

UNDP Project Document

Government of the Republic of the Marshall Islands

United Nations Development Programme

ENABLING ACTIVITIES FOR THE PREPARATION OF THE SECOND NATIONAL COMMUNICATION TO THE UNFCCC

Brief Description

The proposed project will enable the Republic of the Marshall Islands (RMI) prepare its Second National Communication to the Conference of the Parties of the UN Framework Convention on Climate Change. The activities within the Second National Communication are a continuation and update of the work done by RMI to prepare its Initial National Communication (INC) that was carried out under the Pacific Islands Climate Change Assistance Project (PICCAP). The main components of the project are: a) Inventory of GHG Emissions b) Programmes containing measures to facilitate adequate adaptation to, and mitigation of climate change, c) and Programmes and national action plans that are considered relevant for the achievement of the objectives of the UNFCCC. The Project will further enhance the national capacities and will raise general knowledge and awareness on climate change and its effects. It will also contribute to putting climate change issues higher on the national agenda through strengthened cooperation and increased involvement of all relevant stakeholders in the process. In addition, it will strengthen and build national capacities for participation in different mechanisms related to GHG mitigation and to fulfilling other commitments to the UNFCCC.

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ACRONYMS

APRs	Annual Project Reports
BPoA	Barbados Programme of Action for Small Island Developing States
CBD	Convention on Biological Diversity
CCA	Common Country Assessment
CCU	Climate Change Unit
CoP	Conference of the Parties
CP	Country Programme
ENSO	El Nino-Southern Oscillation
GHG	Greenhouse Gases
IM	International Meeting in Mauritius
INC	Initial National Communication
IPCC	Intergovernmental Panel on Climate Change
JPoI	Johannesburg Plan of Implementation
MDGs	Millennium Development Goals
NBSAP	National Biodiversity Strategy and Action plan
NACCC	National Advisory Committee on Climate Change
NCSA	National Capacity Self Assessment
NEX	National Execution
NGO	Non-Governmental Organization
PICCAP	Pacific Islands Climate Change Assistance Project
PICs	Pacific Island Countries
PIREP	Pacific Islands Renewable Energy Project
QPRs	Quarterly Projects Reports
RMI	Republic of the Marshall Islands
SBAA	Standard Basic Assistance Agreement
SIDS	Small Island Developing States
SNC	Second National Communication
SPREP	Secretariat of Pacific Regional Environment Programme
TWGs	Thematic Working Groups
UNCCD	United Nations Convention on Combating Desertification
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
WSSD	World Summit on Sustainable Development
V&A	Vulnerability and Adaptation Assessment

1. ELABORATION OF THE NARRATIVE

1.1. SITUATION ANALYSIS

The Republic of the Marshall (RMI) Islands continues to be gravely concerned about environmental degradation and climate change/global warming and their detrimental effects to its people. The Republic is an Island Nation of 29 atolls and 5 Islets which form two vast parallel chains scattered over 2.1 million km² of the Central Pacific. They make up a total of 181 km² of land and are located between 4° and 19° North latitude and 160° and 175° East longitude.

Twenty two of the atolls and four of the islands are inhabited. Majuro and Kwajalein are the two most populated atolls, accounting for close to 70% of the total national population of 50000 (1999 census).

While some of the islands are several kilometers long, few exceed a few hundred meters in width and are often considerably narrower. Land elevations are very low, with a mean height above sea level of only two meters. The combination of small land areas and low land elevations contribute to the ecological vulnerability of the Republic. There is concern that any change in sea-level could seriously upset the fragile balance between the land and the sea.

In addition to the threats of climate change and climate variability, population pressures and changes in governance, lifestyle and consumption patterns are causing problems with urbanization, solid waste and habitat destruction. Meanwhile, a significant proportion of fertile land remains under utilized, largely because of land disputes and out migration of the people to the center for better access to education and health. Land on atolls is traditionally divided into strips of land that run across the land from lagoon to ocean, called *wetos*. Land is held communally by family groups or *bwij*, which trace their claim to land matrilineal through the *alap* or the person in immediate charge of a piece of land. The *Irojlaplap* (the Paramount Chief of certain lands) is the acknowledged owner of all land interests under his jurisdiction and may not necessarily be a member of a *bwij* inhabiting certain land. The Constitution preserves traditional rights of land tenure such that decision-making powers over land are vested in the traditional, hereditary chiefs of the Republic. Disputes in respect of land are resolved by a Traditional Rights Court established under the Constitution.

The RMI ratified the United Nations Framework Convention on Climate Change (UNFCCC) on 8 October 1992 and submitted its Initial National Communication (INC) to the UNFCCC on November 1999. The INC was prepared and reviewed by local expertise and international partners. This document was the first capacity building effort which provided compelling information and evidence that, the RMI, as a low lying atoll island nation and by global standards, is one of the most vulnerable Countries to climate change and its impacts, including sea-level rise.

The INC was a product of the activities carried out under the Pacific Islands Climate Change Assistance Project (PICCAP) a major enabling Project which was regionally coordinated by SPREP and implemented by a number of Pacific Island Countries, including the RMI from 1998-2001. At the Phase II of PICCAP (2001-2002), the Republic used the period to deliver remaining crucial activities, including a number of public awareness activities, consultations and administrative matters, all of this part of capacity building. As well, the RMI initiated efforts to create an institutional set-up that seeks to mainstream climate change issues into the national policies and legal frameworks, including prioritizing Environment management and development as key issues for the Country. For example, in 2001, the RMI held its Second National Economic Summit, which

incorporated the social aspects of development leading to what is called today NESS or National Economic and Social Summit.

Ratification of the UNFCCC is one step forward in terms of commitment to addressing climate change; the country has also ratified the Kyoto Protocol on 8/11 2003.

In addition, the Republic of Marshall Islands has adopted numerous multilateral environment agreements (MEAs), including those agreed at United Nations Conference on Environment and Development (UNCED) in 1992.

The adoption of the many MEAs (around 200) has placed a heavy burden on the RMI's limited human and financial resources, imposing obligations that far exceed the RMI's existing capacity to implement these agreements while at the same time achieving national goals of sustainable development. For example, the UNFCCC obligations require the RMI to develop national communications which include data on greenhouse gas emissions, vulnerability studies and plans for adaptation, capacity needs assessments. This report requires extensive consultations with stakeholders, planning, designing of appropriate awareness programmes, establishment of committees, and the securing and maintaining of political support at all levels, as well as considerable amount of financial and technical resources, in addition to the anticipated funds from GEF for SNC. Similarly, the UNCBD requires Parties to develop and implement national strategies, plans or programmes for the conservation and sustainable use of biodiversity.

The completion of the RMI's UNFCCC Initial National Communication was a welcome first step not only in addressing its commitments under the Convention but was a step in implementing recommendations under its National Environmental Management Strategies (NEMS) which was a product of the Nation's summit on Environment in 1994. Obligations under both Conventions require the mobilization of both information and resources at the national level and with more than 30 other Conventions and Treaties to implement there is a serious concern that the RMI's current capacity to meet its obligations has already been stretched too thinly. RMI is experiencing difficulties keeping up with the quantity and quality of its participation and contribution to the international conventions. Thus, the activities of the SNC will need to coincide with those of the NCSA which should help the government of RMI assess its current level of capacity to meet its obligations under the CBD, UNFCCC and UNCCD.

Nevertheless, since the completion and submission of the INC, the RMI has embarked on the implementation of sustainable development programmes which have strong linkages to its reporting commitments under other multilateral environmental agreements. These reports include its contribution to WSSD and JPoI, BPoA and the Mauritius Strategy, NBSAP under the UNCBD, reporting requirements for the UNCCD, the Commission on Sustainable Development (CSD) and others.

The RMI has carried out a national project to identify its national needs and capacity for renewable energy technology in collaboration with SPREP, funded by the GEF in 2004-2005. The RMI has also submitted its first MSP Project for Renewable Energy under Climate Change. It has also prepared its Millenium Development Goal (MDG) reports for the UNDP and is working on meeting these goals at the national level by implementing programs supported by its National Vision 2018 Strategic Plan based on the conclusions from the 2nd National Economic and Social Summit held in 2001. In addition, the RMI has identified adaptation plans to be of utmost importance and seeks to

start discussions early 2007 for a possible proposal for GEF funds co-financed by the RMI. With financial support from the GEF, the RMI will begin implementing its capacity building needs relating to the UNFCCC, CBD and the UNCCD through National Capacity Self Assessment which was approved in 2005 and received its first set of funding in November 2006.

1.2. STRATEGY

In compliance with its obligation as a non-Annex I Party to the UNFCCC, the RMI intends to prepare its Second National Communications (SNC). The proposed project will assist the RMI Government in implementing activities needed to enable the Republic to prepare its SNC, following the guidelines adopted by the Conference of Parties (CoP).

The activities within the SNC are a continuation of, and an improvement of the work done under the PICCAP which enabled the RMI to prepare its Initial National Communication and Phase II enabling activities. During the implementation of the project, particular attention will be put on addressing identified gaps and constraints during the SNC stocktaking exercise, the first stocktaking workshop of the NCSA, relevant national consultations relating to climate change and general management of Instruments/treaties, the national workshop on energy and so on, making good use of the information derived from such exercises, and utilizing the results of relevant previous or ongoing national or international activities relating to climate change .

The proposed project is fully in line with the Republic's national development objectives, its national strategy for the implementation of the UNFCCC and its pursuit of improving natural resource management and promoting environmental sustainability. The RMI Government through its soon-to-be adopted climate change policy and national strategy recognizes seven key principles which are critical for the implementation of the UNFCCC: (i) mainstreaming of climate change issues and concerns into national development planning; (ii) development of a National Greenhouse Gas Inventory Network; (iii) Pursuing sustainable development through the UNFCCC and the Kyoto Protocol; (iv) Understanding and responding to the adverse impacts of climate change; (v) Training and human resources development, public awareness and education; (vi) capacity building; and (vii) Linking science and policy. Additionally the RMI Government has reiterated its support as indicated in the Vision 2018 to ensure compliance with the environmental legislation which requires all major development projects to undergo environmental impact assessments. The SNC exercise will further review this process and ensure to include considerations for climate change issues and concerns.

Climate Change is already incorporated in Government policies and legislations but would need to be clearly spelled out as well as prioritized in national consultations as a major issue affecting development. However, its Policy on Energy encompasses climate change in the context of sustainable development, particularly for the rural areas. As well, the energy policy aspires to maintaining nil greenhouse gas emissions for the RMI as a way of participating internationally to mitigate global warming. As indicated above, the Vision 2018 is being implemented through various Government, non-governmental and community partners to help the Nation as a whole progress towards its sustainable development goals of 2018. In this regard, the SNC will directly contribute to the achievement of the RMI Vision 2018 Objectives and goals. It is anticipated that the SNC would compliment on-going work at the national level and work carried out in partnerships at the regional level for the period mid 2007-2010.

The project will make use of the capacity built and institutional arrangements that were set up during PICCAP. However, capacity building activities will still form part of the project and will be provided

through training workshops, and encouragement of the information exchange between the national and relevant regional and international institutions. This is to augment the existing capacity, as well as address capacity gaps that were identified during the INC preparations and consultations, the SNC stocktaking exercise carried out on an individual and group basis, RE and NCSA Stocktaking workshops from the upcoming NCSA project in the Country, and in the ongoing regional climate change discussions at the regional and international levels.

The project will be executed by the RMI OEPPC-Office of the President in close collaboration with other relevant ministries and institutions, particularly those that will make up the Country's National Advisory Committee on Climate Change (NACCC). The OEPPC will work closely with UNDP and GEF during the development and implementation phase of the Project.

1.3. MANAGEMENT ARRANGEMENTS

The OEPPC/Office of the President will have principal responsibility for project management and operational coordination of the SNC. The OEPPC/Office of the President is the GEF focal point and communicates with UNDP and the Republic of the Marshall Islands Cabinet and President. The SNC is nationally driven and implemented with UNDP responsible to provide the overall implementation support of the SNC according to GEF requirements. The OEPPC, in consultation with the SNC Steering Committee or task force team, will oversee the operations of the Project Management Office (PMO). The arrangements ensure close coordination and two-way communication between key stakeholders for smooth implementation of the SNC.

The Director of the OEPPC will be designated as the SNC Project Director (SNC-PD). The SNC-PD will supervise activities, ensure the timely provision of government inputs and be responsible to the Government and UNDP for the achievement of results and outputs. A National Project Coordinator (NPC) will be recruited to work full time for the project to oversee the day-to-day operations of the Project Management Office (PMO). The NPC will be working closely with the SNC-PD in advocating for capacity development issues at the ministry level. At least one Project Assistant will be recruited to carry out administrative and logistical arrangement under supervision by the Project Coordinator.

The National PMO will report to the OEPPC and the Steering Committee on a quarterly basis regarding the progress of the SNC activities. This report will include the financial aspects of the project so as to guide the Steering Committee in making recommendations for decisions for the following periods. Copies of these reports will be made available to the GEF implementing agency, in this case UNDP on a quarterly basis. The project activities will be reviewed by the National Steering Committee to ensure consistency with project objectives.

1.4. MONITORING AND EVALUATION

UNDP guidelines and procedures on reporting, monitoring and evaluation will be followed throughout the project cycle. In addition, the project's National Coordinator will provide progress quarterly reports to UNDP and copy to all members of NACCC and the OEPPC. These reports will enable the NACCC and UNDP to evaluate the progress of the project on a regular basis and identify difficulties and shortcomings with a view to overcoming them during the period of project implementation. These reports will be reviewed by UNDP for their quality and standard, comprehensiveness, and conformity to the proposed terms of reference and dates of completion.

The National Steering Committee/NACCC will meet once a month or a needs basis according to agreed schedules of work to review project implementation and provide scientific, technical, policy and strategic guidance.

Monitoring Responsibilities and Events

A detailed schedule of project review meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.

Monitoring of Implementation Progress – This will be the responsibility of the NCCC based on the project's Annual Work Plan and its indicators. The Project Management Office (PMO) through the OEPPC will inform the UNDP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion. UNDP will in turn review the situation and appropriate necessary actions.

Periodic Monitoring of Implementation Progress – This will be undertaken by the UNDP through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.

Project Monitoring Reporting

The project's National Coordinator in collaboration with the SNC-PD will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

(a) Inception Report (IR)

A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.

The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.

When finalized, the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document.

(b) Quarterly Progress Reports

Short reports outlining main updates in project progress will be provided quarterly to the UNDP Country Office and the UNDP-GEF regional office by the Project Management Office (PMO).

(c) Technical Reports

Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project management team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent Annual Project Reports (APR). Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

Audit Clause

An annual audit of the SNC resources will be carried out by an accredited auditor selected by the Government in consultation with the UNDP. In addition to national government requirements, the auditor shall pay particular attention to the UNDP financial regulations, policies and procedures that apply to projects; the project document and work plans, including activities, management arrangements, expected results, monitoring, evaluation and reporting provisions; and the key considerations for management, administration and finance. The audit shall not cover expenses incurred by UNDP. The recruitment of auditor(s) will be agreed to by both OEPPC and UNDP.

1.5. LEGAL CONTEXT

This document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement between the Government of the Republic of Marshall Islands and the United Nations Development Programme. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government cooperating agency described in the Agreement.

UNDP acts in this Project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended *mutatis mutandis* to GEF.

The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:

- Revision of, or addition to, any of the annexes to the Project Document;
- Revisions, which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
- Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and,
- Inclusion of additional annexes and attachments only as set out here in this Project Document.

2. Total Budget

Award ID: 00037548
Award Title: PIMS 2970 CC EA: Enabling activity for the Preparation of Republic of Marshall Islands Second National Communication to the UNFCCC
Project ID: 00041105
Project Title: PIMS 2970 CC EA: Enabling activity for the Preparation of Republic of Marshall Islands Second National Communication to the UNFCCC
Executing Agency: Office of Environmental Planning and Policy Coordination (OEPPC)-Office of the President

GEF OUTCOMES ATLAS ACTIVITY	RESPONSIBLE PARTY	PLANNED BUDGET						
		Source of Funds	Budget ATLAS Code	Budget Description	Year 1 (US\$)	Year 2 (US\$)	Year 3 (US\$)	Total Budget (US\$)
Outcome 1: National Circumstances, planning, establishment of PMO, Steering Committee Meetings, advertisements	PMO/OEPPC	GEF	71300	Local consultants	4,000	3000	3,000	10,000
Outcome 2: National GHG Inventories	PMO/OEPPC	GEF	71300	Local consultants	10,000	10,000	10,000	35,000
			74210	Printing and publication	3,000		2,000	
Outcome 3: Programmes containing measures to facilitate adequate adaptation to climate change		GEF	71300	Local consultants	24,000	10,000	10,000	60,000
			72100	Contractual services	3,000	1,000		
			71600	Travel	5,000	5,000		
			72200	Equipment	2,000			
Outcome 4: Programmes containing measures to mitigate climate change	OEPPC	GEF	71300	Local consultants	10,000	7,000	7,000	32,000
			72100	Contractual services	2,000	3,000		
			72200	Equipment		3,000		
Outcome 5: Clearing-House Mechanism, research other relevant information (e.g., research and systematic observation, technology transfer, education and public awareness, capacity building and training)	OEPPC	GEF	71300	Local consultants	15,000	15,000	15,000	65,000
			74500	Miscellaneous	10,000	5,000	5,000	
Outcome 6: Constraints & Gaps; Related Financial, technical, & capacity needs	OEPPC	GEF	71300	Local consultants	5,000	2,000	1,000	8,000
Outcome 7: Technical Assistance	Consultants	GEF	71200	Regional and/ International consultants	10,000	15,000	15,000	40,000
Outcome 8: Compilation, Production of communication, including Executive Summary & its translation	OEPPC	GEF	71300	Local consultants	5,000	4,000	4,000	25,000
			74210	Printing and publication	3,000	5,000	4,000	
Outcome 9: Project Management	OEPPC	GEF	72100	Personnel and Office administration	45,000	40,000	35,000	120,000
Outcome 10: Monitoring and reporting	OEPPC/ UNDP	GEF	74105	Management and reporting	3,000	3,500	3,500	10,000
GRAND TOTAL					159,000	131,500	114,500	405,000

APPENDIX A: SUMMARY REPORT OF THE SELF-ASSESSMENT EXERCISE

A. DESCRIPTION OF THE PROCESS AND APPROACH ADOPTED FOR THE STOCKTAKING EXERCISE

Due to time constraints and difficulty in scheduling a time that would require all relevant stakeholders to meet together, the stocktaking exercise for the second national communication was conducted individually and in groups and involved several stakeholder consultations. At least three approaches were used to solicit and collect information from various ministries, agencies, institutions of government and non-government organizations:

1. Gathering of information (including policy documents) relating to the activities of the INC and other similar activities that were already available to the team members;
2. Meetings and/or consultations with relevant divisional members of the various ministries, agencies institutions of government and non-government organizations;
3. Group discussions and individual or one-on-one consultations; and
4. Review of previous stocktaking for PIREP, ADMIRE, NCSA, NBSAP, the UNCCD consultations for 3rd National Report and the Socio-economic consultations under the International Waters Project.

The consultations were focused on the activities relating to the preparation of the INC of RMI, institutional arrangements, and opportunities for promoting synergy between the various activities and organizations, priorities for the SNC and information gaps, consistent with the UNDP guidelines on stocktaking and national stakeholder consultations. Specific issues covered in the meetings and consultations included all elements of information relating to the preparation of a Second National Communication, as contained in Decision 17 of the Eighth Conference of the Parties (CoP) to the UNFCCC.

The elements of information covered in the consultations included work carried out under previous climate change enabling activities (e.g., PICCAP, Phase II, NAPA, and NCSA), gaps/uncertainties identified, new areas of work to be undertaken, priorities for SNC, opportunities for promoting synergy/linkages with related programmes (NCSA, UNCCD, NBSAP), and lessons learned and or best practices in INC process that would be useful for the preparation of SNC. The discussions with various ministries, agencies, and institutions/organizations were centered on the following components of the national communication:

- a) National circumstances (development priorities, geography and climate, information needs for adaptation, and mitigation, capacity needs and constraints, institutional arrangements);
- b) Greenhouse gas (GHG) inventories (main sources of emissions and removals, data sources, adequacy and reliability, accessibility, availability and management of data, capacity needs and constraints);
- c) Programs containing measures to facilitate adequate adaptation to climate change (vulnerable sectors, gaps and uncertainties, methods and tools, methods for assessing adaptation options, capacity needs and constraints, priorities for vulnerability and adaptation in the SNC);
- d) Programs containing measures to mitigate climate change (main sectors, methods and tools, and priorities to be addressed and the linkages to the other development priorities);
- e) Other information such as technology needs and other tech transfer-related issues, PICCAP Phase II outcomes, research and systematic observation, education, training and public awareness needs and the linkages to NCSA and other capacity building activities; and
- f) Constraints and gaps, and related financial, technical and capacity needs (areas for improvement and any new information to be included).

Institutions and individuals involved

A total of 10 ministries, agencies and institutions of government and non-government organizations in RMI involving at least 20 experts were consulted during the stocktaking and stakeholder consultations. Many of the individuals and/or organizations are members of NCSA, NBSAP, UNCCD, PICCAP, and Waste Management and are anticipated to become members of the Climate Change Committee on the National Advisory Committee on Climate Change (NACCC). These consultation meetings concluded with a national workshop which brought together all the individuals and organizations to discuss the main findings of the stocktaking and stakeholder consultation meetings and to consider some of the common elements including gaps, new areas of work and priorities for the second national communication. The stocktaking and stakeholder consultations were carried out over a 30-day period in October-November 2006, and the time spent on each focus group meeting and, or consultation ranged between 15 minutes to an hour (for individual ministry/agency consultations), 1 hour for group consultations and 5 days reviewing previous stocktaking workshops on NCSA, ADMIRE and SocioEconomic consultations.

B. MAIN OUTCOMES OF THE STOCKTAKING, INCLUDING PRIORITIES IDENTIFIED

The work carried out under the previous enabling activities such as the Pacific Islands Climate Change Assistance Programme (PICCAP), Phase II (Top-Up) enabling activities and the NBSAP indicate that a great deal of information is now available for the preparation of the SNC.

NATIONAL CIRCUMSTANCES

While the physical geography of RMI and its islands remain the same as was previously reported in its INC, some of its physical and socio-economic characteristics are being influenced by the interactions of the ocean-atmosphere system and the development priorities it wants to pursue. The way in which RMI will implement the UNFCCC will depend partly on how well it can respond to the vagaries of climate change, climate variability and sea-level rise and the need for economic development.

Since the completion of its INC, RMI has embarked on an economic growth policy which is focused on improving its economic and environmental performance, education, private sector development and creation of employment, agricultural opportunities, social structure, infrastructure and services, tourism and public sector efficiency. Activities since completion of RMI's INC include:

- Contribution to the 2002 World Summit on Sustainable Development and the Johannesburg Plan of Implementation (JPOI);
- The 10-year review of the Barbados Programme of Action and the International Meeting in Mauritius as well as other regional meetings and conferences; and
- Multilateral Environmental Agreements (UNCCD, CBD, Montreal Protocol, Basel, Ramsar, etc).

Some of the pertinent information from these reports and documents will be useful for incorporation in the national circumstances section of the SNC. This will include analyses of national development priorities and policies that are relevant to addressing climate change in RMI as well as incorporating climate change concerns in sectors such as energy, transport, industry, tourism, agriculture, fisheries, health and waste.

NATIONAL GREENHOUSE GAS INVENTORY

RMI's first GHG inventory as presented in its INC highlighted some of the most pertinent problems and constraints in the preparation of its SNC. These problems and constraints are:

- a) Difficulties in accessing accurate data and the lack of GHG database management system;
- b) Difficulties in data collection and collation;
- c) Lack of knowledge or expertise and lack of studies in particular categories of GHG emissions;
- d) The lack of quality data and poor data management has been singled out as the most pressing;
- e) Lack of appropriate hardware and software for development and improvement of data management systems for the preparation of national communications; and
- f) Lack of strong coordination of activities relating to the preparation of the GHG inventory.

Given the problems and constraints outlined above, it may be necessary to focus emissions estimates on those categories of emissions for which data are available and accessible and whose emissions provide a significant share to the total GHG emissions in RMI. In this regard, a key source analysis will be undertaken to determine key source categories of emissions for the inventory work. Additionally, capacity building and training on the use and application of the methodologies and tools for conducting a national GHG inventory will have to be conducted in order to train sufficient numbers of people to undertake the inventory work.

VULNERABILITY AND ADAPTATION ASSESSMENT

Previous work on vulnerability and adaptation assessment, socioeconomic studies and population statistics, provide pertinent information for the preparation of SNC, including, *inter alia*:

- a) About 100% of the RMI population and infrastructure are located in the coastal areas/zones, rendering them highly vulnerable to climate change and sea-level rise. Their vulnerability is exacerbated by their exposure to extreme events, such as high winds, high waves, typhoons, dry weather events, coastal erosions, salt water intrusions to waters, coral bleaching and so forth;
- b) The RMI is also highly susceptible to extreme climate events, such as prolonged droughts associated with the EL NINO events and coral bleaching. Typhoons or extreme winds can cause severe damage to agriculture and biodiversity;
- c) Most vulnerable sectors included coastal zone, Fisheries, water resources, agroforestry and biodiversity, and health which are considered vital to the welfare and livelihoods of communities; and
- d) A "no-regrets" approach to adaptation (including least-cost options) to climate change is seen as a necessary first step developing a national policy framework to raise awareness about the need for adaptation and mitigation actions.

The RMI has already taken positive actions to implement the UNFCCC objectives but many gaps, constraints and problems still remain. The National Environmental Management Strategy (NEMS) has catalyzed the drafting of policies relating to population, water resources, land-use and waste management in addition to addressing biodiversity and climate change concerns.

Many of the issues and activities relating to the implementation of the UNFCCC and the preparation of national communication were carried out under the auspices of the PICCAP and later since 2004 OEPPC in collaboration with anticipated NACCC and other stakeholders. The OEPPC is mandated to oversee the implementation of the UNFCCC, the Kyoto Protocol and any related plans of action on the climate

change front in the RMI. OEPPC will be working closely with the NACCC once it is formally set up in order to have a multi-stakeholder team comprising membership from many ministries of government, non-government organizations and institutions.

The level of awareness on environmental issues is higher now than five years ago among the various sections of the population and government but more needs to be done to integrate climate change issues and concerns in the development planning and implementation.

SYNERGY BETWEEN ENABLING ACTIVITIES AND OTHER PROJECTS

At the national level, the proposed project will have strong linkages to a number of on-going UNDP-GEF enabling activities such as the National Capacity Self-Assessment (NCSA) activities, as well as with other UNDP funded activities in the area of sustainable energy including the UNDP-GEF funded Pacific Islands Renewable Energy Project (PIREP), and the proposed the proposed Acting for the Marshall Islands Renewable Energy (ADMIRE), including projects carried out at the regional levels by SOPAC and SPREP's Pacific Islands Greenhouse Gas Abatement through Renewable Energy Project (PIGGAREP).

Of particular note is the similarity in approaches that highlighted the immediate needs and concerns relating to identification and prioritization of adaptation options, strategies and measures in the preparation of its Initial National Communications and current discussions on waste management and outer islands/rural area capacity building.

Adaptation to climate change is anticipated to have very close linkages with activities relating to the preparation of the National Biodiversity Strategy (NBSAP) under CBD and National Action Plans under the UNCCD. Activities relating to the preparation of vulnerability and adaptation assessments for national communication will therefore have closer links on adaptation and capacity building issues that will be identified under the NCSA project.

NEW AREAS OF WORK FOR SECOND NATIONAL COMMUNICATION

A number of new areas have been identified which will form part of the programme for the preparation of the SNC. The new areas of work include:

- a) Institutional Strengthening for Climate change policy matters;
- b) Conduct a key source analysis in order to determine the sectors with significant emissions where resources can be targeted;
- c) Training in the use and application of various models in vulnerability and adaptation assessments, the IPCC Good Practice Guidance on National Greenhouse Gas Inventories and Uncertainty Management, IPCC Good Practice Guidance on Land Use, Land Use Change and Forestry and related applications of geographic information systems and remote sensing techniques;
- d) Strengthen existing and, where appropriate, establish data management systems to ensure preparation of good quality inventories and to enable vulnerability and adaptation assessments over the long term;
- e) Identify technology transfer issues relating to energy efficiency and energy conservation as well as opportunities for renewable energy sources and technologies;
- f) Pre-assessment and stakeholder discussions on adaptation strategies and options; and
- g) Development of RMI's Policy on Climate Change.

Opportunities already exist for promoting and strengthening synergy with related programmes such as NCSA, NBSAP, NAPs and CBD-Addon in the process of the preparation of SNC. The SNC will build on other related projects (e.g., NCSA, CBD/ADD-On) and other national activities carried out under other relevant international conventions (e.g., UNCBD and UNCCD). This is especially important for vulnerability and adaptation activities as adaptation issues transcend many of the activities of the three Conventions thus increasing the potential for cooperation and collaboration among the various ministries, agencies, institutions and individuals who are already involved in their implementation.

PRIORITIES FOR SNC IDENTIFIED UNDER VARIOUS COMPONENTS

NATIONAL CIRCUMSTANCES

Information on national circumstances concerning the physical (geography, topography and climate) and socio-economic (economy, education, population, health, livelihoods) characteristics of the country and how these might affect the way in which the RMI deals with climate change and sustainable development issues in the long term will be part of the discussions during the first year for development. The preparation of the second national communication will strengthen the linkages and facilitate better understanding of the nexus between climate change and development. This will involve analyses of policies and plans that are currently being pursued by the RMI and their relevance in dealing with climate change issues and concerns.

Coordination, cooperation and synergy between the key stakeholders in developing actions and strategies to cope with the impacts of climate change are crucial for the sustainability of project implementation. It is envisaged that the preparation of the various components of the SNC will help strengthen and where appropriate, build synergies among and between activities relating to the reporting requirements of other MEAs. The NACCC epitomizes a strong institutional arrangement under which many of the activities/tasks will be carried out in the preparation of second national communication.

NATIONAL GREENHOUSE GAS INVENTORY

Many of the problems relating to the preparation of national greenhouse gas inventory are lack of quality data and its associated problems of access, availability, management and retrieval systems; lack of expertise and capabilities to undertake inventory work and the lack of technical, financial, human and institutional capacities to carry out inventory work on a sustainable (continuous) basis, and its relevant linkages to the livelihoods of the communities. Therefore good capacity building and training of personnel and institutions is necessarily critical, as well as discussions at the national levels about the relevance of inventories in order to ensure high quality inventories and participation of the communities in energy efficiency practices.

Training and capacity building is required in data collection, analysis, archiving and management, and the use and applications of geographic information systems and remote sensing techniques as they relate to estimations of emissions and removals from land use change and forestry sector. Identification of key source categories of emissions is considered important in determining resource allocations in GHG inventories and therefore training is needed in this area as well as on the use of Revised IPCC guidelines on national greenhouse gas inventories, the IPCC good practice guidance on the National GHG inventories and Uncertainty Management and the IPCC Good Practice Guidance on Land use, land-use change and forestry.

STEPS TAKEN OR ENVISAGED TO IMPLEMENT THE CONVENTION

Measures to facilitate adequate adaptation

Much of early work has focused on vulnerability and adaptation assessments, which identified a number of critical actions, and measures that could contribute to enhancing adaptive capacity and towards achieving adequate adaptation to climate change. The preparation of the INC, the activities of the Phase II enabling activities (top-up) and the NBSAP have highlighted many of the needs and concerns relating to vulnerability and adaptation, including the need to:

- a) Integrate climate change adaptation into sectoral development planning and budgeting processes;
- b) Build capacity for climate change vulnerability and adaptation at the national and provincial levels to strengthen human and institutional capacities to assess, plan and respond to climate related risks;
- c) Implement urgent adaptation measures to enable the communities to cope with future climate and sea level changes;
- d) Strengthen networking and information sharing/exchange amongst all stakeholders to develop appropriate measures to address climate change, climate variability and sea-level rise;
- e) Conserving and protecting of breeding grounds and habitats and species that are considered vulnerable to impacts of natural disaster and human induced activities;
- f) Conducting studies on the impacts of EN NINO on the fisheries and tourism sectors;
- g) Monitoring the use of chemicals and fertilizers and its impact on fisheries, and their habitats;
- h) Improving water management efforts with better supply-side and demand-side management;
- i) Develop a climate change and climate variability database to collect data on sectors and relevant indicators to monitor and evaluate their impacts;
- j) Promote integrated coastal zone management and planning for the protection of coastal resources; and
- k) Improving climate monitoring, research and systematic observation, develop and manage databases necessary for vulnerability and adaptation assessment and to enhance the capabilities and capacities of experts and institutions in the use and applications of analytical, integrated and process-based methods and tools for assessment work.

The RMI will look into holding consultations to developing a policy framework for adaptation that is country driven, economically viable and socio-culturally sensitive to the needs and concerns at the various levels of integration of society. The preparation of vulnerability and adaptation assessment will build on these frameworks and plans in enhancing adaptive capacity and improving the coping strategies.

Significant gaps still exist in the areas of data collection, monitoring, expertise, skills and know-how required to conduct vulnerability and adaptation assessments on a continuous basis. Therefore, there is an urgent need for training and capacity building in:

- a) Development and use of appropriate methodologies and tools for conducting vulnerability and adaptation assessments at the community, national and sectoral levels;
- b) Strengthening of existing and where appropriate development of data management systems to ensure that a vulnerability and adaptation assessment is carried out on continuous basis;
- c) Evaluation (including cost-benefit analysis), prioritization and costing of adaptation options, strategies and measures;
- d) Incorporation of vulnerability and adaptation assessment work into development planning. This would include risk-based assessment methods;
- e) Research, systematic observation and data collection, analysis and dissemination; and

- f) Enhancement of the capacity of communities to identify capacity building and training needs as they relate to vulnerability and adaptation assessments, building on the community vulnerability and adaptation assessments currently being carried out in several communities.

Measures to mitigate climate change

As part of its overall development strategy under the Auspices of the Vision 2018, the RMI is in the process of updating its energy policy that will reflect its future development trajectory. In this regard efforts are being made to promote energy efficiency and conservation as well as the use of renewable energy sources and technologies.

Training and capacity building is required in the use of appropriate technologies, methodologies and tools for assessment of mitigations options and development of mitigation scenarios particularly in sectors with significant mitigation potential.

OTHER INFORMATION CONSIDERED RELEVANT FOR THE ACHIEVEMENT OF THE OBJECTIVES OF THE CONVENTION

Technology transfer

There is a need to carry out technology needs assessment to identify the barriers and ways to promote renewable energy technologies for renewable energy development. Other issue relating to technology transfer includes, capacity building needs, enabling environment, technology information and mechanisms for the transfer of technology. This would be done in collaboration with the ADMIRE MSP which was resubmitted to the GEF through the UNDP late this year.

Research and systematic observation

Strengthening of the capabilities and expertise of the RMI to contribute to and participate in research and systematic observation, data collection and processing, archiving, analysis and dissemination is crucial in dealing with climate change issues. Therefore, there is a need to enhance the capacity of the institutions and personnel responsible for RMI's contribution to and participation in the global climate observing system and other global observation systems.

Capacity-building

Capacity-building is regarded as a key issue in all areas of work relating to the preparation of national communications. It is therefore important that sufficient resources are provided for this activity on an on-going basis so that activities/tasks required are implemented in an effective manner. Opportunities already exist for collaboration and synergy between the various Convention processes as they relate to capacity building and technology transfer and therefore it is important to ensure these are further strengthened.

Education, training and public awareness

In respect of education, training and public awareness the RMI anticipates to incorporate climate change and environmental issues within the education curriculum in accordance with on-going national strategies on environmental curriculums. Such efforts are highly commendable and will need resources

(human and financial) to continue this work as the priorities and needs for climate change science evolve.

There is a need to continue and improve the efforts in training and awareness-raising on climate change issues at the community and national level. Existing networking and information exchange between the various levels of society should be strengthened and where relevant new networks and information exchange mechanisms should be explored.

Needs and constraints, and related financial, technical and capacity gaps

Great efforts are being made to fulfill and overcome some of the needs and constraints relating to financial, technical and capacity gaps with the assistance of bilateral and multilateral organizations. However, there are many more needs and constraints that are being identified and for which no or very limited resources are available to help address these evolving issues and priorities. Therefore it is recommended that resources (human, technical and financial) made available should be commensurate with the evolving priority needs and concerns.

C. MAIN LESSONS LEARNED FROM THE SELF-ASSESSMENT EXERCISE

LINKAGE WITH FIRST ENABLING ACTIVITIES INCLUDING TOP-UP ACTIVITIES

A number of lessons learned from the previous work relating to the preparation of the INC and on-going work currently being carried out under various projects include the following:

- a) Strong institutional arrangement is critical in the management of the projects and their implementation;
- b) Greater clarity over roles and responsibilities of various ministries, agencies and institutions and the need to strengthen institutional arrangements, and to develop in-country capacity and in-country training will be critical in the implementation of the SNC project;
- c) The level of collaboration and cooperation between and among the various agencies, institutions of government and non-government organizations and communities in the implementation of projects is quite high in RMI, a factor that will facilitate effective implementation of the various components of the SNC;
- d) Many activities relating to the implementation of the various components of national communication will require capacity building and training. This could include skills upgrading and outsourcing experts and institutions to carry out the tasks/activities in a timely manner;
- e) Good progress has been made under its public service reform programme particularly in promoting the private sector development, coastal management development, agro-forestry and subsistence agriculture, reviving of traditional conservation areas and creation of conservation management areas, strengthening the Board to administer the Environment Act, implementing the Energy Policy, creation of a waste utilities corporation, and large projects to be reviewed under EIA processes. However, the challenge now is to seek to integrate climate change issues and concerns into the sectoral planning and development and into the context of sustainable development and people's livelihoods.
- f) A number of government ministries and non-government organizations will play a key role in the preparation of the SNC. These are likely to be:
 - Ministry of Resources and Development;
 - Ministry of Foreign Affairs;
 - Ministry of Public Works;

- Ministry of Internal Affairs;
- Ministry of Health;
- Ministry of Education;
- OEPPC;
- EPPSO;
- Marshall Islands Marine Resources Authority (MIMRA);
- Marshall Islands Council of NGOs;
- USP-RMI;
- CMI.

SYNERGY WITH RELEVANT INITIATIVES

The on-going GEF Projects i.e. the NBSAP and the International Waters Project formulation process represents a very good example on how various ministries, agencies, institutions of government and non-government organizations work together in a collaborative manner towards developing a national plan of action. The approach used in this committee formulation is similar to what is being proposed for the SNC preparation, whereby the immediate needs and concerns relating to identification and prioritization of adaptation options, strategies and measures are highlighted and collectively addressed by the stakeholders.

The SNC preparation (particularly the adaptation component) will be based on multi-stakeholder consultations, which will identify a number of important sectors of the economy and livelihoods, which would be adversely affected, by climate change, climate variability and sea-level rise. Moreover, adaptation and capacity building are key crosscutting issues that would promote synergy between and among the UNFCCC and the UNCBD and the UNCCD. Activities relating to the preparation of vulnerability and adaptation assessments for the SNC will therefore have closer links on adaptation and capacity building issues with other reporting requirements.

REGIONAL COMPONENT

In recognition of the capacity constraints for the RMI and the region, it is envisaged that the SNC preparation in the RMI can make use of regional technical support mechanism such as is provided by SPREP to technical advice and support (expertise, skills and know-how); nationally-adapted methods and tools; a roster of regional experts who could be used to assist the countries undertake some of the activities relating to the national communication; training and capacity building institutes on various elements of the national communication, and methodologies for prioritization and ranking of adaptation actions/activities.

Regional training, while focusing on vulnerability and adaptation assessments, national GHG inventories, mitigation analysis, will also focus on data management systems for various elements of the national communication and include best practices such as those initiated by projects carried out in country and those of neighboring Pacific Islands, including the CIDA-sponsored work on adaptation, NAPA and the evaluation (and costing) of adaptation options, strategies and measures.

D. STAKEHOLDER CONSULTATIONS

The Government of the Republic of Marshall Islands is fully committed to the implementation of the UNFCCC, and hence the goals and objectives of this project. The strengthening of scientific, technical and institutional capacities of the RMI in various aspects of the proposed activities, as well as the

leading role taken by the NACCC and the OEPPC, to execute the project would enable the country to fulfill its obligations and commitments under the UNFCCC on a sustainable basis. Indeed, the whole project management structure is designed to fully engage participation by local experts in all aspects of activities so that further activities in the future are sustainable.

Public participation in certain aspects of the project activities will be encouraged where appropriate and possible. The outreach activities to be undertaken in the SNC Project's Component 7 would also need the extensive support of not only the relevant ministries, but also local communities and NGOs such as the Marshall Islands Council of NGOs and other community groups in order for the activities to be effective and successful. Local communities, NGOs and the media will be invited to participate in all national workshops as appropriate.

On the completion of the SNC preparation, it is expected that further institutional and technical capacity of the country would have been considerably strengthened to enable the RMI to better respond to the challenges and opportunities presented by climate change as well as to better fulfill its commitments under the UNFCCC.

STAKEHOLDERS AND INSTITUTIONS CONSULTED

Institution	Stakeholders interests/responsibilities	Relevance to climate change/reasons for inclusion	Role in the self-assessment process
GOVERNMENTAL INSTITUTIONS			
OEPPC-Office of the President	Focal point of the UNFCCC. GEF OFP Responsibilities:	Climate Change Unit, established within OEPPC Chair and Secretariat to National Advisory Committee on Climate Change. Responsible for preparation of the INC and SNC and its submission to the CoP Responsible for Adaptation preparation in collaboration with other relevant agencies Development of National Climate Change Policy	Regular consultations with the NACC for discussion of the proposal of the SNC in terms of technical issues, opportunities for synergy among various projects and institutional arrangements. Consultation on the provision of climate data and information as well as on the needs for capacity-building, training and research (collection, analysis and archiving) and dissemination of information Environmental and climate change policies
- Monitoring of past and local weather and climate conditions - Provide meteorological information – warnings on severe weather or climate conditions,	Focal point for weather related matters	Member of NACCC	Consultations on issues relating to technologies data and information for research and systematic observations (contribution and participation in global research and observing
RMIEPA	Responsible for coastal land management and all matter relating to the monitoring of land, natural resources and environment	Coastal Department Member of the National Advisory Committee on Climate Change	Consultations on national priorities, mainstreaming of climate change into environmental act, national environmental strategies, programmes and other documents, as well as on current and planned projects.
MINISTRY OF AGRICULTURE, FORSETS AND FISHERIES	It is in charge of issuing identification documents; performing inspection over the work of the entities in the communal area, issuing building permits, and preparation of regulation related to isolation	In charge of sustainable transport, preparation of new standards for efficient building, and relayed issues that will be used in the GHG Abatement in the residential and commercial sectors. Member of NACCC	Consultation with regard to the issues related to agriculture, forestry, fisheries. Consultation on data needs for LUCF inventory and V&A assessment regarding agricultural crops, forest and fisheries. systems)

Institution	Stakeholders interests/responsibilities	Relevance to climate change/reasons for inclusion	Role in the self-assessment process
MINISTRY OF HEALTH	Responsible for surveillance and early warning for vector-borne and water-borne diseases The relationship between climate change (rainfall and temperature) and the incidence of vector-borne and water-borne diseases Mosquito (malaria) monitoring programme	Member of the National Advisory Committee on Climate Change Has collaborated on public awareness on the effects of climate variability and extremes as well as community vulnerability and adaptation assessments during PICCAP.	Consultations on information and data on the health effects of changes in rainfall and temperature Provision of health statistics relating to climate-related stresses (diseases).
EPPSOT	Responsible for integrating climate change issues and concerns into national planning	Member of NACCC Integrate National Climate Change Policy into national plans	Consultations on the progress made on national climate change policy and priority action agenda for the government
MINISTRY OF EDUCATION	Responsible for education curriculum development which includes subjects relating to climate change, climate variability and sea-level rise.	Member of the National Advisory Committee on Climate Change	Consultations on the process of incorporating climate change issues into the education curriculum an efforts to include climate change issues in training and public awareness programmes.
MINISTRY OF Resources and Development-TRADE and Energy	Responsible for advising and/or creating business opportunities for the private sector, communities and implementation of RE Policy	Assist agriculture and forest sectors on agroforestry and reforestations programmes	Consultations on the provision of data and information on land use and forestry, and energy
Non-Government Organizations			
Marshall Islands Energy Company	Data collection of greenhouse gas emissions	Member of the National Advisory Committee on Climate Change In collaboration with the OEPPC, MEC will provide or prepare GHG emissions report	Consultations on further collaboration with OEPPC and NACC on GHG reports
Marshall Islands Council of NGOs	Assist NACC with education of climate change at the grassroots levels	Member of the NACCC	Consultations on further collaboration with OEPPC on community vulnerability and adaptation assessment
ACADEMIC INSTITUTIONS OF HIGHER LEARNING	Provide advice on project implementation and collaborate on CC matters and policies with NACCC and students	Members of NACCC	Consultations with OEPPC and NACC on integrating CC curriculums into institutions

APPENDIX B: TECHNICAL COMPONENTS OF THE PROJECT PROPOSAL

1. BACKGROUND/CONTEXT

Following the new guidelines for the preparation of national communications, the RMI (through this proposal) seeks to prepare and submit its Second National Communications (SNC) to the UNFCCC. The activities within the SNC are continuation of, and an improvement of the work done under the INC preparation. During the duration of the project, particular attention will be put on addressing identified gaps and constraints during the SNC stocktaking exercise, making good use of the information derived from such exercise, and utilization of the results of relevant previous or ongoing national or international activities related to the climate change issues.

2. PROJECT OBJECTIVES

The proposed project aims to strengthen the technical and institutional capacity of the RMI to prepare and submit its Second National Communication to the UNFCCC thereby meeting its obligations.

3. PROJECT STRATEGY

Please refer to Section 1.2, page 5-7.

4. PROJECT ACTIVITIES

4.1. NATIONAL CIRCUMSTANCES

Information provided on national circumstances is critical for understanding the RMI's vulnerability to the adverse effects of climate change, its capacity and its options for adaptation, as well as its options for addressing its GHG emissions within the broader context of sustainable development.

Information on national circumstances will include the analyses of national and or regional development priorities and objectives that the RMI is pursuing and those that would serve as the basis for addressing climate change and sea-level rise issues. Information on national circumstances will be linked to information provided in other chapters of the national communication. The analyses of development priorities and objectives should be of interest to other national stakeholders investigating the benefits of specific activities and policies and the linkages between the activities and policies relating to climate change and those of other Conventions, such as the CBD and the UNCCD.

Information will include:

- Geographical characteristics, including climate, forests, land use and other environmental characteristics;
- Population: growth rates, distribution, density and other vital statistics;
- Economy, including energy, transport, industry, and tourism, agriculture, fisheries, waste, health and services sector;
- Education, including scientific and technical research institutions;
- Any information considered relevant by the Party, e.g., information relating to Article 4.8 and 4.9, of the Convention;

- A description of institutional arrangements relevant to the preparation of the national communications on a continuous basis including distribution of responsibilities within government departments, universities, research institutions, etc;
- NACCC as a relevant coordinating body;
- Involvement and participation of other stakeholders; and
- Thematic Working Groups on GHG inventory, vulnerability and adaptation assessment, mitigation, etc.

4.2. GREENHOUSE GAS INVENTORY

GHG inventory is one of the key components of a national communication, as it forms the basis for climate change mitigation measures. A reliable and accurate GHG inventory will also be very useful for the formulation of any projects under the Clean Development Mechanism (CDM) of the Kyoto Protocol, so that appropriate baseline for emission reduction can be derived.

The RMI's first GHG inventory in its INC highlighted some of the most pertinent problems and constraints in the preparation of its second national communication. These problems and constraints were:

- Lack of data or reliable data, including difficulties in accessing accurate data and the lack of GHG database that is required for a better understanding of its estimation of its GHG emissions, which is considered vital in social and economic development planning;
- Lack of reliable data from land use change and forestry sector and application of default emission factors used that might not be suitable to national conditions;
- No estimation of uncertainties for sources and removals of emissions;
- Capacity-building is still needed in GHG inventory; and
- Lack of appropriate hardware and software to develop and, or improve data management systems for the preparation of national communication would help the country fulfill its obligations, not only under the UNFCCC but also, other reporting requirements of the various multilateral environmental agreements.

Proposed Activities

On the basis of the previous inventory, national GHG Inventory for direct greenhouse gases carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) and for indirect greenhouse gases carbon monoxide (CO), nitrogen oxides (NO_x) and non-methane organic volatile compounds (NMVoC) will be undertaken for the year 2000 in five source categories: energy, industrial processes, agriculture, land-use change and forestry and waste, using the IPCC 1996 Revised Guidelines for National Greenhouse Gas Inventories.

A key-source analysis will be carried out to determine the sectors with significant emissions where resources can be targeted. This activity will also include training in and capacity building on the use and application of the IPCC 1996 Revised Guidelines for National Greenhouse Gas Inventories, the IPCC Good Practice Guidance on National Greenhouse Gas Inventories and Uncertainty Management, and the IPCC Good Practice Guidance on Land Use, Land Use Change and Forestry and related applications of geographic information systems and remote sensing techniques.

Existing data management systems will be strengthened to ensure preparation of good quality inventories over the long term. As appropriate and depending on its capabilities, the RMI may look into incorporating the emissions of methane and nitrous oxide from international bunkers and aviation for the year 2000, or where available. The activity data of hydrofluorocarbons (HFCs), per fluorocarbons (PFCs), and sulfur hexafluoride (SF₆) will also be collected for the same period where available.

Quality assurance and quality control (QA/QC) procedures based on the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, will be applied as appropriate to ensure that the results of the inventory will be as reliable as possible.

Tables 1 and 2, as provided by the UNFCCC guidelines (annex to decision 17/CP.8) will be used for reporting the national GHG inventory. This activity will be coordinated with any regional efforts wherever possible.

At the end of the proposed activities, a workshop will be held to review the results. Policy makers and other stakeholders will be invited to participate in the workshop, so as to enhance their awareness on the importance of GHG inventory and on a long-term programme for the improvement of future GHG inventories.

The Thematic Working Group (TWG) on GHG Inventory will carry out the inventory work. Training on the application of IPCC methodology, including data collection, analysis and management, including the use of IPCC Good Practice Guidance and Uncertainty Management in National GHG Inventories will be conducted for the TWG.

The capacity-building activities would include the participation of some members of the TWG on GHG Inventory in the sub-regional, regional and international training workshops on GHG inventory, so as to share gain from exchange of experiences and lessons learned with other countries.

Major Outputs and Indicators

The major outputs and indicators of this component will be:

- Establishment of thematic working group on GHG inventory;
- Updated and improved inventory data for CO₂, N₂O, CH₄, CO, NO_x, NMVoC, and data on HFCs, PFCs and SF₆ for the year 2000;
- An updated, improved and user-friendly GHG inventory database;
- An updated GHG inventory report, including technical annexes that detail the inventory procedures and calculations;
- Further identification of shortcomings and gaps of the IPCC Guidelines in relation to the local conditions;
- A description of any original research needed to develop and/or apply new emission factors for specific activities;
- Recommendations on areas of targeted research to improve future inventories and to suggest revisions to the existing IPCC GHG inventory methodology;
- Strengthened human, scientific, technical and institutional capacity to undertake a GHG inventory; and
- The review workshop report, including major papers presented.

4.3. PROGRAMMES CONTAINING MEASURES TO FACILITATE ADEQUATE ADAPTATION TO CLIMATE CHANGE

This component of the project will address gaps that were identified during the SNC stocktaking exercise regarding previous work on vulnerability and adaptation assessments during the INC.

Proposed Activities

Based on previous work, an integrated vulnerability assessment will be undertaken for key socio-economic sectors, such as coastal zone and reefs, agriculture, land-use change and forestry, water resources, health, fisheries, biodiversity, food security, and public infrastructure.

Relevant global and/or regional circulation models may be used to construct climate change scenarios for the region that includes the RMI. Where possible, integrated assessment modeling will be used to assess the impacts of climate change in the RMI. Based on these quantitative analyses, appropriate cost-effective adaptation options and measures will be assessed. The impacts of climate change on national development strategies; plans and programmes will be evaluated. Appropriate policy options will be identified and developed for response strategies.

Two of the possible major impacts of climate change are sea level rise, and the increase in extreme weather events, both of which could have significant implications for the RMI in terms of typhoons droughts, and livelihoods of people. In addition, the frequency, persistence and magnitude of El Niño are projected to increase under the climate change scenario. El Niño could induce drought in the RMI and many parts of the western Pacific. In view of these projected scenarios, further assessment of vulnerability will be carried out focusing on specific sectors using outputs of regional circulation models and targeted research.

The SNC will include: (i) an integrated assessment of impacts and adaptation options including (ii) the identification of least-cost adaptation measures; (iv) a climate change-induced disaster prevention, preparedness and management plan; (v) development of spatial information materials (e.g., maps, diagrams, decision matrices) for policy makers; (vi) the list of high priority measures recommended for inclusion in sustainable development strategy; and (vii) analysis of barriers and opportunities for integration of adaptation measures in the medium and long-term national development plans. These assessments will build on the results of the National Adaptation Programme of Action recently completed, and will take into account the priorities and recommendations identified.

At the end of the assessment, a workshop will be held to review the results of the adaptation option and strategies. Policy makers and other stakeholders will be invited to participate in the workshop, so as to enhance their awareness on the various adaptation options, which should be taken into consideration in national development planning.

Thematic working group on vulnerability and adaptation will undertake the above tasks, using methodologies that they consider better reflecting the national situation, as well as existing methodologies and guidelines such as the *IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations* (Carter et al., 1994); *UNEP Handbook on Methods for Climate Change Impact Assessment and Adaptation Strategies* (Feenstra et al., 1998); *International Handbook on Vulnerability and Adaptation Assessments* (Benioff et al., 1996); *Developing Socio-Economic*

Scenarios for Vulnerability and Adaptation Assessments; MAGICC/SCENGEN Climate Scenario Generator: Version 2.4, Technical Manual (Wigley et al., 2000); *Compendium of Decision Tools to Evaluate Strategies for Adaptation to Climate Change* (www.unfccc.int/issues/meth_tools.html), the Adaptation Policy Framework (UNDP, 2004) and other regional methodologies where appropriate, will be used to undertake the assessment. Other methods may be used as appropriate to the RMI. The capacity for this group on the application of the above-mentioned methodologies, including data collection, analysis and management, will be further strengthened and enhanced where necessary.. The capacity-building activities will include the participation of the selected team members in sub-regional, regional and international training workshops on vulnerability and adaptation assessment, so as to share experiences and lessons learned with other countries.

Major Outputs and Indicators

The major outputs and indicators of this component will be:

- Strengthened and/or developed human, scientific, technical and institutional capabilities and capacities to undertake vulnerability and adaptation assessments will be developed and strengthened;
- A wide range of stakeholders involved in the preparation of vulnerability and adaptation assessments. The involvement and participation of communities in the assessment work will ensure heightened awareness of the risks imposed by climate change, variability and sea-level rise and also facilitate development of adaptation options, strategies and measures that would be viable and culturally acceptable;
- An improved, and/or better understanding of the key vulnerabilities and the risks imposed by climate change, climate variability and sea-level rise on various sectors, communities and infrastructure;
- An analysis (i.e., cost-benefit analyses, evaluation and prioritization) of the various adaptation options, strategies and measures for key/priority socio-economic sectors based on established methodologies, including possible least-cost adaptation options and adaptation technologies;
- Identification of targeted research on climate variability, climate change, tropical cyclones, drought and precipitation trends and their relation with El Niño;
- Policy options for adequate adaptation and response strategies for climate change impacts on key socio-economic sectors, including a draft National Climate Change Adaptation Action Plan;
- Further activities, gaps, constraints and research needs, as well as specific financial, technical and institutional and research needs for capacity-building will be identified and highlighted; and
- The review workshop report, including major papers presented.

4.4. PROGRAMMES CONTAINING MEASURES TO MITIGATE CLIMATE CHANGE

The RMI recognizes that undertaking climate change mitigation and assessment will provide ancillary benefits for sustainable development, such as increase in technological efficiency and effectiveness, improvements in the security and availability of power supply and increase in employment resulting from mitigation projects.

Significant constraints relating to the availability of data and information and, specific institutional arrangements to handle data acquisition and database maintenance for climate change mitigation still remain problematic. Mitigation assessment will entail the generation of information on the national analysis of the potential costs and impacts of the various technologies and practices to mitigate

climate change. This information will also be relevant for sustainable development and useful for policy makers in formulating and prioritizing mitigation programmes.

Proposed Activities

In order for the RMI to undertake mitigation assessment as part of its development strategy, the Thematic Group on Mitigation, including *inter alia*, will carry out a number of pertinent activities:

- Collection, collation, analysis and archiving of data for the different sectors of the economy, where appropriate and relevant;
- Training and capacity building for national experts and institutions to undertake the preparation of the mitigation assessment;
- Training of personnel in the use of methods, models and tools for the generation of climate and socioeconomic scenarios, at both the national and sectoral levels; and
- Preparation of mitigation projects for funding.

Training and capacity building will be required in the use of appropriate technologies, methodologies and tools for assessment of mitigations options and development of mitigation scenarios particularly in sectors with significant mitigation potential.

Several methods and models that may be used in mitigation assessment, ranging from a broad description of main development trends and statistics to formalized modeling at sector and macro-economic levels. Many of these methods and models are provided in a number of technical resource such as *Such as Technologies, Policies and Measures for Mitigating Climate Change* (IPCC Technical Paper I); *Greenhouse Gas Mitigation Assessment: A Guidebook by the U.S. Country Studies Program* and *Climate Change 2001: Mitigation* (Contribution of Working Group III to the Third Assessment Report of the IPCC). Given the likely dominance of the energy sector (including transport) in terms of emissions, models such as LEAP, ENPEP and MARKAL will be used to undertake mitigation assessment.

Based on the above analyses, a draft National Mitigation Plan for key socio-economic sectors will be developed. Both legal (e.g., law and legislation) and economic (e.g., tax incentives) instruments may be necessary for promoting mitigation measures. A list of environmentally friendly mitigation technologies, including renewable energy technologies, will be identified and assessed. Appropriate mitigation projects will also be identified for bilateral and multilateral funding.

At the end of the proposed activities, a workshop will be held to review the results and the draft National Mitigation Strategy for GHG Emission Reduction. Policy makers and other stakeholders will be invited to participate in the workshop, so as to enhance their awareness on the importance of GHG emission reduction, which should be taken into consideration in national development planning.

Much of this work will build on and complement the work already started by the GEF-funded *Pacific Island Renewable Energy Project* (PIREP), which focuses on the removal of barriers to the adoption of renewable energy technologies and the anticipated for approval ADMIRE. The Mitigation Working Group will include the PIREP Task team.

The capacity-building for the Mitigation Working Group on the application of the above-mentioned methodologies and models, including data collection, analysis and management, will be further strengthened and enhanced. The capacity-building activities will include the participation of the selected team members in the sub-regional, regional and international training workshops on mitigation assessment, so as to share experiences and lessons learned with other countries. Training workshop on the application of macro-economic models and relevant energy models will be organized with the assistance of both national and, where appropriate, regional or international consultants as well as the use of expertise available from the UN agencies.

Major Outputs and Indicators

The major outputs and indicators of this Component will be:

- Important baseline data for key socio-economic sectors required for assessing GHG mitigation options;
- A comprehensive quantitative mitigation options assessment for key socio-economic sectors based on established methodologies, including possible least-cost mitigation options and environmentally friendly mitigation technologies;
- A draft Mitigation and Renewable Energy report including appropriate legal and economic instruments, and public-private partnerships for mitigation measures will be drafted;
- Strengthened human, scientific, technical and institutional capacity for mitigation assessment;
- Further constraints and specific financial, technical and institutional needs for capacity-building on mitigation and renewable energy technologies and on the development of mitigation measures and strategies will be identified and highlighted; and
- The review workshop report, including major papers presented.

4.5. OTHER INFORMATION CONSIDERED RELEVANT TO THE ACHIEVEMENT OF THE OBJECTIVE OF THE CONVENTION

4.5.1. Development and transfer of technologies

Proposed activities

A technology needs assessment (TNA) will be carried out by the thematic group on Technology Transfer to identify technology needs for adaptation and mitigation. The TNA will be undertaken by using the assessment methodology developed by UNDP. The TNA group will use a six-step process to complete the TNA.

The synthesis report from this assessment will provide input to the chapters on vulnerability and adaptation and mitigation assessments in the Second National Communication.

Thematic working group on technology transfer and research and systematic observation will carry out the following activities relating to technology transfer based on the previous activities and the technology needs assessment (TNA):

- A comprehensive analysis and assessment of the country-specific technological requirements and opportunities of their use, transfer and introduction in key socio-economic sectors, as well as their social, economic and environmental impacts for adaptation and mitigation;

- Capacity-building and training for the TWG will include learning how to apply the TNA methodology and the use of appropriate technology information databases such as the UNFCCC's TT:CLEAR and any relevant information provided by the Center for Technology Information;
- The barriers to the adoption of environmentally-sound technologies in the RMI will be identified, with a view to facilitating their removal. The PIREP Team who has been working on these issues for the last two years will provide information on barriers to and possible adoption of technologies for mitigation; and
- Various public awareness programmes focusing on the benefits of various technologies will be carried out in communities/villages.

The feasibility of other technological options, such as cogeneration of power by means of grid-connected solar systems that do not have battery storage; and the electric-powered car using excess wind to supply electricity (assuming that a proposed wind farm will come on line in the next decade) will be assessed and evaluated.

Selected members of the thematic working group on Technology transfer and research and systematic observation will participate in relevant sub-regional, regional and international training workshops and conferences to share experiences and lessons learned, as appropriate.

At the end of the proposed activities, a workshop will be held to review the results and outcomes, of technology needs assessments, which will serve as important inputs for both the National Adaptation Programme of Action and the National Mitigation Plan.

Major Outputs and Indicators

The major outputs and indicators of this Sub-Component will be:

- Completion of technology needs assessment;
- Completion of a TNA synthesis report including priorities for adaptation and mitigation;
- Important inputs for both the upcoming RMI Adaptation Plans and program of Action and the National Mitigation Plan;
- Technology information networks;
- Strengthened human, scientific, technical and institutional capacity; and
- The reports of the review workshop, including major papers presented.

4.5.2. Research and systematic observation

Proposed Activities

Within the financial constraint of the present proposed project, the following activities are envisaged:

- Improvement in data collection, analysis and management, with emphasis on data quality assurance. This activity will build on the data recovery programme supported by the World Meteorological Organization through its South Pacific Sub-regional Office;
- Trend analysis in existing temperature and rainfall data;
- Establishment of early warning systems as part of the work on vulnerability and adaptation assessment;

- Analysis of the impact of climate change on the frequency of extreme climatic events including EN NINO. This work will also be part of the vulnerability and adaptation assessment work;
- Analysis of rainfall (including floods and drought) under future climate change scenarios, current climate variability including tropical cyclones and EN NINO. This work will be carried out in close collaboration with the V&A thematic working group;
- Participation in and contribution to the activities and programmes, as appropriate, of regional and global research networks and observing systems, such as the Pacific Island - Global Climate Observing System (PI-GCOS) programme, which aims to establish a robust and sustainable climate observation and application system that meets the climate change and variability observations and application needs of the Pacific island nations and region and meets GCOS requirements;
- Climatic information networking with relevant regional and international organizations; and
- Preparation of a draft Synthesis Report on Research and Systematic Observation with special focus on ENSO, tropical cyclones and drought, so as to provide technical and policy guidance for a more sustainable programme. The synthesis report will also include constraints, financial, technical, human and institutional needs for capacity-building needs.

The above activities will be undertaken by the Technology Transfer and Research and Systematic Observation Group, which is composed of staff members from the RMI Meteorological Observatory. The capacity of the study team members will be strengthened where necessary, including the participation in sub-regional/regional/international workshops. Special training in data collection, analysis and management on climate monitoring will also be required.

At the end of the proposed activities, a workshop will be held to review the results and outcomes, including the draft Synthesis Report on Research and Systematic Observation, with the participation of stakeholders from the public and private sectors, including NGOs, communities and civil societies.

Major Outputs and Indicators

The major outputs and indicators of this component will be:

- Improved climate database;
- Specific research relating to ENSO, tropical cyclones and drought;
- Early warning systems for ENSO, tropical cyclones and drought established;
- Participation in and contribution to the PI-GCOS programme;
- Climatic information networks with regional and international organizations;
- Draft National Strategy for Research and Systematic Observation;
- Strengthened human, scientific, technical and institutional capacity; and
- The reports of the review workshop, including major papers presented.

4.5.3. Education, training and public awareness and information and networking

Proposed Activities

Based on the previous activities, the following activities are proposed:

- Preparation of outreach materials (leaflets, booklets, calendars, posters, quarterly newsletters, video, CD) and dissemination of these materials through mass media (TV, radio, newspapers,

magazines, Internet, etc.). The information provided by SPREP, IPCC, WMO, IUC/UNEP, UNITAR and the UNFCCC Secretariat through their web pages would be used as sources of information for outreach activities where appropriate. This activity will build on education, training and awareness initiatives that are already being undertaken in the RMI;

- Establishment of a local website for climate change – This will facilitate information dissemination and sharing of experiences and lessons learned among communities. Capacity-building for updating and maintaining this website is essential in order to ensure its sustainability even after the completion of the project;
- Strengthening of education on climate change at the primary and secondary levels;
- Incorporation of climate change issues into non-formal education and into the different levels of curricula of the formal education systems; and
- Identification of further constraints, gaps and specific financial, technical and institutional needs for capacity-building on public awareness, education and training will be identified and highlighted at the end of the activities.

In order to achieve the above proposed activities, which will be undertaken nationally throughout the various thematic working groups, reasonable financial resources will be needed, not only for both for human and institutional capacity strengthening, but also for the acquisition of relevant equipment.

Major Outputs and Indicators

The major outputs and indicators of this component will be:

- Educational and public awareness programmes at national and local village levels;
- Outreach materials in English and Marshallese;
- Strengthened primary, secondary and post secondary school curriculum on climate change;
- Strengthened human, scientific, technical and institutional capacity; and
- The reports of the review workshop, including major papers presented.

4.5.4. Improved information and networking

Access to and the use of information technology, such as Internet, will be essential to ensure efficient exchange and sharing of information both within and outside the country. Information networking is an important activity in any project cycle. However, during the INC project, acquisition of computers and access to Internet has been fairly limited due to financial constraints.

Proposed Activities

- Establishment of list serve for various thematic working groups to facilitate information networking;
- Participation and contribution to sub-regional and regional information networks on climate change issues, especially those relating to national communications;
- Provision of a list of national experts, including their expertise, who have participated in the preparation of the SNC;
- Assessment of current capacity in information communication technologies; and
- Institutional strengthening, including human resources development, technical and technological capabilities on the use of information technology for climate change information sharing.

Major Outputs and Indicators

The major outputs and indicators of this component will be:

- Information networks and regular exchange of information among thematic working groups and between other countries of the region; and
- Strengthened human, scientific, technical and institutional capacity in information networking.

4.5.5. Capacity-building

Previous Activities

The process of the preparation of the INC has highlighted limited human, scientific, technical, technological, organizational, and institutional and resources capabilities in RMI for fulfilling its commitments, including the reporting requirements. Based on the results of a survey, special capacity building needs have been identified in the INC.

Proposed Activities

Within the constraint of the limited financial resources, this proposal aims to address the specific needs that have been identified in the INC to the extent possible, taking into consideration of decision 2/CP.7, which provides that “*Capacity building is a continuous, progressive and iterative process, the implementation of which should be based on the priorities of developing countries.*”

As far as capacity building is concerned, it would be appropriate to maximize the synergies for implementing the UNFCCC and other global environmental agreements, such as UNCBD and UNCCD. The NCSA would provide a good basis for such synergies.

Every effort will be made to address some of the priority areas relating to the preparation of national communication (GHG inventory, V&A assessment, technology transfer, mitigation, research and systematic observation) as identified in the initial scope of the capacity building framework of the UNFCCC.

Major Outputs and Indicators

The major outputs and indicators of this component will be strengthened human, scientific, technical and institutional capacity at all levels on major aspects relating to climate change.

4.6. CONSTRAINTS AND GAPS, AND RELATED FINANCIAL, TECHNICAL AND CAPACITY NEEDS

New gaps and constraints if any, identified while undertaking each section of the SNC, would be reported along with related financial and technical capacity needs. Special attention will be paid to the *previously identified gaps and needs* under the previous activities such as INC and Top-Up. Explanations on whether and how they have been addressed under the SNC and their status will be reported. In addition, gaps and constraints relating to the implementation of the UNFCCC will be reported.

Main Outputs

- Status of the constraints and gaps (technical, institutional, methodological, financial, capacity) from previous studies;
- New constraints and gaps (technical, institutional, methodological, financial, capacity), if any related to each thematic area (inventory, abatement analysis, V&A) and elaborate needs to overcome and fill them; and
- Constraints and gaps (institutional, financial, and capacity) related to Article 6 activities, which are crosscutting the NC preparation exercise. Elaborate needs to overcome and fill them.

4.7. TECHNICAL SUPPORT

In recognition of the capacity constraints a regional support component is being proposed to provide, *inter alia*, technical advice and support (expertise, skills and know-how); nationally-adapted methods and tools; tool-kits, a roster of regional experts who could be used to assist the countries undertake some of the activities relating to the national communication; training and capacity building institutes on various elements of the national communication, and methodologies for prioritization and ranking of adaptation actions/activities.

Regional training, while focusing on vulnerability and adaptation assessments, national GHG inventories, mitigation analysis, should also focus on data management systems for various elements of the national communication. The training should also include best practices such as those initiated and carried out by other Pacific Islands i.e. by the CIDA-sponsored work on adaptation, NAPA and the evaluation (and costing) of adaptation options, strategies and measures.

Regional support may come from a planned a clearinghouse mechanism for climate change national hosted at the OEPPC and regionally hosted at SPREP. The clearinghouse and technical support will include support for capacity building, education, training and public awareness, technology transfer, research and systematic observation (PI-GCOS). UNDP, as the GEF Implementing Agency for this SNC preparation project, will be consulted on all aspects during the execution of the project. It will be fully informed of all activities and invited to actively participate in all technical and policy workshops related to the project, so that it can provide useful inputs and contributions to ensure the successful implementation of the project.

Technical assistance from other national, regional and international organizations, consultants and experts will be sought where and when necessary and appropriate.

5. INSTITUTIONAL FRAMEWORK FOR PROJECT IMPLEMENTATION

The NACCC, the SNC-PMO and the Thematic Working Groups will form the project management team for the preparation of second national communication. The Project Management Team (PMT) will work and undertake its tasks under the auspices of the VMS, in consultation with other relevant government departments, the private sector, and NGOs.

The following thematic working groups will be formed to assist with the preparation of various components of the national communication: (i) National Greenhouse Inventory, (ii) Vulnerability and Adaptation; (iii) Mitigation; (iv) Technology transfer, Research and systematic observation; (v) Education, training, public awareness and information and networking and Capacity-building; and (vi) Compilation of national communication and integration. Each thematic working group will

comprise of a number of experts drawing both from public and private sectors, communities, and NGOs, as appropriate.

The NACCC will provide technical and policy oversight to the project, facilitated by the SNC-PMO.. The SNC-PMO will report to the Director of the OEPPC and be responsible for the operational programme of project implementation and will be located in the OEPPC. The SNC-PMO will have adequate and appropriate computer and telecommunication facility, including Internet, to enable them to efficiently and effectively undertake their activities.

Figure 1 shows the institutional framework and project management structure. The SNC preparation project will be executed by the OEPPC, with the support of various government ministries: Resources and Development, Foreign Affairs, Health, EPPSO, RMIEPA Public Works, Internal Affairs and Non-governmental Partners.

Additional assistance may be provided to the project by regional and international organizations where appropriate. The NACCC comprises various ministries and departments, as well as representatives from the private sector, local communities and NGOs. The NACCC will ensure that the recommendations of the project are integrated into overall national development planning process.

NCCC will be appointed by the OEPPC to coordinate the day-to-day execution of activities to be carried out by six thematic working groups, which will include experts both from public and private sectors, education institutions, local communities and NGOs. The NCCC and CCPA and support staff will provide secretariat support to the NACCC.

The NACCC will meet every two months to review project implementation and provide scientific, technical, policy and strategic guidance. The minutes of these meetings will be shared with all participating institutions.

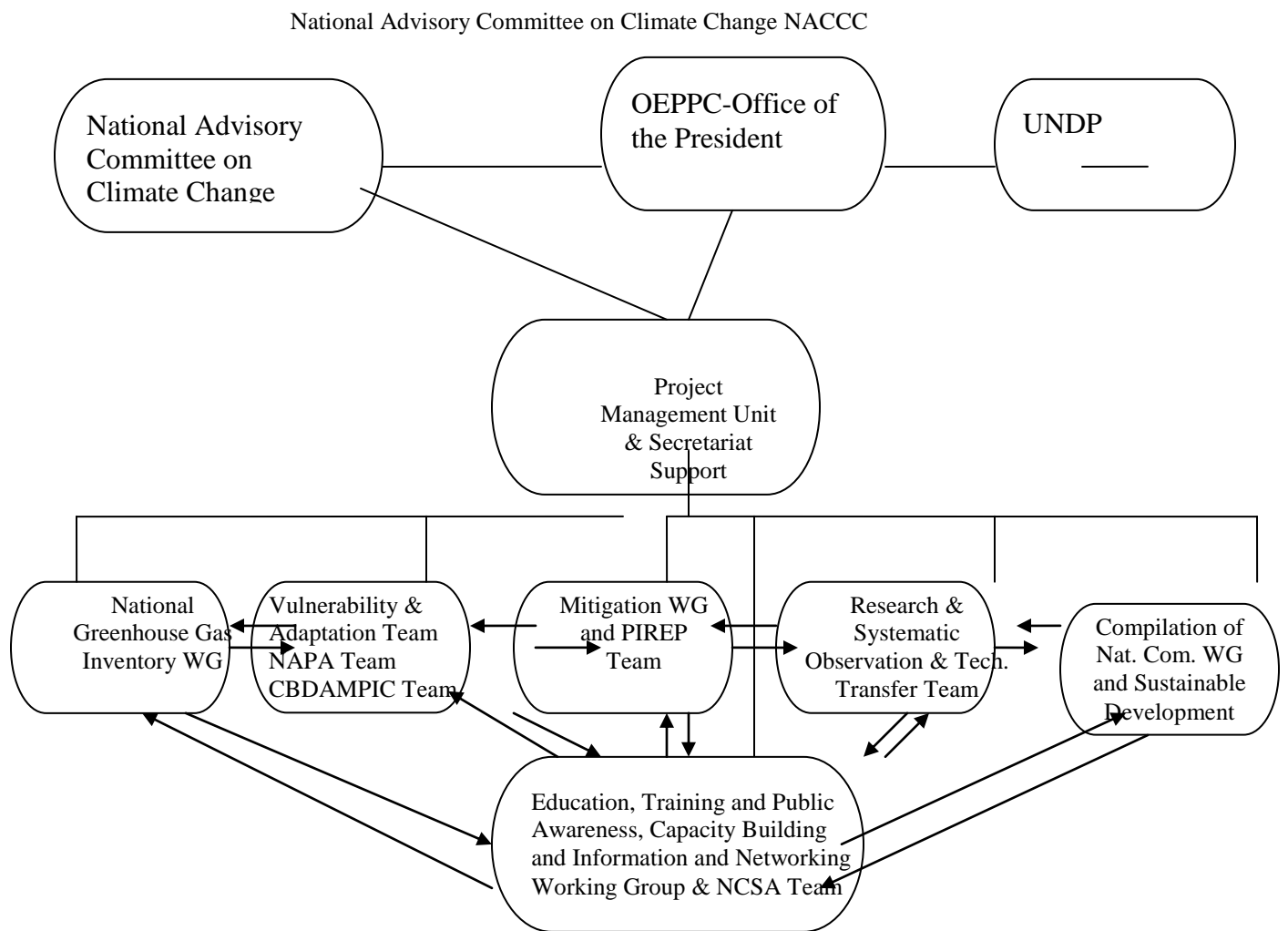


Figure 1: SNC Project Implementation Arrangements

6. ASSESSING PROJECT IMPACT

UNDP guidelines and procedures on reporting, monitoring and evaluation will be followed throughout the project cycle. In addition, the National Coordinator will provide a quarterly progress report to UNDP and copy to all members of NACCC and the OEPPC who will be hosting and executing the project. If possible, these reports may be compiled into electronic newsletters that will

be distributed to all participating institutions. These reports will enable the NACCC and UNDP to evaluate the progress of the project on a regular basis and identify difficulties and shortcomings with a view to overcoming them during the period of project implementation. These reports will be reviewed by UNDP for their quality and standard, comprehensiveness, and conformity to the proposed terms of reference and dates of completion. In addition, a mid-term review between UNDP and the OEPPC may be conducted.

An independent financial audit will be conducted according to the UNDP rules and procedures. During the implementation of the project, regular financial statements will be prepared and provided to UNDP for accessing funds for project activities.

7. BUDGET

As the proposed activities are standard enabling activities required for the preparation of national communication, so the incremental cost for undertaking these activities are also full cost, and hence no incremental cost analysis is required.

Thus, the total requested funding of US\$405,000 as itemized in Table B-1 reflects the current real needs and concerns of the country in order to cope with adverse effects of climate change. Although some capacity has already been built during the INC and its Phase II top-up funding project, further capacity-building, including training, for the project team members, especially those new members, are still very much needed. A significant portion of the funding requested would be used for human and institutional capacity-building or strengthening, with a view to slowly building up a solid technical team that would be responsible for preparing future national communications in a sustainable manner.

The proposed budget for each proposed component of activity has been estimated and thoroughly reviewed by UNDP and the NACCC before it is fully endorsed by the UNFCCC Focal Point and the national GEF Operational Focal Point.

8. DETAILED WORK PLAN

It is expected that the proposed three-year project will commence in July 2007 and end in July 2010. The detailed work plans for each component will be developed by the NCCC in full consultation with the NACCC after the approval of the project, with the guidance and assistance of UNDP, which will be consulted throughout the project cycle. Table B-2 shows the schedule of the SNC preparation activities.

Table B-1: SNC Preparation Budget (USD 1,000)

Activities	Cost	Total Cost
II. NATIONAL CIRCUMSTANCES		
Development priorities, objectives and circumstances, and PMO preparations	5	10
Existing arrangements for preparing communications continuously	5	
III. NATIONAL GREENHOUSE GAS INVENTORIES		
National GHG Inventories	10	35
Cost-effective programs to develop country-specific emission factors	10	
Arrangements to collect and archive data for continuous inventory preparation	10	
Level of uncertainty associated with the inventory data	5	
IV. GENERAL DESCRIPTION OF STEPS		
Steps towards formulating programs to facilitate adequate adaptation	20	60
Vulnerability to adverse effects of climate change & on adaptation	15	
Evaluation of strategies & measures for adapting to climate change	10	
Policy frameworks for developing and implementing adaptation strategies	10	
Steps for formulating programs to mitigate climate change	10	
V. OTHER RELEVANT INFORMATION		
Transfer of, and access to ESTs, development of endogenous capacities; enabling environments	10	65
Climate Change research and systematic observation	10	
Climate Change education, training and public awareness	20	
Capacity Building Activities, Options and Priorities	10	
Efforts to promote information sharing and networking, Clearinghouse	15	
Clearinghouse Mechanism	10	
VI. CONSTRAINTS & GAPS; RELATED FINANCIAL, TECHNICAL, & CAPACITY NEEDS		
Constraints, gaps and needs, and activities for overcoming gaps, etc.	4	8
Financial resources and technical support provided by various sources	2	
Projects proposed for financing or in preparation for arranging support	2	
Opportunities, barriers for implementation of adaptation measures	2	
VII. TECHNICAL ASSISTANCE		
VIII. COMPILATION, PRODUCTION OF COMMUNICATION, INCLUDING EXECUTIVE SUMMARY & ITS TRANSLATION	25	10
IX. PROJECT MANAGEMENT (BASED ON 3 YEARS DURATION)	130	130
X. MONITORING AND REPORTING	10	10
TOTAL		405

Table B-2: SNC Preparation Project – Schedule of Activities

<i>Outputs/Activities</i>	Year 1				Year 2				Year 3			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
1. National Circumstances												
1.1. Analyses of development priorities, objectives and national circumstances to address climate change, planning and PMO prep, NACC												
1.2 Examine possibilities for incorporation of climate change concerns into the national and/or regional development objectives, priorities, circumstances and programmes												
1.3 Update information on the features of national geography, climate, natural resources and socio-economic conditions												
1.4 Establishment of an institutional framework for the preparation of SNC												
1.5 Compilation of information from existing sources on national circumstances												
2. Greenhouse Gas Inventory												
2.1. Formation of the thematic working group on GHG inventory												
2.2. Revise the input data, taken into consideration data gaps and areas needing improvement identified in the stocktaking exercise												
2.3 Conduct training workshop on the use of IPCC technical guidelines, GPG and GPG for LULUCF												
2.4 Identify key-source categories of emissions												
2.5 Gather available data from national sources to fill inventory data gaps and identify and develop methods for overcoming inventory data gaps if there is no available data												
2.4. Undertake national GHG inventories for the year 2000,												
2.5 Describe procedures and arrangements undertaken to collect and archive data for the preparation of national GHG inventories, and efforts to make this a continuous process,												

<i>Outputs/Activities</i>	Year 1				Year 2				Year 3			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
including information on the role of the institutions involved												
2.6 Organize workshop for presentation and discussion on the results obtained from the GHG inventory												
2.9. Prepare final GHG Inventory following the UNFCCC guidelines												
3. Programmes Containing Measures to Facilitate Adequate Adaptation to Climate Change												
3.1. Formation of the thematic working group on vulnerability and adaptation assessment												
Organize a training workshop for the TWG on V&A on the use of available methods and tools for conducting V&A assessment												
3.2. Review the scenarios for climate change, applying the most recent updated version of MAGICC-SCENGEN and examine climatic conditions for RMI												
3.3. Analyze the climate changes for the period 1961-2000 to identify trends for temperature, precipitation, wind, cloudiness and sunshine hours												
3.4. Analyze the time series data for ENSO events and climate extremes												
3.5. Analyze anecdotal evidence of impacts of climate change and sea-level rise in communities/villages building												
3.6. Undertake impact assessment in key vulnerable sectors												
3.6. Describe links between climate, and socio-economic baseline conditions of the country in the most vulnerable sectors												
Draft adaptation strategy												
3.7. Identify high priority adaptation strategies and measures												
3.8. Carry out cost-benefit analysis of proposed adaptation measures												
3.9. Synthesize information and												

<i>Outputs/Activities</i>	Year 1				Year 2				Year 3			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
prepare a national adaptation plan of action												
3.9. Organize workshop to discuss the results from V&A												
3.10. Final Vulnerability assessment and national adaptation plan following the UNFCCC guidelines												
4. Programmes Containing Measures to Mitigate Climate Change												
4.1. Formation of thematic working group on Mitigation												
4.2. Review previous work on mitigation and renewable energy development building on PIREP project results												
4.3. Conduct training workshop for the TWG on Mitigation on the use of methods and tools for mitigation analyses and assessment												
4.4. Based on the results from the GHG Inventory, develop a baseline scenario for mitigation												
4.5. Develop a series of mitigation scenarios to abate the increase of the GHG emissions in terms of sustainable development objectives												
4.6 Prepare a draft mitigation plan building on the outcomes of PIREP project												
5. Other Information Considered Relevant to Achievement of the Objective of the Convention												
5.1. Formation of thematic working group on technology transfer and research and systematic observation												
5.2. Conduct training workshop for TWG on technology transfer and research and systematic observation on how to conduct TNA												
5.3. Assess the technology needs for adaptation and mitigation												
5.4. Prepare a synthesis report on the TNA												
5.5. Review needs and priorities for research and systematic observation (RSO), building on the outcomes of PI-GCOS.												
5.6. Prepare a report on RSO using the UNFCCC guidelines												
5.7. Compile and analyze												

<i>Outputs/Activities</i>	Year 1				Year 2				Year 3			
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
information on activities relating to the implementation of Article 6 of the Convention and the New Delhi work program												
5.8. Compile and analyze information on capacity-building activities in accordance with the UNFCCC's capacity-building framework.												
6. Constraints and Gaps and Related Financial, Technical and Capacity Needs												
6.1. Prepare an analysis of financial, technical and capacity needs while undertaking the activities, measures and programmes to implement the Convention and improve the national communication on the continuous basis												
6.2. Compile and analyze information on financial and technical resources or other in-kind contributions made available by Vanuatu for the preparation of SNC												
6.3. Compile and analyze information on financial resources and technical support provided by GEF, Annex II Parties, bilateral/multilateral institutions, for activities related to climate change												
6.4. Prepare project proposals on adaptation and mitigation for funding												
6.5. Prepare proposals for pilot demonstration projects on adaptation focusing on barriers and ways to overcome these barriers												
6.6. Compile and assess information on technology and local know-how development needs												
7. Preparation and submission of the NC												
7.1. Compile a draft national communication and circulate it for comments												
7.2. Hold a national workshop 5 to consider and endorse the draft SNC												
7.3. Finalize and submit SNC												

Appendix C: TERMS of REFERENCE

PROJECT MANAGEMENT

Post: National Climate Change Coordinator (NCCC)

I. Project background information

The RMI completed its initial national communication and submitted it to the secretariat of the UNFCCC during the fifth Conference of the Parties in November 1999. The preparation of the initial national communication was supported through a Pacific Island Climate Change Assistance Programme (PICCAP), a GEF-funded enabling activity for the preparation of initial national communications of 10 Pacific island countries.

Under PICCAP programme countries were required to establish appropriate institutional arrangements to implement the various activities/tasks in the preparation of the national communication. The PICCAP Coordinator was appointed and assumed the role of a National Coordinator of Climate Change. The NCCC worked closely with the PICCAP Country Team to implement the project in collaboration with the regional PICCAP programme.

The project for preparation of the Second National Communication on climate change is a logical continual step towards further implementation of the UNFCCC at national level. Its main objective is to prepare a comprehensive report on the climate change related issues. The analysis conducted within the INC will be updated and upgraded/extended, which will result in preparation of a comprehensive national report. Furthermore, it will work towards ensuring that climate change issues are not considered as separate to national and local environmental concerns by integrating objectives into national and local strategic planning processes.

Duration of the project is 36 months. However, delays in the proposal reviews and constraints nationally as well as with the UNDP would likely add another 12 months for project completion.

II. Scope of the assignment

The SNC-PMO will manage the project on a day-to-day basis and is accountable to the executing agency for the planning, management, quality control, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The NCCC will ensure the regular monitoring and feedback from activities already under implementation.

The SNC-PMO will be located within the Climate Change Unit (CCU) of the OEPPC. The NCCC will work closely with the UNFCCC focal point and the National Advisory Committee on Climate Change.

III. Duties and Responsibilities

The National Climate Change Coordinator (NCCC) will have the following duties:

- Prepare a detailed work plan and budget;
- Prepare and submit to UNDP and the OEPPC, regular progress and financial reports;
- Coordinate and oversee the preparation of the outputs of the SNC;

- Ensure effective communication and adequate information flow with the relevant authorities, institutions and government departments in close collaboration with the NACCC;
- Ensure appropriate stakeholder participation in the project implementation and coordinate the work of all stakeholders under the guidance of the OEPPC and NACCC and in consultation with the UNDP office;
- Ensure that information is available to the NACCC about all Government, private and public sector activities, which impact on capacity development;
- Maintain and establish additional links with other related national and international programs and other Enabling Activities such as UNCCD, NCSA, NBSAP, PIREP and other national projects;
- Prepare the Terms of Reference for consultants and experts and ensure their timely hiring;
- Guide the work of consultants and experts and oversee compliance with agreed work plan and timely completion of tasks;
- Organize and coordinate the procurement of services and goods under the project;
- Coordinate, manage and monitor the implementation of the Project activities/tasks undertaken by the various thematic working groups, local experts; consultants, sub-contractors and co-operating partners;
- Assume overall responsibility for the proper handling of logistics related to all project workshops and events;
- Manage the Project finance, oversee overall resource allocation and where relevant submit proposals for budget revisions with the help of the UNDP officer;
- Undertake any other actions related to the Project as requested by the VMS and UNDP; and
- Serve as secretary to the NACCC.

IV. Qualifications and Skills

- Advanced university degree in the fields related to climate change and environmental management, project management and business management;
- Minimum of 5 years of working experience in the area relevant to the project;
- Substantial involvement in the preparation of the national GHG inventory, vulnerability and adaptation assessment and the preparation of first national communication;
- Demonstrated ability in managing projects, and in liaising and cooperating with all project stakeholders including government officials, scientific institutions, NGOs and private sector;
- Familiarity with international organizations operations and structure;
- Substantial experience in Government and in interdepartmental procedures;
- Familiarity with international negotiations and processes under the UNFCCC;
- Fluent written and oral communication in Marshallese and English
- Strong communications and interpersonal skills
- Excellent computer knowledge (MS Office, Internet)
- RMI citizenship

Post: CLIMATE CHANGE PROJECT ASSISTANT (CCPA)

I. Project background information

The preparation of SNC will involve a multitude of tasks/activities ranging from project management, financing and administration to the implementation of day-to-day activities or tasks, which would be carried out, by numerous individuals and organizations. In the light of the implementation of the project a Climate Change Project Assistant (CCPA) will be required to work closely with the NCCC in

managing and supporting the implementation of the activities/tasks relating to the preparation of SNC. The CCPA will be located in the CCU of the OEPPC.

Duration of the project is 36 months.

II. Scope of Work

The CCPA will assist the NCCC in the coordination of daily activities and the organization of local travel for national experts. He/she will also be responsible for all administrative (contractual, organizational and logistical) and all accounting (disbursements, record-keeping, cash management) matters under the Project.

III. Duties and Responsibilities

The CCPA will have the following duties:

- Manage the day-to-day operations of the Climate Change Unit (CCU), particularly with respect to the provision of technical services and support;
- Ensure that necessary financial, procurement, disbursement and personnel matters are effectively addressed;
- Compile and/or prepare the documentation necessary for the procurement of services, goods and supplies under the project;
- Ensure timely disbursement of funds from the project bank account;
- Maintain the project's files and supporting documentations;
- Maintain the project's disbursement ledger and journal;
- Prepare internal and external correspondence for the CCU;
- Maintain files and assist in the preparation of documentation in advance of and following all meetings, edit reports and other documents for correctness of form and content;
- Organize meetings, training workshops, etc for the project personnel and the thematic working groups;
- Organize and coordinate information exchange between participating institutions and internationally;
- Co-ordinate and assist in travel arrangements for project personnel or for representatives within the thematic working groups;
- Maintain and update the established national web site;
- Provide oral interpretation and written translation as required;
- Assist in the preparation of documents related to project activities; and
- Undertake other administrative/financial duties as requested by the NCCC.

IV. Qualifications and Skills

- University degree or equivalent;
- Minimum of 3 years of working experience in the area of project administration/accounting;
- Demonstrated ability to cope with spreadsheets and book-keeping;
- Experience in Government and in interdepartmental procedures;
- Familiarity with environmental issues and UNFCCC preferred
- Fluent written and oral communication English and desirable in Marshallese;
- Strong time-management, organizational and inter-personal skills;
- Excellent computer knowledge (Word, Excel, Power Point, etc);

- Experience with preparation of information for presentation on web site; and
- Local Resident of the RMI.

NATIONAL ADVISORY COMMITTEE ON CLIMATE CHANGE (NACCC)

The OEPPC and the National Climate Change Committee (NACCC) will be responsible for supervising project execution. This will include evaluating project outputs to ensure that project activities are being carried out in a timely manner and to acceptable levels of quality, and reviewing the status and needs of countries throughout project implementation. The NACCC will provide a policy and technical platform for the project and in that context it will have the following duties.

III. Duties and Responsibilities

The NACCC responsibilities will include the following:

- Provide operational directives to the SNC Project management team which will serve as a secretariat;
- Make informed consensus decisions on issues arising from the Climate Change Convention, Kyoto Protocol and any future Plans for Action as decided by the Conferences of the Parties;
- Facilitating political inclusion in the national climate change process, particularly to encourage appropriate policy development to enable effective national responses to climate change;
- Coordinate International Climate Change negotiations, ensuring consistency, relevancy and real benefits to Vanuatu in participation;
- Inform respective departments on Climate Change issues, particularly consideration of climate change issues in sectoral policies and other department plans;
- Monitor and facilitate the work of the Greenhouse Gas Inventory Network, detailed in Chapter 6, and including any relevant data collection and information systems;
- Ensure that the Department responsible for settling the financial contributions of Vanuatu to the UNFCCC is accorded;
- Recognize and encourage human resource development in the field of scientific research and development, including the formulations of projects and joint projects, particularly in the context of Climate Change;
- Establish and coordinate the work the National Group of Experts;
- Ensure appropriate climate change acts/legislation are enacted;
- Facilitate access to funding for the national climate change effort;
- Endorsing the detailed work plan, produced thematic reports, Final SNC Report and Action Plans; and
- Proposing to the Government to adopt the SNC for submission to the UNFCCC Secretariat.

THEMATIC WORKING GROUPS

A. THEMATIC WORKING GROUP ON GHG INVENTORY

I. Scope of Work

The Thematic Working Group on National GHG Inventory will be formed to carry out the inventory of GHG emissions in the RMI. The group will consist of experts from relevant ministries, institutions and agencies of government and non-government organizations. The group will ensure that specific tasks relating to the national GHG inventory is carried out in a timely manner and will ensure efficient coordination of outputs of consultants and national institutions. The activities undertaken by the national institutions will contribute to strengthening institutional arrangements for compiling, archiving, updating and managing GHG inventories.

II. Duties and Responsibilities

Particular duties may be as follows:

- Undertake national GHG inventories for the year 2000, according to the guidelines for the preparation of National Communications (17/CP.8);
- Participate in the training workshop on the use of IPCC guidelines, and GPG including one for the LULUCF;
- Include information on the other non-direct GHGs such HFCs, PFCs and SF₆ as well as CO, NO_x, SO_x and NMVOCs;
- Revise the input data, taking into consideration data gaps and areas needing improvement identified in the stocktaking exercise;
- Collect/gather available activity data from national sources to fill inventory data gaps;
- Identify and develop methods for overcoming inventory data gaps if there is no available data;
- Identify barriers to obtaining existing data for key sources and propose solutions;
- Archive relevant data for the project duration;
- Calculate emissions for the year 2000 for all sectors;
- Describe procedures and arrangements undertaken to collect and archive data for the preparation of national GHG inventories, as well as efforts to make this a continuous process, including information on the role of the institutions involved;
- Utilize the deliverables under the regional project; and
- Organize (in cooperation with the NCCC) workshop for presentation and discussion on the results obtained from the GHG Inventory.

III. Qualifications and Skills

The institutions and/ or expert individuals contracted for undertaking project activities should meet the following minimum criteria:

- Sound and broadly-recognized scientific expertise on climate research in the RMI;
- Prior experience in inventory preparation, through involvement in the Initial National Communication;
- Highly qualified scientists working in the fields of emission factor development or data collection methods; and

- Familiarity with the UNFCCC and IPCC technical guidelines.

VI. Expected output:

A report of the National GHG Inventory in accordance with the UNFCCC guidelines. The report should include information on other non- direct GHGs: HFCs, PFCs and SF₆ as well as CO, NO_x, SO_x.

B. THEMATIC WORKING GROUP ON VULNERABILITY ASSESSMENT AND ADAPTATION

I. Scope of Work

The TWG on V&A will consist of teams to be established by the NACC. The group will ensure implementation of specific activities outlined below, as well as coordination of the outputs of other consultants engaged outside the institution. The activities undertaken by the national institutions will also strengthen institutional arrangements for systematic climate observation, data management and control, processing and updating of meteorological and hydrological services data.

II. Duties and Responsibilities

Particular duties may be as follows:

- Participate in the training workshop on V&A methods and tools available for V&A assessment work;
- Revise the scenarios for climate change, applying the most recent version of MAGICC-SCENGEN;
- Analyze the climate changes for the period 1961-2000 for existing stations of the following parameters: temperature, precipitation, wind, cloudiness and sunshine hours;
- Identify the data needs, availability and suitability, and establish datasets baselines of the assessment;
- Analyze the existing climate data and parameters, by months and years;
- Prepare climate maps using GIS technology;
- Review the vulnerability assessment of the following sectors: agriculture, water resources, natural ecosystems, forestry, and human health, including identification of vulnerable areas that are most critical;
- Describe links between climate, and socio-economic baseline conditions of the country in the most vulnerable sectors;
- Based on the output of the vulnerability assessment, evaluate the feasibility of available adaptation measures to meet their specific needs and concerns arising from the adverse effects from the climate change;
- Prepare a national adaptation action plan to implement those measures being of highest priority including clear distinction of responsibilities among the relevant stakeholders, timeframe for fulfillment/implementation of the recommended measures, financial means for implementation of the measures, and identification of possible barriers and risks;
- Liaise and consult with the TWG on Technology Transfer and Research and Systematic Observation on issues relating to technology needs assessment and climatic conditions of the RMI;
- Organize (in cooperation with the NCCC) a workshop to present the results from V&A;
- Prepare comprehensive report on Vulnerability assessment and national adaptation Action plan; and

- Prepare a chapter on “Programmes containing measures to facilitate adequate adaptation to climate change,” in accordance with the UNFCCC guidelines.

III. Qualifications and Skills

The institutions and experts contracted for undertaking project activities should meet the following minimum criteria:

- Sound and broadly-recognized scientific expertise on climate research in the RMI;
- Prior experience in vulnerability assessment and adaptation process, through involvement in the First National Communication;
- Highly qualified scientists working in the fields of climate observation and vulnerability analysis in the specific sectors; and
- Familiarity with the UNFCCC, IPCC methodology, MAGICC/SCENGEN and other methods.

IV. Expected output:

Completed report on vulnerability assessment and adaptation strategy for the following sectors: agriculture, water resources, natural ecosystems, forestry and human health.

C. THEMATIC WORKING GROUP ON MITIGATION

I. Scope of Work

The thematic Working Group on Mitigation will be responsible for carrying out GHG mitigation analyses and identifying mitigation options for RMI. It will ensure timely and effective implementation of specific activities outlined below, as well as coordination with the outputs of other consultants engaged outside the institution.

II. Duties and Responsibilities

- Based on the results from the GHG Inventory and future development plans, particularly in the energy and land use change and forestry sectors, develop a baseline and mitigation scenarios to abate the increase of GHG emissions;
- Consider the main national economic and social development trends in the analysis, including expected GHG emissions in energy, agriculture, land-use change and forestry and waste management;
- Extend the analysis on the side of energy consumption, including energy consumption in the industry (for heating, for technological processes), in the public sector and in the residential sector;
- Revise the measures contained in the INC according to the latest economic development, including quantitative measures in all sectors;
- Identify, formulate and prioritize programmes containing measures to mitigate climate change within the framework of sustainable development;
- Finalize the GHG mitigation analysis using the selected tools and additional background information in order to finalize the cost-benefit analysis of the different measures, develop a series of mitigation scenarios to abate the increase of the GHG emissions;

- Liaise and consult with the TWG on GHG Inventory and the TWG on Technology Transfer and Research and Systematic Observation on matters relating to GHG inventories and on technology needs for mitigation;
- Formulate a final national action plan to abate the GHG Emissions including information cost analysis, assessment of technology options for the different mitigation options in various sectors, institutional capacity-building needs to sustain mitigation work, and the related legal and institutional frameworks;
- Organize (in cooperation with the NCCC) a workshop to present the results of the GHG Mitigation and draft national action plan; and
- Prepare final report on GHG mitigation and national action plan, including comments from the stakeholders.

III. Qualifications and Skills

The institutions contracted for undertaking project activities should meet the following minimum criteria:

- Sound and broadly-recognized scientific expertise on climate research in the RMI;
- Experience in preparing scenarios for GHG mitigation through involvement in the First National Communication;
- Qualified scientists working in the related areas: Energy, Agriculture, Land Use Change and Forestry, Waste; and
- Familiarity with the UNFCCC, software modeling tools such as LEAP, ENPEP, WASP, GACMO, etc.

IV. Expected output:

A completed GHG Mitigation Report and National Action Plan for effective response to the GHG emissions.

The proposed activities will be undertaken in appropriate sequence so as to maximize the synergies between each component of the proposed activities, as well as the efficiency and cost-effectiveness for the implementation throughout the project cycle. Some proposed that are not related to each other, such as GHG inventory and vulnerability assessment, will be undertaken in parallel, as indicated in Table 5.

Good practices in project implementation, such as the efficient use of financial and human resources, the engagement of qualified local and regional consultants, public participation throughout the project cycle, will be adopted where appropriate. Established guidelines will be followed, while established tools and methodologies will be used.

D. THEMATIC WORKING GROUP ON TECHNOLOGY TRANSFER AND RESEARCH AND SYSTEMATIC OBSERVATION

I. Scope of Work

The thematic Working Group on Technology Transfer and Research and Systematic Observation will be responsible for carrying out technology needs assessment for mitigation and adaptation; and for assessing the needs and priorities for research and systematic observation in the RMI. The group will

ensure timely and effective implementation of specific activities outlined below, as well as coordination with the outputs of other consultants engaged outside the institution.

II. Duties and Responsibilities

- Participate in a training workshop on the technology needs assessment and the use of the UNFCCC guidelines on research and systematic observation;
- Carry out technology needs assessment for RMI
- Undertake an assessment of the needs and priorities for research and systematic observation in close collaboration with Pacific Islands – Global Climate Observing System initiatives;
- Prepare an analysis of the climatic conditions of various stations in the RMI;
- Liaise closely and consult with the TWGs on GHG inventory, Vulnerability and Adaptation, and Mitigation on issues of relevance, especially on climate data, technologies and capacity building.
- Provide substantive input to the work of TWGs on Vulnerability and Adaptation and Mitigation
- Formulate an action plan for technology needs for mitigation and adaptation including assessment of technology options in various sectors, institutional capacity-building needs, related legal and institutional frameworks;
- Organize (in cooperation with the NCCC) a workshop to present the results of the technology needs assessment and research and systematic observation; and
- Prepare final report on technology transfer issues and research and systematic observation, including comments from the stakeholders.

III. Qualifications and Skills

The institutions and or expert individuals contracted for undertaking project activities should meet the following minimum criteria:

- Sound and broadly-recognized scientific expertise on various technologies and climate research in the RMI;
- Experience in preparing a report on technology, research and systematic observation through involvement in the Initial National Communication
- Qualified scientists working on issues relating to climate, weather, meteorology and hydrological services; and
- Familiarity with the methodologies for technology needs assessment and the UNFCCC guidelines.

IV. Expected output:

A completed technology needs assessment for the RMI and a final report on Research and Systematic Observation including emerging needs and priorities.

E. THEMATIC WORKING GROUP ON EDUCATION, TRAINING AND PUBLIC AWARENESS, INFORMATION AND NETWORKING AND CAPACITY-BUILDING

I. Scope of work

The TWG on ETPA, INFNET and CBT will be responsible for compiling information on the needs and priorities for ETPA, INFNET and CB. The group will examine ways to promote climate change education, training and public awareness building on the work already done on this issue during Phase II

enabling activities. The group will ensure timely and effective implementation of specific activities outlined below, as well as coordination with the outputs of other consultants engaged outside the institution.

II. Duties and responsibilities

- Compile and analyze information on activities/tasks relating to the implementation of the New Delhi work program on Article 6 of the Convention;
- Compile and analyze information on activities/tasks relating to the implementation of the Capacity-building framework of the UNFCCC;
- Identify the needs and priorities for climate change education, training and public awareness and capacity-building as they relate to GHG inventory, vulnerability and adaptation assessment, mitigation, technology transfer, research and systematic observation and other emerging priorities;
- Liaise and consult with the various TWG under SNC project and the task team on National Capacity Self Assessment;
- Prepare a draft National plan for implementation of Article 6 of the Convention and the UNFCCC capacity building framework;
- Identify technology needs for information and networking;
- Conduct a workshop (in collaboration with NCCC) on ways to promote climate change education, training and public awareness; and
- Prepare a chapter on: (i) Education, Training and Public Awareness, (ii) Information and Networking, (iii) capacity-building for inclusion in the compilation of the SNC.

F. THEMATIC WORKING ON NATIONAL CIRCUMSTANCES AND INTEGRATION OF SECOND NATIONAL COMMUNICATION

I. Scope of work

This TWG will be responsible for drafting a section on national circumstances and the integration of Second National Communication with input from the various thematic working groups. The group will ensure that all information pertaining to the SNC is compiled and disseminated for review and comment in a timely manner.

II. Duties and Responsibilities

- Compile the SNC in accordance with the UNFCCC guidelines based on information and or reports provided by the various TWGs;
- Liaise and consult with the various TWGS on issues relating to their respective competencies;
- Promote the integration of climate change concerns and issues into various TWG reports;
- Identify and highlight evolving needs and priorities relating to the preparation of second national communication and the implementation of the Convention;
- Prepare a final draft of the SNC including a 10-page executive summary and technical annexes (if any);
- Conduct a national workshop in collaboration with NCCT and the TWGs on the SNC; and
- Prepare final draft of SNC, print and submit to the UNFCCC secretariat and disseminate through CD-ROMs and a dedicated site on the VMS website.

SCOPE OF AUDIT

I. Scope of Work

The scope of the audit should be sufficiently clear to properly define what is expected of the auditor but not in any way restrict the audit procedures or techniques the auditor may wish to use to form an opinion. It should specify at least the following:

- A definition of the entity or the portion of an entity that is subject to audit (This will normally be the project office whether located within a government department or in a separate location);
- That the audit will be carried out in accordance with either ISA 1 or INTOSAI2 auditing standards;
- That the audit period is 1 January to 31 December of the year 20XX;
- That the scope of the audit is limited to the executing agency expenditures, which are defined as including (1) all disbursements listed in the quarterly financial reports submitted by the executing agency and (2) the direct payments processed by UNDP at the request of the executing agency;
- That the auditor will verify the mathematical accuracy of the CDR by ensuring that the expenditures described in the supporting documentation (the quarterly financial reports, the list of direct payments processed by UNDP at the request of the government, the list of disbursements made by UNDP as part of support services, and the UN agency expenditure statement) are reconciled to the expenditures, by disbursing source, in the CDR;
- That the auditor will state in the audit report the CDR expenditures excluded from the scope of the audit because they were made by UNDP as part of support services and the total expenditures excluded because they were made by a UN agency; and
- That the auditor will state in the audit report if the audit was not in conformity with any of the above and indicate the alternative standards or procedures followed.

II. The Audit Report

The TOR should clearly indicate the expected content of the auditor's opinion. (Refer to Annex 2 for a sample Audit Report.) This would include at least the following:

- That it is a special purpose report and its intended use;
- The audit standards that were applied (INTOSAI standards, ISAs, or national standards that comply with one of these in all material respects);
- The period covered by the opinion;
- The scope restriction for those expenditures that are the responsibility of UNDP (as part of support services) or a UN agency; and
- Whether the CDR presents fairly the expenditures for the project and that the funds were utilized for the purposes described in the project document and work plans.

This section should also indicate the due date for submission of a draft audit report and the signed audit report to the executing agency, as well as the due date for the submission of the signed audit report to UNDP.

III. Management Letter

¹ International Standards of Auditing (ISA) published by the International Auditing Practices Committee of the International Federation of Accountants

² International Organization of Supreme Audit Institutions

The TOR should specify that the auditor would submit a management letter at the completion of the audit. Guidance should be provided regarding the topics/issues to be covered in the management letter. At a minimum, the following topics/issues should be included:

- A general review of project progress and timeliness in relation to progress milestones and the planned completion date, both of which should be stated in the project document. This is not intended to address whether there has been compliance with specific covenants relating to specific performance criteria or outputs. However general compliance with broad covenants such as implementing the project with economy and efficiency might be commented upon but not with the legal force of an audit opinion;
- An assessment of the project's internal control system with equal emphasis on (i) the effectiveness of the system in providing the project management with useful and timely information for the proper management of the project and (ii) the general effectiveness of the internal control system in protecting the assets and resources of the project;
- A description of any specific internal control weaknesses noted in the financial management of the project and the audit procedures followed to address or compensate for the weaknesses. Recommendations to resolve/eliminate the internal control weaknesses noted should be included; and
- Comments as to whether recommendations made in the management letter for the previous audit were implemented or, if not, the implementation status.

More detailed guidance for each of the above general categories is provided below.

Review of project progress

As part of the general review of project progress, specific steps could include the following:

- Review annual and quarterly work plans, quarterly financial reports, and requests for direct payments and assess in terms of their timeliness and their compliance with the project document and the UNDP Programming Manual (6.5.3 and 6.5.4);
- Review the Annual Project Reports prepared by the executing agency and assess in terms of compliance with UNDP guidelines and whether the executing agency met its responsibilities for monitoring described in the project document and work plans;
- Review whether the decisions and/or recommendations of the above activities have been followed through by the executing agency;
- Review the pace of project progress and comment on the causes for delays; and
- Comment on whether implementation services of the UN Agency(s) were provided in line with project document and the work plan.

Assessment of internal control

The auditor is expected to conduct a general assessment of internal controls according to established internal control standards. An example of established internal control standards is available from the Organization of Supreme Audit Institutions (INTOSAI). The INTOSAI standards are intended for use by government managers to use as a framework to establish effective internal control structures. For further information, the INTOSAI *Guidelines for Internal Control Standards* can be found on the INTOSAI Web site www.intosai.org. An overview of the standards can be found in the UNDP Contact tool (Chapter 6).

In addition to the above general assessment, additional specific steps could include the following:

- Review expenditures made by the executing agency and assess whether they are in accordance with project document, work plans and budgets; and are in compliance with the UNDP Programming Manual (6.4);
- Review the process for procurement/contracting activities and assess whether it was transparent and competitive;
- Review the use, control and disposal of non-expendable equipment and assess whether it is in compliance with the UNDP Programming Manual (6.4.5); and also whether the equipment procured met the identified needs and whether its use was in line with intended purposes;
- Review the process for recruiting project personnel and consultants and assess whether it was transparent and competitive;
- Review the executing agency accounting records and assess their adequacy for maintaining accurate and complete records of receipts and disbursements of cash; and for supporting the preparation of the quarterly financial report; and
- Review the records of requests for direct payments and ensure that they were signed by authorized government officials.

IV. Recommendations for improvement

- Recommendations should be directed to a specific entity so there is no confusion regarding who is responsible for implementation. The response of the entity should be included in the management letter, immediately following the recommendation; and
- Also, the auditor may wish to comment on “good practices” (if any) that were developed by the executing agency that should be shared with other project personnel.

V. Available Facilities and Right of Access

- There should be a description of the nature and the location of all records belonging to the project. This list should specify those records kept at the executing agency's headquarters and those that are located at other offices; and
- The TOR should state that the auditor would have full and complete access at any time to all records and documents (including books of account, legal agreements, minutes of committee meetings, bank records, invoices and contracts etc.) and all employees of the entity. The auditor should be advised that he/she has a right of access to banks, consultants, contractors and other persons or firms engaged by the project management. If an auditor may not have unrestricted access to any records, person or location during the course of the audit, this restriction should be clearly defined, with reasons, in the TOR.

SIGNATURE PAGE

Country: REPUBLIC OF the Marshall Islands

UNDAF Outcome(s)/Indicator(s):
(Link to UNDAF outcome. If no UNDAF, leave blank) N/A

Expected Outcome(s)/Indicator (s): Enhanced Government capacity and commitment to meet its obligations under global conventions

(CP outcomes linked to the SRF/MYFF goal and service line)

Expected Output(s)/Indicator(s): Environmental considerations integrated into national development policies, strategies, programmes and projects

(CP outcomes linked to the SRF/MYFF goal and service line)

Implementing partner:

Other Partners: UNDP

Programme Period: 2006-2009
Programme Component: Energy and Environment for Sustainable Development
Project Title: ENABLING ACTIVITIES FOR THE PREPARATION OF RMI'S SECOND NATIONAL COMMUNICATION TO THE UNFCCC
Project ID:
Project Duration: 3 years
Management Arrangement: NEX

Budget US\$ 405,000
General Management Support Fee
Preparation phase US\$ 15,000
Total budget: US\$ 420,000
Allocated resources:
• Government (in kind) US\$ 10,000
• Regular _____
• Other:
 ○ Donor _____
 ○ Donor _____
 ○ Donor _____
• In kind contributions _____
Unfunded budget: _____

Agreed by (RMI Government's DEPPC-Office of the President):

 4 Aug 7, 2007

Agreed by (UNDP):

