki/	Tel: (686) 21183 Fax (686) 21902	Deputy Secretary	Ms Taua Eritai t_meritai@yahoo.com.au
Tourism	KIRIBATI	Kiribati National Tourism Office	Rochford_dra@mail.com	Technical Advisor	Mr. Danial Rocheford

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Fisheries	NAURU	Nauru Fisheries and Marine Resources Authority (NFMRA)		Manager - Coastal Fisheries	Mr Monte Depaune Monte.depaune@naurugov.nr
CROP	NOUMEA	SPC (Secretariat of the Pacific Community) www.spc.int	BP D5 Noumea Cedex New Caledonia 98848 Tel: +687 262000 Fax: +687 263818	Director General (based in Noumea)	Dr Jimmie Rodgers JimmieR@spc.int
Donor	PALAU	UNDP	Sharon.sakuma@undp.org	Country Development Manager	Ms. Sharon Sakuma
Environment	PALAU	Office of Environmental Response & Coordination OERC, Office of the President of the Republic of Palau	oerc@palaugov.net Jerome@palaunet.com		Mr. Jerome Esebei Temengil
Environment	PALAU	Office of the President - Office of Environmental Response and Coordination	PO Box 6051 Koror, PW 96940 Republic of Palau TEL: 680 767 8681; FAX: 680 767 8638	Acting Director	Ms Ngedikes Olai Uludong-Polloi opolloi@palaugov.net; opolloi@gmail.com
Tourism	PALAU	Belau Tourism Association		Director	Ms. Blaire Phillips
Tourism	PALAU	Coral Savers Foundation	Coralsavers_palau@gmail.com	President	Mr. Steve Chinji Chibana
Tourism	PALAU	F&B, Palau Pacific Resort	atanna@ppr-palau.com	Director	Mr. Ashok Tanna,
Tourism	PALAU	F&B, Palau Pacific Resort	Lsugiyama@ppr-palau.com	Environment Coordinator	Ms. Lucy Sugiyama
Tourism	PALAU	Fish 'n Fins Dive Center and Ocean Hunter Dive Excursions	tova@oceanhunter.com	General Manager	Ms. Tova Harel-Bornovski
Tourism	PALAU	Japan International Cooperation Agency	Noda.makoto@jica.go.jp	Resident Representative JICA	Mr. Noda Makoto ,
Tourism	PALAU	PALARIS, Palau Automated Land and Resource Information System	palaris@palaunet.com; idipd@palaugis.org	Program Manager,	Mr. David Idip,
Tourism	PALAU	Palau Chamber of Commerce		Executive Director	Mr. Tmetuchl Baules

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Tourism	PALAU	Palau Conservation Society	agupta@palauconservation.org	Director of Conservation and Protected Areas	Mr. Anu Gupta, ,
Tourism	PALAU	Palau Conservation Society	esadang@palauconservation.org	Executive Director	Mr. Elbuchel Sadang,
Tourism	PALAU	Palau International Coral Reef Center, Palau Aquarium	ygolbuu@picrc.org	Chief Researcher	Mr. Yimnang Golbuu
Tourism	PALAU	Palau Visitors Authority	ddeleon.pva@visit-palau.com	Managing Director	Mr. Darin de Leon
Tourism	PALAU	Palau Visitors Authority	dee.pva@visit-palau.com	Administrator	Ms. Dorothee Ueda
Agriculture & Forestry	PAPUA NEW GUINEA	National Agricultural Research Institute (NARI) www.nari.org.pg	Southern Regional Research Centre, Dry Lowlands – Laloki P. O. Box 1828, PORT MORESBY, NCD Papua New Guinea Phone: (675) 323 5511; Fax:(675) 323 4733	Research Programme Leader	Mr Udai R Pal udai.pal@nari.org.pg / udai_pal@yahoo.co.in Cell:(675)72829331
Agriculture & Forestry	PAPUA NEW GUINEA	Papua New Guinea Forest Authority www.forestry.gov.pg	PO BOX 5055,Boroko NCD Papua New Guinea Phone: (675) 327 7841; Fax: (675) 325 4433	Manager - Policy & Planning	Mr Dambis Kiap
Agriculture & Forestry	PAPUA NEW GUINEA	Papua New Guinea Forest Authority www.forestry.gov.pg	PO BOX 5055,Boroko NCD Papua New Guinea Phone: (675) 327 7841; Fax: (675) 325 4433	Manager - Climate Change and REDD Branch	Mr Goodwill Amos
Agriculture & Forestry	PAPUA NEW GUINEA	Papua New Guinea Forest Authority www.forestry.gov.pg	PO BOX 5055,Boroko NCD Papua New Guinea Phone: (675) 327 7841; Fax: (675) 325 4433	Managing Director	Mr. Kanawi Pouru kpouru@pngfa.gov.pg
Agriculture & Forestry	PAPUA NEW GUINEA	Papua New Guinea Forest Authority www.forestry.gov.pg	PO BOX 5055,Boroko NCD Papua New Guinea Phone: (675) 327 7841; Fax: (675) 325 4433	Director - Forest Research Institute (FRI)	Professor Simon Saulei
Donor	PAPUA NEW GUINEA	Delegation of the EU to PNG	The Lodge, 3 <sup>rd</sup> Floor Brampton Street P.O. Box 76 Port Moresby PNG Phone: (675) 321 3544; Fax: (675) 321 7850	Counsellor - Rural and Human Resources Development	Dr Kay Beese Kay.Beese@ec.europa.eu
Donor	PAPUA NEW GUINEA	Delegation of the EU to PNG	The Lodge, 3 <sup>rd</sup> Floor Brampton Street P.O. Box 76 Port Moresby PNG Phone: (675) 321 3544; Fax: (675) 321 7850	Attaché - Economics and Trade	Mr Thomas Viot Thomas.Viot@ec.europa.eu

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Donor	PAPUA NEW GUINEA	UNDP www.undp.org.pg	UN House Level 14, Deloitte Tower Douglas Street P.O. Box 1041 Port Moresby PNG Tel: (675) 321 2877; Fax: (675) 321 1224	Resident Coordinator of the UN System in PNG / Resident Representative of UNDP	Mr David McLachlan-Karr david-mclachlan-karr@undp.org
Donor	PAPUA NEW GUINEA	UNDP www.undp.org.pg	UN House Level 14, Deloitte Tower Douglas Street P.O. Box 1041 Port Moresby PNG Tel: (675) 321 2877; Fax: (675) 321 1224	Programme Analyst (Energy and Environment)	Ms Gwen Maru gwen.maru@undp.org
Energy	PAPUA NEW GUINEA	Department of Petroleum and Energy	PO. Box 494, Waigani NCD Papua New Guinea Phone: +675-325-3233; Facsimile: +675- 325-1678	Director	Mr Vore Veve vore_veve@datec.net.pg
Policy and Planning	PAPUA NEW GUINEA	Department of National Planning http://www.planning.gov.pg/	Level 3 Vulupindi House Tel: 3288511	Assistant Secretary - Special Programme Branch	Mr Varigini Badira Mobile: 71055417 varigini_badira@planning.gov.pg
Fisheries	REPUBLIC OF MARSHALL ISLANDS	Marshall Islands Marine Resources Authority (MIMRA)		Chief, Coastal and Community Affairs	Ms Florence Edwards fedwards@mimra.com; f.t.edwards@gmail.com
Environment	REPUBLIC OF THE MARSHALL ISLANDS	Office of the President - Office of Environmental Planning and Policy Coordination (OEPPC)	PO Box 15 Majuro 96960 Republic of the Marshall Islands TEL: 692 625 7944; FAX: 692 625 7918	Director	Ms. Yumiko Crisostomo yumikocrisostomo@gmail.com
Policy and Planning	REPUBLIC OF THE MARSHALL ISLANDS	Ministry of Resources and Development	P.O. Box 1727 Majuro, Marshall Islands 96960 Phone: (692) 625-3206/4020 Fax: (692) 625-7471	Secretary of Resources & Development	Thomas Kijiner, Jr. rndsec@gmail.com
CROP	SAMOA	Secretariat of the Pacific Regional Environment Programme (SPREP)	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Director	Mr David Sheppard davids@sprep.org
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Climate Change Advisor	Mr Espen Ronneberg espenr@sprep.org
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Pacific Islands Global Climate Observing System (PI-GCOS) Officer	Mr Dean Solofa
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Pacific Year of Climate Change Campaign Coordinator	Mr Ewan Cameron
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Climate Change Adaptation Officer (CCAO)	Mr Fine Faitehina Tutuu Lao
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Coastal Management Adviser, Island Ecosystems	Mr Jeffrey Kinch

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Deputy Director	Mr Kosi Latu
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Marine Conservation Analyst	Mr Paul Anderson paula@sprep.org
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Information Resource Centre Manager	Mr Peter Murgatroyd
CROP	SAMOA	SPREP	PO Box 240, Apia, SamoaTel: +685 21929 / Fax: +685 20231	Project Manager, Pacific Islands Greenhouse Abatement – Renewable Energy Project (PIGGAREP)	Mr Solomone Fifita
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Programme Manager, Island Ecosystems	Mr Stuart Chape
CROP	SAMOA	SPREP	PO Box 240, Apia, Samoa Tel: +685 21929 / Fax: +685 20231	Human Resource Development / Training Officer	Mr. Frank Wickham wickham.frank@gmail.com
Donor	SAMOA	UNDP	UNDP Office, Private Mail Bag, Apia, Samoa Tel: +685 25557/23670 xt.28 / Fax: +685 23555	Climate Chnage Adaptation Officer, Small Grants Programme, Community Based Adaptation Programme	Mr. Kevin Petrini kevin.petrini@undp.org
Donor	SAMOA	UNDP	UNDP Office, Private Mail Bag, Apia, Samoa Tel: +685 23670 / Fax: +685 23555	Climate Change Programme Officer	Mrs. Peniamina D. Leavai peni.leavai@undp.org
Donor	SAMOA	UNDP	UNDP Office, Private Mail Bag, Apia, Samoa Tel: +685 23670 / Fax: +685 23555	Regional Technical Advisor for Pacific Climate Change Adaptation	Gabor Vereczi Gabor.vereczi@undp.org
Energy	SAMOA	Ministry of Finance – Energy Unit	Private Mail Bag APIA ph : (685) 34341/34350; Fax : (685) 21312	Energy Coordinator	Ms Sili'a Kilepoa Ualesi silia.kilepoa@mof.gov.ws
Environment	SAMOA	Ministry of Natural Resources, Environment and Meteorology (MNRE)		Principal Climate Change Officer	Ms Anne Rasmussen anne.rasmussen@mnre.gov.ws
Fisheries	SAMOA	Conservation International		Marine Programme Manager, Pacific Islands Programme	Ms Sue Miller Taei staei@conservation.org
Fisheries	SAMOA	Ministry of Agriculture and Fisheries		Assistant Chief Executive Officer	Mr Atonio Mulipola apmulipola@fisheries.gov.ws

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Fisheries	SAMOA	Ministry of Agriculture and Fisheries		Senior Fisheries Officer	Mr Toetu Pesaleli toetu.pesaleli@fisheries.gov.ws
Fisheries	SAMOA	Ministry of Agriculture and Fisheries		Principal Fisheries Officer	Ms Joyce Samuelu Ah-Leong joyce.samuelu@fisheries.gov.ws
Fisheries	SAMOA	Ministry of Agriculture and Fisheries		Senior Fisheries Officer	Ms Maria Sapatu maria.sapatu@fisheries.gov.ws
Fisheries	SAMOA	Ministry of Agriculture and Fisheries		Principal Fisheries Officer, Community-Based Fisheries Management	Ms Olofa Tuaopepe olofa.tuaopepe@fisheries.gov.ws
Tourism	SAMOA	EIB, European Investment Bank		Head Regional Office Pacific	Mr. Jean Phillippe de Jong j.dejong@eib.org
Tourism	SAMOA	Samoa Hotel Association	nmargraff@samoa-hotels.ws		Ms. Nive Margraff
Tourism	SAMOA	Samoa Hotel Association	nsass@samoa-hotels.ws		Ms. Nynette Sass
Tourism	SAMOA	Samoa Tourism Authority	hunter@visitsamoa.ws	Chief Executive	Ms. Sonia Hunter
Donor	SOLOMON ISLANDS	AusAID Australian High Commission http://www.ausaid.gov.au/country/country.c fm?CountryID=16&Region=SouthPacific	Cnr Hibiscus Ave & Mud Alley PO Box 589 Honiara Ph +677 21561 x361; Fax +677 23691;	Counsellor (Development Cooperation)	Mr Kamal Azmi Mob +677 74 94316 Kamal.Azmi@ausaid.gov
Donor	SOLOMON ISLANDS	Delegation of the EU in Solomon Islands	Level 2, City Centre Building Mendana Avenue P.O. Box 844 Honiara Phone: (677) 22765 / 24280 ; Fax: (677) 23318	Chargé d'Affaires a.i.	Dr Abdoul Aziz Mbaye Abdoul-Aziz.Mbaye@ec.europa.eu
Energy	SOLOMON ISLANDS	Ministry of Mines and Energy	P.O. Box G37 HONIARA Ph : (677) 21522; Fax : (677)	Permanent Secretary	Mr Luma Darcy ldarcy@mines.gov.sb ; ppsmines@pmc.gov.sb
Energy	SOLOMON ISLANDS	Solomon Islands Electrical Authority	P.O. Box 6 Honiara Phone: (677) 38596 ; fax: (677) 39472	General Manager Solomon Islands Electrical Authority / Sustainable Energy Project - World Bank	Mr. Norman Nicholls mobile (677) 7495004 ; n_nicholls@siea.com.sb
Environment	SOLOMON ISLANDS	Ministry of Environment, Conservation and Meteorology	PO Box 21 Honiara Solomon Islands Tel: 677 277 51; Fax: 677 280 54	Permanent Secretary	Mr Rence Sore psmecm@pmc.gov.sb
Environment	SOLOMON ISLANDS	Solomon Islands Community Conservation Partnership http://resources.cbc.amnh.org/tetepare/ind ex.html	Maromaro-Tongs Building PO R82 Ranadi, E Honiara Solomon Islands	Project Director	Mr. Kayvan Izadi SICCPdirector@gmail.com

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
			Tel: +677 30365		
Policy and Planning	SOLOMON ISLANDS	Ministry of Foreign Affairs and Trade		Permanent Secretary	Mr George Hiele lindsey_indu@y7mail.com
Tourism	SOLOMON ISLANDS	Solomon Islands Visitors Bureau	mtokuru@sivb.com.sb	General Manager	Mr. Michael Tokuru
Energy	TONGA	PM's Office (Adivsory Unit) www.tonga-energy.to	P.O. Box 62 Nuku'alofa, Tonga Tel: +676 24794	Renewable Energy Co-ordinator	Hon.'Akau'ola akauola@consult.gov.to
Energy	TONGA	PM's Office (Advisory Unit) www.tonga-energy.to	P.O. Box 62 Nuku'alofa, Tonga Tel: +676 24794	Energy Analyst	Mr Lano Fonua fonualano@gmail.com
Environment	TONGA	Ministry of Environment and Climate Change		Acting Director	Mr 'Asipeli Palaki apalaki@yahoo.co
Tourism	TONGA	Tourism Tonga	Tt coms@live.com		Mr. Reece Proudfoot
Energy	TUVALU	Ministry of Environment, Energy & Tourism	Ph : (688) 20615/90821; Fax: (688) 20826/20800	Acting Energy Planner	Mr. Nielu Meisake ntalalelei@yahoo.com
Environment	TUVALU	Ministry of Natural Resources, Energy and Environment	Tel: 688 20179; Fax:688 20167	Biodiversity Officer	Mr.Solomona Lotoala smetia@gov.tv
Fisheries	TUVALU	Fisheries Division		Fisheries Extension and Development Officer	Mr Samuelu Telii samuelu.telii@gmail.com
Tourism	USA	International Finance Corporation, Washington,	smann@ifc.org	Senior Tourism Investment Policy Officer	Mr. Shaun Mann
Tourism	USA	International Finance Corporation, Washington,	jbartlett@ifc.org	Tourism Specialist	Ms Jennifer Bartlett
Donor	VANUATU	AusAID		Renewable EnergyTel: +678 23341	Leith Veremaitoleith.veremaito@ausaid.g ov.au

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Donor	VANUATU	Délégation de l'Union européenne au Vanuatu	Tel: +678 22501	Attaché (Cooperation) - Programme Officer	Mr Adrien Mourgues adrien.mourgues@ec.europa.eu
Donor	VANUATU	NZAID New Zealand High Commission	Tel: +678 22933	Manager	Mr John Claasen Email: John.Claasen@nzaid.govt.nz
Energy	VANUATU	UNELCO Power Utility	Tel: +678 7741752	Renewable Energy Advisor	Mr Francois PyFrancois.Py@unelco.com.vu
Energy	VANUATU	Vanuatu Civil Aviation Authority	Tel: + 678 7784911	Consultant/Energy Economist Chairman	Mr. Donald Wouloseje donald.civav@vanuatu.com.vu
Energy	VANUATU	Vanuatu Energy Unit	Tel: +678 5552955	Director	Mr Leo Moli Imoli@vanuatu.com.vu
Energy	VANUATU	Vanuatu Renewable Energy and Power Association (VANREPA)/Green Power	Tel: +678 7749598 Email: solarsolutions@vanuatu.com.vu	Director	Mr David Stein
Meteorology	VANUATU	Vanuatu Meteorological Service		Director, Chairman, NACCC	Mr Jotham Napat
Policy and Planning	VANUATU	National Advisory Committee on Climate Change	Tel: +678 7744388 Email: piccap@vanuatu.com.vu	Secretariat	Mr Brian Phillips
Policy and Planning	VANUATU	Office of the Prime Minister	Tel: +678 5524000	Head, Aid Coordination & Negotiation Unit	Mr Johnson Naviti jnaviti@vanuatu.gov.vu
Tourism	VANUATU	Australia Pacific Technical College	Tel: +678 24066	Country Manager - School of Tourism and Hospitality	Ms Jan Matheson jan.matheson@aptc.edu.au
Tourism	VANUATU	CARE International	Tel: +678 5438310	Country Director	Mr Robert Hughes project.manager@care.org.vu
Tourism	VANUATU	CARE Pacific, Indonesia and Timor Leste		Project Officer	Ms Christine O'Sullivan
Tourism	VANUATU	Department of Tourism	Tel: +678 5526020	Director - National Tourism Development Office	Mr George Borugu Email: gborugu@vanuatu.gov.vu
Tourism	VANUATU	Ministry of Trade, Tourism and Business Development		First Political Advisor to the Deputy Prime Minister	Mr. John Shing

THEMATIC AREA	COUNTRY	ORGANISATION	ADDRESS / CONTACT	DESIGNATION	NAME
Tourism	VANUATU	Ministry of Trade, Tourism and Business Development	Tel: +678 25674	Director General	Mr. Marokon Alilee Email: malilee@vanuatu.gov.vu
Tourism	VANUATU	NuEra Global Developments Limited (Hotel Developers in Eton, East Efate Island)		Office Manager	Ms Angelika Becker
Tourism	VANUATU	NuEra Global Developments Limited (Hotel Developers in Eton, East Efate Island)		Executive Director	Mr Bill Hawkes
Tourism	VANUATU	Rocky Island Community Bungalows	Port Resolution Tel: +678 5383751	Assistant Manager	Ms. Naomi Tomas
Tourism	VANUATU	SHEFA Provincial Tourism Association	SHEFA Provincial Tourism Association Tel: +678 23878 Email: sales@airvanuatu.com.vu	Air Vanuatu Sales/ President	Mr David Dick Manager
Tourism	VANUATU	Sunrise Bungalow	Tel: +678 5431502	Manager	Mr. Sam Kau
Tourism	VANUATU	Tourism Office	Tel: +678 22685/ 22515 Email: events@vanuatu.travel	Acting Director	Mr. Joe lautu
Tourism	VANUATU	Vanuatu Dive Operators Association	Tel: + 678 23802Email: sailaway@vanuatu.com.vu	President	Mr. Peter Whitelaw
Tourism	VANUATU	Vanuatu Hotels and Resorts Association	Tel: +678 23425	President	Ms. Joanne Wade poppys_admin@vanuatu.com.vu
Tourism	VANUATU	Vanuatu Tour Operators Association	Tel: +678 28037 Email: motor- traders@vanuatu.com.vu; unity-airlines@vanuatu.com.vu	President	Mr Tony Deamer
Tourism	VANUATU	Wan Smolbag Theatre	Tel: +678 27119	Manager, Environment Programme	Mr. George Petro Email: gpetro@wansmolbag.org