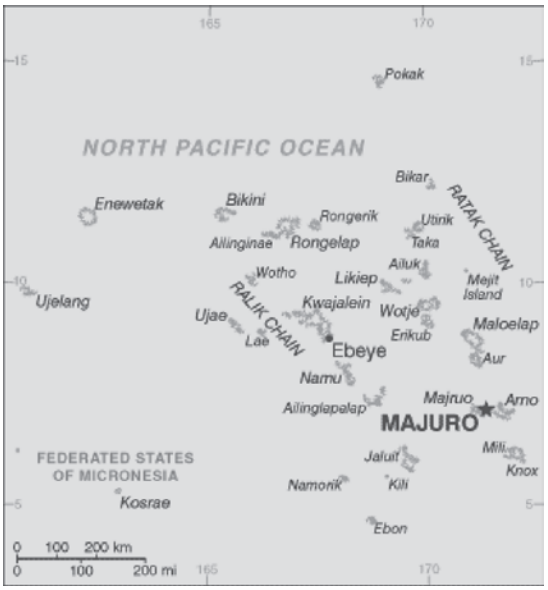
MARSHALL ISLANDS



This Country Risk Profile was prepared in consultation with the National Disaster Management Office, The National Emergency Management and Coordination Office, the Ministry of Internal Affairs, the Ministry of Public Works, the Ministry of Finance the Environmental Protection Agency, the Marshall Islands National Weather Service, the Ministry of Resources and Development, the Office of Environmental Planning and Policy Coordination, the Marshall Islands Marine Resources Authority, the Pacific Islands Applied Geoscience Commission (SOPAC) and key donors in the region.

1. DISASTER RISK PROFILE

The Republic of the Marshall Islands (RMI) consist of 29 low lying atolls and five islands just west of the international date line and north of the equator. Its land area is roughly 70 sq miles compared with 700 sq miles of ocean surrounding the islands.

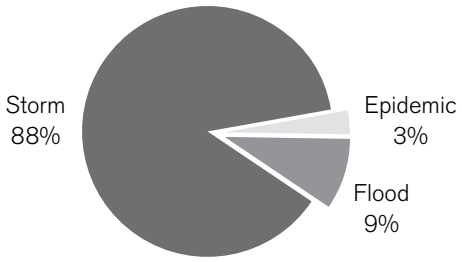
The major natural hazards facing the RMI are tropical storms, typhoons, storm surge and drought. Additional challenges/hazards include sea-level rise, coastal erosion, pollution of the marine environment, ecosystem degradation and food security. The hazard that poses the most threat to the RMI is sea-level rise. Its highest point is just 10 m above sea level.

The key natural hazards – tropical storms and typhoons, high surf and drought – are all climate-related and expected to worsen with global warming. Moreover, the RMI faces physical, demographic and socio-economic conditions which exacerbate vulnerability to the above hazards including high population density, a substantial poverty rate, low elevation, limited fresh water resources and wide dispersal of the islands.

Major storms do not often affect the Marshall Islands. The last typhoons which caused substantial damage to the Islands were Typhoon Gay and Tropical Storm Axel in 1992. However the RMI is impacted by high wave action and ocean swells after hurricanes in the neighboring Pacific Islands. The last major disaster to hit the RMI was in late 2008. A storm surge/coastal flood affected 600 people.

According to a 2008 World Bank assessment, while the list of hazards facing the RMI is comparatively small, their potential for damage is significant as the islands two urban areas account for 60-70% of the population. In terms of the country as a whole, the greatest impact would be from direct typhoon hits on the urban centers of Majuro and Ebeye. The land has low elevation and is narrow; housing and most buildings are generally of poor construction, not well maintained and tightly packed; there are no established agreed means of evacuation or identified shelters to seek refuge and the airport would be unusable. Climate change is likely to increase the intensity, frequency, path and other characteristics of typhoons.

% People Affected by Disaster Type



The inhabitants of the Marshall Island rely on rainwater for 95% of their fresh water.

A state of emergency was declared in 2007 after a prolonged drought depleted fresh water supplies. In 2008 the storm surge and high tides caused widespread flooding in the capital city of Majuro and other urban centers, located at just one meter above sea level and the government declared a state of emergency.

Key Natural Hazards	Key Man-made or Human-induced Hazards
Tropical Storms and Typhoons	Fire
High Surf	Contamination of water supply
Drought	Outbreak of epidemic diseases
	Commercial transport accidents

Capital	Majuro (Delap)
Official Language	Marshalese, English
Independence	October 21, 1986 (from the United States)
Area	total: 181.3 km^2 land: 181.3 km^2 water: 0 km^2
Land Use	arable land: 11.11% permanent crops: 44.44% other: 44.45% (2005)
Government	constitutional government in free association with the US
Population	64,522 (July 2009 est.)
GDP	Per capita US $3070 (2007)
HDI	not available
Terrain	low coral limestone and sand islands
Climate	tropical; hot and humid; wet season May to November; islands border typhoon b
Natural resources	coconut products, marine products, deep seabed mineral
Major products	copra cake, coconut oil, handicrafts, fish
Main development donors	United States

World Fact Book, World Bank Country Reports

2. DISASTER RISK MANAGEMENT FRAMEWORK

In 1987, RMI passed its National Disaster Management Plan. Seven years later, the enactment of the Disaster Assistance Act established a National Disaster Management Committee and a National Disaster Management Office (NDMO) located in the Office of the Chief Secretary. In 1994, the RMI also passed a Hazard Mitigation Plan, a National Disaster Manual, and an Airport Disaster Plan. A Drought Disaster Plan was passed in 1996, followed by the drafting of a revised National Disaster Management Plan in 1997. The most recent legislative activity in disaster risk management was the development of a Standard Hazard Mitigation Plan in 2005. The draft national action plan is linked to the RMI development policy.

The National Action Plan for Disaster Risk Management (NAP) aligns itself both with the regional policy framework (i.e. the Pacific Regional Framework for Action on DRR & DM) and the national policy framework. AUSAID - SOPAC has plans to support a NAP Disaster Facility to assist the RMI in establishing its DRM framework.

NAP GOALS AND OUTCOMES FOR THE RMI

Goal 1: Establish an enabling environment for improved DRM in the RMI
Outcome: Well-functioning Institutions and Systems for Disaster Risk Management

Goal 2: Mainstream DRM in planning, decision making and, budgetary processes at national and local levels
Outcome: DRM is mainstreamed in all relevant processes at all levels, and in all relevant sectors

Goal 3: Improve capacity for emergency preparedness and response at all levels
Outcome: Organizations and agencies at all levels are well prepared and resourced to respond to disasters

Goal 4: Build a strong and resilient DM early warning and emergency communication systems
Outcome: Effective early warning and communication between Majuro, Ebeye and the Outer Islands at all times

Goal 5: Access to safe and adequate clean water at all times
Outcome: Reduced vulnerability to water-related hazards and water-shortages resulting from hazards

Goal 6: Sustainable development of the coastal area
Outcome: Reduced vulnerability to coastal hazards

Goal 7: Reduce economic dependency of the Outer-Islands
Outcome: Improved Outer-Island resilience to hazards

Goal 8: Improve understanding of the linkages between zoning, building codes, and vulnerability to disasters
Outcome: Decision-makers and public more receptive to the need for adequate zoning and building codes in reducing vulnerability

Goal 9: Raise the awareness of DRM amongst the public
Outcome: Public are better informed of National and Outer Island DRM issues

Goal 10: NAP implementation and impact is monitored and reviewed on a regular basis
Outcome: The NAP is effectively implemented and kept up to date

Source: GFDRR Country Assessment Marshall Islands 2008

3. ACTIVITIES UNDER THE HYOGO FRAMEWORK OF ACTION

HFA Priority #1: Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation

THE NATIONAL DRM AGENCY

The overall coordination of disaster management falls under the National Disaster Committee (NDC) and its operational arm, the National Emergency Management and Coordination Office (NEMCO). They have traditionally focused on post disaster response, not disaster prevention mitigation or CCA activities. The NDC is chaired by the Chief Secretary and the NEMCO falls under the Chief Secretary Office (CSO), reporting directly to the President.

In response to the growing importance and attention to DRR and the implementation of the National Action Plan for Disaster Risk Management (NAP), an implementation unit (NAPIU) will be established under the CSO. There is currently a lack of resources and funding for the NAP implementation unit.

While the NDC meets regularly, it is also responsible for other tasks outside the national disaster issues; meetings cover a wider scope and include emergency relief coordination and planning efforts. Disaster risk management is regularly discussed by the sub-group of the NDC which is the DRM NAP Task Force. This group also meets regularly. The Task Force is chaired by the Deputy Secretary.

DRM LEGISLATION

In 1987, the RMI enacted the Disaster Assistance Act. Several laws such as the National Environmental Protection Act (1984), the Planning and Zoning Act (1987), and the Coast Conservation Act, 1988 all provide a good framework and require specific measures to be undertaken to prevent further environmental degradation.

DRM AT THE SUB-NATIONAL LEVEL

Local government has been engaged throughout the development of the NAP. The NAP requires that all Atoll Local Governments develop their own disaster risk management action plans.

DRM IN THE POVERTY REDUCTION STRATEGY

In terms of national development policy and priorities, the Government charted the *Vision 2018: The Strategic Development Plan Framework 2003–2018* which establishes the overall development priorities for the RMI and sets the first segment of the Government's Strategic Development Plan for the next 15 years. The Strategic Development Plan will consist of master plans which are mandated under the Vision 2018 focusing on major policy areas, and the Action Plans of Ministries and Statutory Agencies. Although Vision 2018 was drafted before the recent attention to DRR, it is felt within the RMI government that its goals remain broad and flexible enough to accommodate the emphasis on DRR without amendment.

The National Action Plan for Disaster Risk Management (NAP) aligns itself both with the regional policy framework (i.e. the Pacific Regional Framework for Action on DRR and DM) and the national policy framework (i.e. Vision 2018 and its Master and Action Plans).

INTERMINISTERIAL INVOLVEMENT IN DRM

The other agencies which have a role in DRM include:

- The Environmental Protection Agency (RMIEPA) – RMIEPA was created under the National Environmental Protection Act of 1984 and carries out multiple responsibilities including water quality monitoring, solid waste monitoring, public awareness and coastal management.
- The Office of Environmental Planning and Policy Coordination (OEPPC) was established to provide policy advice to the President and Cabinet; to ensure adequate attention is given to addressing the RMI's international commitments made through the international treaties; to ensure that activities arising from associated international conventions are linked to national priorities and to collaborate with other Government Partners/NGOs and communities in implementing environmental projects/programs.
- The Marshall Islands Marine Resources Authority (MIMRA). MIMRA is responsible for coordinating and regulating the exploration, exploitation and management of marine resources.
- The Ministry of Resources and Development is responsible for preparing much of the adaptation and response to the impacts of climate change as they arise.
- The Majuro Water and Sewer Company (MWSC) is responsible for the operation of the water supply, treatment and distribution systems.
- The National Disaster Management Committee (NDC) and is for responsible of overall coordination of disaster relief operations.
- The National Emergency Management and Coordination Office (NEMCO) is the operational arm of the NDC. It is

responsible for disaster response (not prevention); under the CSO.
- Marshall Islands National Weather Service is supported by the US National Oceanic Atmospheric Administration (NOAA) and provides weather, hydrologic, and climate forecasts and warnings for the Marshall Islands, its territories, adjacent waters and ocean areas.

CLIMATE CHANGE AND DISASTER RISK MANAGEMENT

The RMI adopted its Climate Change Strategic Plan in 2006. It was a short term strategic plan developed in line with the *Vision 2018* and based on group and regional discussions, public consultations and needs assessments conducted by OEPPC. This plan would lay the groundwork for establishing a longer-term climate change strategy for RMI. The strategic focus areas of this plan are:

- Institutional strengthening and capacity building
- Initial support to existing energy programs in the context of climate change
- Meet RMI's obligations under the United Nations Framework on Climate Change
- Clearinghouse mechanism
- Public awareness
- Link climate change to development through policy
- Building capacity in adaptation to climate change and develop a plan

HFA Priority #2: Identify, assess and monitor disaster risks and enhance early warning

NATIONAL, REIONAL AND LOCAL SECTORAL RISK ASSESSMENTS

Factoring in climate change into RMI's risk mapping is an extremely high priority and urgent need given the country's low lying atolls. The Marshall Islands Resources Authority (MIMRA) has begun with marine resources mapping surveys which consider future climate change but is in need of both improved technology and human resource development.

EARLY WARNING SYSTEMS

Different agencies have roles in hazard monitoring and no one agency is responsible. The National Weather Service has an advanced warning system available for all the islands. The DRM NAP will consolidate forecating responsibility to one agency. There is a relatively solid based of knowledge, data and tools for some sectors in the RMI particularly in terms of climate data. However there are some important gaps in mapping, monitoring and related activities. The NAP provides a framework for implementing risk reducing activities and risk assessment which would be founded on sufficient data and an understanding of the dynamics of the process. Therefore it is critical to develop an information management system wherein there is a system of organization, storage and sharing of data and information, including communication and sharing with outer islands.

FORECASTING

The RMI relies on the Meteorological Service Unit owned and supported by the US National Oceanic and Atmospheric Administration's (NOAA) National Weather Service and operated by RMI nationals contracted by NOAA. There are two tidal gauges (the longer established gauge provided by the University of Hawaii and the more recent Sea-Frame gauge, supported by Australia) which record sea-level data and are readily accessible. The record of temperature, precipitation, wind and pressure data are archived and available for time periods and forms which facilitate a range of risk and climate change reviews and assessments. These are housed at the U.S. National Climate Data Center. The data is used for three month climate and rainfall forecasts but could be further utilized for DRR/CCA activities.

Both the UNDP partnership in the Pacific Disaster Network and the SOPAC Pacific Disaster Network project will also strengthen technical skills for integrating an integrated hazards information system.

DATA SHARING

Developing an information management system should be a priorty for the RMI. There is no centralized system for natural hazard information management and no method to facilitate the storage and sharing of basic and the RMI would benefit from a low-tech" starter system to facilitate simple information sharing with the goal of having all sector actors utilizing the same data base for all phases (conceptualization, planning, implementing, benchmarking, monitoring and follow up).

HFA Priority #3: Use of knowledge, innovation, and education to build a culture of safety and resilience at all levels

PUBLIC AWARENESS

Increased community awareness ofnatural hazards is needed. Even though community awareness raising of natural hazards is an activity which will be covered under SOPAC's programming. Preparatory activities of the NAP require extensive consultation with government officials, line agencies, mayors, the private sector and local communities. They were made aware of the government's commitment to the DRR and CCA principles as well as the opportunities and benefits of risk reduction. A continuance of this participatory approach would further reinforce the message.

INFORMATION MANAGEMENT AND EXCHANGE

Regional organizations such as SOPAC provide an important networking partnership that link the DRM NAP development and implementation processes with other organizations within and outside country. Much needed technical assistance is also provided by the network partners. As stated above, however, a centralized system is needed to store and share hazards data.

RESEARCH

RMI has two institutes studying hazards and vulnerabilities. The first is the School of the Pacific Rainfall Climate Experiment which is a collaborative field project involving schools (from elementary to university level) and local meteorological services from the Pacific Island Countries (PICs), atolls and the US Mainland. Its headquarters is at the University of Oklahoma. This program seeks to educate students on environmental issues and enhance the science programs in the participating schools. The students collect data that is used for climatological research and are part of the study of weather patterns in the Pacific.

The second program is the South Pacific Sea Level and Climate Monitoring project that is managed by the Flinders University of South Australia. Under this program, 11 SEA Level Fine Resolution Acoustic Measuring Equipment (SEAFRAME) stations were established in the Pacific Islands including one in the Marshall Islands. Data from these monitoring stations will provide the PICs access to data on climate variability and the impact of GHG and this will help RMI in planning and developing strategies and responses.

HFA Priority #4: Reduction of the underlying risk factors (reduction of exposure and vulnerability and increase of resilience)

ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT

Development in the country has not taken into account current and future risks. With its fragile eco system

and dense population, safeguarding the RMI's natural resources, particularly its clean water supply is urgent. The RMI is poised to embark on a number of projects, especially as regards bolstering water supply systems in order to reduce the risks from drought. These include both individual and community water-harvesting projects. However, in general, these projects do not take climate variability and change explicitly into account.

The Integrated Water Management and Development Plan for Laura Groundwater Lens, Majuro will in part address this issue with $500,000 in GEF funding and $3,362,583 from other donors.

LAND USE PLANNING

At the national level, integration of disaster risk into land use planning provisions may be in place, but implementation falls short at the local level and unregulated costal development poses a serious threat to the islands. For example, in order to avoid further coastal degradation and reduce risks, the Coastal Conservation Act of 1988 and the National Environmental Protection Act of 1984 provide the enabling provisions, but local governments who are responsible for enacting ordinances for land-use zoning requirements have not done so. As a stop-gap, the EIA regulations have been used on a select case-by-case bases. The Coastal Management National Framework, approved by RMIEPA but not yet endorsed by Cabinet, will hopefully provide a basis for filling the gap. In terms of fire risk, the lack of land-use planning and zoning has resulted in houses being built too close together in overly narrow streets, resulting in a major fire risk for parts of Majuro and Ebeye. The NAP seeks to mainstream DRM into the planning, decision making and budgetary processes across a broader sectoral arena at both national and local levels.

BUILDING CODES

Reviewing and revising draft building codes is essential for sustainable development in the islands. Each donor or entity is responsible for implementing its own building codes as, despite having been drafted over a decade ago, building codes have not been enacted. There is currently no control over design and location of buildings and high density, structurally-deficient buildings pose health and fire hazards, especially in areas of rapid urbanization.

HFA Priority #5: Disaster preparedness, recovery and reconstruction at national, regional, and local levels

RISK FINANCING

The Disaster Assistance Account was established under Disaster Assistance Act and is supervised and controled by the Ministry of Finance. When there is a disaster, the amount utilized will be appropriated in the budget for the next financial year but the fund should maintain a continuous balance of $200,000 at the beginning of each fiscal year. It is very difficult to get critical capital expenditures required for risk reduction activities explicitly targeted in the budget due to a lack of willingness, awareness and accountability as well as lack of available funds.

There is a stationary fund which is only drawn upon in the event of a disaster (not for prevention or preparedness). If disaster does not strike, the funds accumulate (at present, the balance is US $2 million). The funds are appropriated in the Annual Appropriation Act for the following year based on the amount utilized in the current year. However, if the need arises for additional funding due to a disaster, the Chief Secretary in consultation with NDC will submit his/her request to the Ministry of Finance.

The government does not have mechanisms to compensate either for public or private assets damaged by a natural disaster. Compensation will be awarded only if the property was taken and used for coping with the disaster and only upon order by the Cabinet or NDC. All claims are filed with the Office of the Chief Secretary.

Under an amended agreement, the RMI will be able to request disaster assistance from USAID in a declared state of emergency, after utilizing the National Disaster Assistance Emergency Fund, (established by the amended Agreement as a first resource for disaster response), and requesting international assistance through the United Nations.

EMERGENCY MANAGEMENT

The National Emergency Management and Coordination Office (NEMCO) is in charge of emergency response in RMI and is headed by the Chief Secretary. The Emergencies Act 1979 outlines the steps for declaring a state of emergency but does not provide for an early warning protocol.

Under the Compact of Free Association (COFA), the RMI has access to the programs of the U.S. Department of Homeland Security/Federal Emergency Management Agency (FEMA). In the near future, USAID will expand its role in this arena and focuse on training and capacity building in order for the RMI to take full responsibility for DRM.

REGIONAL APPROACHES AND PARTNERSHIPS

RMI works closely with the neighboring countries in the Pacific and is part of many regional partnerships/ treaties. Vulnerability to extreme weather events affects not only the RMI but its neighboring countries; therefore it is beneficial to collaborate in responding to this common issue. One such initiative is the Micronesia Challenge wherein the participant countries aim to conserve 30 percent of marine resources and 20 percent of forest resources. The RMI has a mutual assistance agreement with the United States under the Compact of Free Association.

Moreover, RMI works with several key international development assistance partners in DRM, including: the United States, Republic of China, Japan, the EU, AusAID, SOPAC and the Asian Development Bank. RMI and the U.S. have a strong relationship of mutual assistance covered under the Compact of Free Association (COFA). In exchange for certain defense rights including the lease of 11 islands on Kwajalein Atoll, the U.S. provides guaranteed financial assistance through the Office of Insular Affairs. RMI participates in many of the TA activities under this Office and has access to many U.S. domestic programs including disaster preparedness, response and recovery program through the Department of Homeland Security (DHS)/Federal Emergency Management Agency (FEMA). RMI has several ongoing projects with EU/AusAID and SOPAC. In the future UNDP, UNICEF, IFRC and regional organizations as Secretariat of Pacific Community (SPC) may become involved.

4. KEY DONOR ENGAGEMENTS

One of the major donors in the RMI is the United States. The RMI has a mutual aid agreement with the US. In exchange for defense rights, the U.S. provides support for capital improvements and development assistance.

The Asian Development Bank (ADB, through its Regional Environment Technical Assistance Project, facilitated the preparation of the National Environment Management Strategy. Recently ADB prepared a Regional Technical Assistance Report on Regional Partnerships for Climate Change Adaptation and Disaster Preparedness. This TA was undertaken as part of ADB's contribution to a World Bank led initiative looking at the feasibility of a catastrophe insurance scheme for the Pacific.

The Pacific Regional Environment Programme (SPREP) conducted an in-depth study on the potential impact of expected climatic changes (primarily sea-level and temperature rise) in the Marshall Islands.

The Pacific Islands Applied Geoscience Commission (SOPAC) provides technical assistance to RMI through its (a) Ocean and Islands Programme for the Marshall Islands; (b) Community Risk Programme; and (c) Reducing Vulnerabilities of Pacific ACP States.

Through the Pacific Islands Climate Change Assistance Program (PICCAP), RMI prepared its First National Communication Report to the UNFCCC. PICCAP is funded by GEF and its main goal is to assist countries to build sustainable capacities to accomplish the required activities under the convention.

UNDP and GEF have also been RMI's partners in addressing climate change issues. The following programs were either implemented, funded, or overseen by UNDP Fiji MCO: (a) National Capacity Self Assessment (NCSA) (GEF-US $225,000) provides tools/guidance in complying with their obligations to UNFCCC, UNCBD and UNCCD; (b) Second National Communications to UNFCCC: Stocktaking Exercise and Enabling Activity (US $420,000) – provides assistance in preparing the SDN for submission to UNFCCC; (c) Action for the Development of Marshall Islands Renewable Energy (ADMIRE) (Budget US $2,6500,000; GEF US $1,000,000) – aims to broaden the scope and utilization of renewable energy; (d) Coconut Bio-Fuel (UNDP-US $30,000) – explores the use of coconut products as a source of electricity for rural communities; (e) Regional Energy Program for Poverty Reduction (UNDP, Bangkok – US $2,782,500) – aims to contribute towards MDG targets through energy initiatives. In addition, UNDP PC provides funding to SOPAC for Mainstreaming Disaster Risk Management and Adaptation to Climate Change (ACC) into National Development Planning (Budget US $500,000 for all PICs).

The World Bank, together with ADB and with funding provided by GFDRR and PFIII, are currently undertaking a Feasibility Study Catastrophic Risk Pool. They are also conducting Regional and Country Assessments as part of the TA for Sustainable Management through Reduced Risk from Disaster and Climate Variability in the Pacific Islands.

Existing Projects with Donors and International Financial Institutions	Funding Agency/ International Partners	Allocated Budget and Period (US$)	HFA Activity Area(s)
Sustainable management through reduced risk from disasters and climate (Fiji, Kiribati, Marshall Islands, Papua New Guinea, Solomon Islands, Timor-Leste and Vanuatu)	World Bank	2008–present US $1,900,000	2,3,4,5
Pacific Catastrophe Risk Pool Feasibility Study	World Bank	2008–present US $400,000	1,2,5
Regional Technical Assistance Report on Regional Partnerships for Climate Change Adaptation and Disaster Preparedness	ADB	Not available	1,2,4
Preparation of the National Environment Management Strategy (NEMS)	ADB	Not available	1
Ocean and Islands Programme for the Marshall Islands	The Pacific Islands Applied Geoscience Commission (SOPAC)	Not available	4
Reducing Vulnerabilities of Pacific ACP States (Fiji, Papua New Guinea, Samoa, Solomon Islands Tonga, Tuvalu and Vanuatu, Cook Islands, Federated States of Micronesia, the Marshall Islands, Nauru, Niue and Palau)	The Pacific Islands Applied Geoscience Commission (SOPAC) /EU	2003–present	1,2
Community Risk Programme	The Pacific Islands Applied Geoscience Commission (SOPAC)	2008–12	3,4

(Cont.)

Existing Projects with Donors and International Financial Institutions	Funding Agency/ International Partners	Allocated Budget and Period (US$)	HFA Activity Area(s)
Pacific Islands Disaster Assistance Program (PDAP) (The Cook Islands, Fiji, Kiribati, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu, Federated States of Micronesia and the Republic of the Marshall Islands)	USAID/OFDA	1995–present US $4,001,75	5
Pacific Islands Climate Change Assistance Program (PICCAP) (The Cook Islands, Federated States of Micronesia, Fiji, Kiribati, Marshall Islands, Nauru, Samoa, Solomon Islands, Tuvalu and Vanuatu)	SPREP	1997–present	4
EDF 9 B Envelope – Upgrading monitoring and early warning systems	European Union	3.2 million euro	2
Pacific Islands Climate Prediction Project (The Cook Islands, Fiji, Kiribati, Niue, Samoa, Solomon Islands, Tonga, Tuvalu, Vanuatu and Papua New Guinea)	AUSAID and the Australian bureau of Meteorology	2004–present US $2.2 million	2
South Pacific Sea Level and Climate Monitoring Project (The Cook Islands, Federated States of Micronesia (FSM), Fiji, Kiribati, Marshall Islands, Nauru, Papua New Guinea (PNG), Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu)	AUSAID	1991–2010	
NAP Disaster Facility	AUSAID	2009–2011	1,2,3
Pacific Disaster Net	SOPAC, UNDP, UNOCHA, IFRC		3,5
Project in Integrated Water Management	SOPAC-GEF	US $500,000	4
Reducing Vulnerabilities of Public ACP States	SOPAC-EU	2003–present US $2,797,329	

5. GLOBAL FACILITY FOR DISASTER REDUCTION AND RECOVERY (GFDRR): ACTION PLAN

Based on the GFDRR funded Country Assessment of the RMI, six priority areas were identified:

- Strengthening the capacity of National Emergency Management and Coordination Office (NEMCO);
- Developing an information management system;
- Enhancing community-based awareness, education and participation in risk-reduction and resilience-building;
- Climate-proofing new water supply developments;
- Reviewing and revising draft building codes; and
- Early warning response.

Two of these priority areas are already or likely to be supported by other donors or agencies – awareness raising slated to be taken up by SOPAC and early warning response has a host of interested donors coordinated by SOPAC.

The World Bank could support the remaining four priority areas as follows:

- **Strengthening the capacity of the National Emergency Management and Coordination Office (NEMCO),** under which the NAP Implementation Unit (NAPIU) will operate. The support would be for Technical Assistance. The success of the NAP will depend heavily on the NAPIU, and this, in turn, depends heavily upon ensuring that NAPIU has strong capacity for technical advice, leadership and coordination. The NAP has been produced by an extensive, inclusive process of consultation, including local government, civil society and the private sector, which, as

a result, has garnered significant in-country commitment. The institutional arrangements, placing the NAP within DRC/NEMCO under the Chief Secretary's Office within the Office of the President, gives it strong positioning. Within three years, the preliminary implementation plan would be advanced and set the stage for implementation of the longer-term action plan.

- **Developing an information management system.** Such a system does not currently exist. The actions under the NAP (and other DRR and CCA actions) require cross-sectoral, cross-governmental (national to local) collaboration and integration of effort. And that requires a systematic system of organization, storage and sharing of data and information, including communication and sharing with outer islands. Technically, such a system could be established well within a three-year period, and, once established, would have long term benefits in facilitating integrated action across agencies and sectors. To be successfully implemented, the information system would have to be strongly championed by NEMCO.

- **Climate-proofing new water supply developments.** The RMI is poised to embark on a number of projects, especially as regards bolstering water supply systems in order to reduce the risks from drought. These include both individual and community water-harvesting projects. However, in general, these projects are not taking climate variability and change explicitly into account in terms of designing to acceptable levels of risk. Here is an excellent opportunity, with minimal additional support required, to maximize the synergy between DRR and CCA with actual on-the-ground risk-reducing measures. The climate-proofing measures would be "added value" to efforts that are current getting underway to enhance water supply systems. The time-frame for implementation is short, well within three years. The "on-the-ground" benefits, however, are long-term, and promote sustainable water resources in the face of future climate change.

- **Reviewing and revising draft building codes,** ensuring that DRR and CCA are incorporated explicitly. While RMI has had draft building codes for nearly two decades, they have never been enacted by local government. The government of RMI, as voiced by the NRC, the OEPPC and the EPPSO, stresses the paramount importance of establishing building codes. While there has been failure to enact draft codes in the past, it is felt that the circumstances are changing and are now more favorable for enactment, particularly if efforts at awareness raising and greater participation in DRR and CCA are pursued. The reviewing and revising of draft building codes is contained with the NAP as an action and is highlighted by the DRC as a priority. The required time-frame is short, within three years, but the benefits, if enacted, are long-term and sustainable.

Indicative Program for GFDRR Funding *(Projects and engagement areas being considered for GFDRR funding)*	**Implementing Agency/ International Partners**	**Indicative Budget and Period (US$)**	**HFA Activity Area(s)**
Facilitate Implementation of the NAP through providing TA support to the NAP Implementation Unit (NAPIU) *Priority Activities:* – Establish the NAPIU to lead the NAP implementation – Develop DRR/CCA policies and work with government ministries and local government to build an enabling environment for mainstreaming DRR/CCA in RMI.	CSO with NDC, NEMCO	US $500,000 2009–2011	1,2,4
Establish Integrated Hazards Information System and Tools (with GIS capability) *Priority Activities:* – Provide TA support for the development of an integrated hazards information system including: – Develop and adopt a Hazards Information Policy: – Assess data needs and products for DRR/CCA – Identify long term storage requirements, analysis tools and mapping needs – Acquire appropriate computer hardware, software and high speed Internet connection – Support capacity building through populating the information system with available historical data and undertaking vulnerability mapping and risk modeling for CC and risk prediction	CSO with NAPIU, EPA, Met Services, MWSC, R&D, MIMRA, EPPSO, IA	2009–2011 US $300,000	2
Climate-proofing water supply systems *Priority Activities:* – Identify and establish collaborative arrangements with donors, government agencies, private sectors, and communities involved in water supply – Develop and pilot a climate-proofing approach to a new water harvesting initiative, involving: 1. Assessing the system design with respect to risks of drought (present and future); 2. Consultation with water consumers and system designers concerning acceptable levels of risk; 3. Assessment of options for reducing the risks; – Build in-country capacity to implement the approach and tools; – Incorporate the climate-proofing approach and methods into the wider programme of water supply developments	EPPSO, with EPA, Weather Office, Min. of Internal Affairs, PWD	2009–2011 US $500,000	4
Review, revise and promote building codes *Priority activities:* – Review the draft building codes and identify potential areas for improvement and strengthening with respect to risk reduction. – Develop preliminary set of options for revision covering range of hazards – Hold consultative workshops with local governments and communities in order to incorporate stakeholder views and preferences – Revise draft based on outcomes of consultation – Identify key proponents of building codes within government and promote government approval	CSO with NDC, NEMCO	2009–2011 US $200,000	4
Total Budget Requested		**US $1.5 million**	

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