

Marshall Islands

National progress report on the implementation of the Hyogo Framework for Action (2009-2011)

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Outcomes for 2007-2009

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Outcomes:

The Republic of the Marshall Islands (RMI) faces numerous development challenges with geographical, social and economic factors contributing to high levels of vulnerability, and climate change is expected to exacerbate existing challenges. RMI recognizes that disaster risks and vulnerabilities need to be taken into account in order to move forward meaningfully with the development priorities articulated in the National Sustainable Development Strategy Vision 2018 and other linked development plans and programmes. The integration of disaster risk reduction (DRR) and disaster management (DM) into sustainable development policies, planning and programming needs further strengthening and the level of awareness amongst all national and local level stakeholders and decision makers that DRR and DRM are key development issues needs to be improved.

The National Action Plan for Disaster Risk Management 2008-2018 (DRM NAP) was developed in 2007 to address the existing gaps with regard to the management of disaster risks in RMI. It is an important and integral supportive element towards the achievement of the RMI's sustainable national development imperatives.

Current progress in DRR varies. Most progress has been made in addressing water issues and education and awareness on DRR. Progress has been weakest in relation to creating an enabling environment for improved DRM; mainstream DRM in planning, decision making, budgetary processes at the national and local levels; and implementing and enforcing building codes and zoning. Currently DRR is not specified in national budgeting expenditure and RMI faces the challenge of limited technical and financial resources across ministries.

The Joint National Action Plan for Climate Change Adaptation (CCA) and DRM, currently under development, will strengthen the integration of CCA and DRM activities and support that risk reduction activities are implemented in a more holistic manner. It will also facilitate the implementation of the new Climate Change Policy and on-going efforts for DRM.

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Outcomes:

As part of the DRM NAP implementation process, draft DRM Arrangements were developed, describing the institutional structure for the ongoing management of disasters and as well mitigation, preparedness, response and relief in the RMI. The new arrangements focus more on DRR, shifting away from the more traditional Disaster Management (DM) approach. The draft DRM Arrangements are yet to be endorsed. An underlying and cross-cutting issue in achieving progress on DRR continues to be the limited capacity (i.e. resources and skills) within all sectors, including government and non-government groups. More visible prioritization of goals and management of the DRM National Action Plan activities is needed. Effective coordination is required to achieve a consistent and coordinated approach to DRM in the RMI. The inadequate resourcing of the National Emergency Management and Coordination Office (NEMCO) is a key reason for the lack of progress in the implementation of the DRM NAP, given the key role of the

Office. Currently there is also a limited sense of ownership of the NAP that exists amongst key ministries which needs to be addressed.

A greater level of understanding is needed amongst community level decision makers on the importance of viewing activities associated with risk reduction as key development issues. This increasingly includes climate change adaptation. Much more work is needed to highlight the link between unsustainable development practices and high levels of vulnerability of local communities. Until this is achieved, there will be limited progress made in the RMI in relation to DRM.

Currently, the level of progress in risk reduction at the local level is driven by effective non-government organization (NGO) initiatives. The national government needs to more effectively engage with non-government counterparts (both NGO and the private sector) which will enhance partnerships and achieve greater progress at the same time.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Outcomes:

The RMI Emergency Response Plan has been developed in partnership with national stakeholders in 2009, and is currently under consideration of the Chief Secretary's Office (CSO). The Emergency Response Plan describes of response functions, lead and support agencies and their roles for the following:

- Health and Medical
- Fire and Rescue
- Evacuation
- Community Welfare
- Logistics Supply
- Information Management
- Impact Assessment

In October 2001, a USAID-led tabletop exercise on disaster response assisted in strengthening the overall coordination of disaster response, by among others describing the steps required at the national level to access US support via United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). The arrangements with the USA regarding disaster response assistance changed in 2008, from being Federal Emergency Management Agency (FEMA) to USAID. It is hoped the new arrangement will allow for greater flexibility in times of disaster.

However, coordination of disaster response at the national level remains weak.

There is a limited commitment to DRR and lack of awareness that being proactive in terms of reducing risk can reduce the cost of disaster response and rehabilitation. For example, the regulations of the Disaster Assistance Emergency Fund (DAEF) do not permit the funds to be used for DRR measures such as addressing the underlying risks and reducing the impact of future disasters.

Strategic goals

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Strategic Goal Statement 2011-2013:

Mainstream disaster risk management into national and local policies, plans, budgetary provisions and decision-making processes, across all sectors and all levels of government and communities, with an emphasis on disaster risk management being the responsibility of the whole country and that it is everyone's business.

The Vision of the National Action Plan for Disaster Risk Management is: "A safer and more resilient RMI to all hazards through well informed and prepared people today and for generations to come. "

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Strategic Goal Statement 2011-2013:

Establish enabling environment for improved disaster risk management in the Republic of the Marshall Islands by strengthening DRM organizational arrangements at national and local government levels; adequately resourcing key organizations for DRM at national and local government levels; strengthening human resource capacity of key organizations for DRM at national and local government levels; and by strengthening the capacity of key community groups and NGOs in Marshall Islands.

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Strategic Goal Statement 2011-2013:

Improve capacity for emergency preparedness and response at all levels by strengthening the National Emergency Operations Center (NEOC) infrastructure to better prepare for, and respond to, disaster events; strengthening capacity for coordination during disasters; strengthening response capacity amongst relevant ministries at national and local levels; informing public about emergency communication and procedures; and by assisting communities in the Outer Islands to develop their own mechanisms to supplement the national and local government plan for emergency preparedness and response.

Priority for action 1

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 1: Core indicator 1

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Is DRR included in development plans and strategies? Yes
- * Yes: National development plan
- * Yes: Sector strategies and plans
- * Yes: Climate change policy and strategy
- * No: Poverty reduction strategy papers
- * Yes: Common Country Assessments (CCA)/ UN Development Assistance Framework (UNDAF)

Description:

The Draft National DRM Arrangements (2010) for the RMI outline a proposed change in the way in which disaster risk management (DRM) is managed, with a greater focus on disaster risk reduction (DRR). These Arrangements are currently under consideration by the National Disaster Committee (NDC) and may be revised to incorporate recommendations and additional outcomes which were highlighted through the progress review of the Disaster Risk Management National Action Plan (DRM NAP) in 2010.

The DRM NAP (2008-2018) is in its early stages of implementation. Its aims are ambitious, and as yet, little dedicated progress has been made in addressing its ten goals. The first two goals of the DRM NAP address Core Indicator 1 of the HFA, and progress on these goals in particular is limited. Namely these DRM NAP goals are i) Goal 1: Establish enabling environment for improved Disaster Risk Management in Marshall Islands and ii) Goal 2: Mainstream DRM in planning, decision making and budgetary processes at national and local levels.

Inclusion of DRR exists to some degree in key ministry's sector plans. Sectors with a more direct or obvious link to DRM (e.g. the National Weather Service) are making considerable progress in terms of mainstreaming DRR, partly because it forms elements of its core business, but also due to deliberate commitment to progress NAP goals. Other sectors, such as Ministry of Health, are including elements of DRR, however, this is occurring incidentally and the term "DRR" remains misunderstood to some degree.

Context & Constraints:

A major challenge to this PFA is the current status of the DRM Arrangements, which were drafted after a review of all DRM policies and legislation in 2008. The DRM arrangements, which highlight the role of

the National Emergency Management Coordination Office (NEMCO) to promote and support disaster risk reduction, are currently under consideration by the NDC, and have been since January 2010. The NAP mentions that the strengthening of NEMCO (which is extremely under-resourced) should follow from the review of the DRM Arrangements. Thus, the challenge is to endorse the DRM Arrangements so as to provide the urgent and necessary support NEMCO requires.

Highlighting the challenges of resourcing and limited capacity is unavoidable under this Core Indicator, as all key ministries suffer from scarce skills and resources to undertake DRM. Furthermore, there is a lack of understanding and awareness of what DRR means in practice, with many ministries focusing on the more traditional approach of disaster response and rehabilitation. Added to this capacity issue is the call from donors to cut back on public expenditure in Public Sector Reforms. Small island countries like the RMI therefore face a double challenge – one of scarce resources, which are further threatened in the future by reduced expenditure.

Priority for action 1: Core indicator 2

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Means of verification:

* Is there a specific allocation of budget for DRR in the national budget?

* 1.09% (incl. DRR and CCA for 2011) % allocated from national budget

* USD\$770,000 (2011) USD allocated from overseas development assistance fund

* - USD allocated to hazard proofing sectoral development investments (e.g transport, agriculture, infrastructure)

* USD\$419,000 (2004-2010) USD allocated to stand alone DRR investments (e.g. DRR institutions, risk assessments, early warning systems)

* USD\$170,000 (donated from Australia, USA, Turkey and China following the high swells of 2008-money allocated to wave mitigation) USD allocated to disaster proofing post disaster reconstruction

Description:

DRR is not specifically included in national budgeting expenditure. The RMI faces the challenge of limited technical and financial resources across ministries. As a result of limited capacity and understanding of what DRR means in practice, risk reduction activities are not addressed in a dedicated manner. However, some sectors address DRR with an incidental approach – for example by addressing water safety and security (Environment Protection Authority - EPA), supporting local food crops (Ministry of Resources and Development) and education and awareness of waterborne diseases (Ministry of Health).

Budget analysis for the fiscal years 2004-2011 shows that since 2004 the total budget allocation for DRM and CCA has increased by 124 per cent to \$1.4 million in 2011. In 2011 the year on year percentage change for DRM & CCA funds declined by 4.9% driven by the need to cut total budget expenditure by

5% for 2011 rather than any political change. The need to curtail expenditure arose from the global economic environment during the global financial crisis 2008-2010 which caused a larger than expected increase in the price of imports to the externally dependent island economy of the RMI.

The National Emergency Management & Coordination Office and the Office for Environmental Planning and Policy Coordination (directly responsible for overseeing the work on DRM and CCA) received a combined budget allocation averaging \$130,000 over the analysis period, accounting for a mere 0.11% of the total budget allocation and 0.1 per cent of GDP.

Domestic financing of DRM & CCA accounts for only 46% of the total allocation in 2011. The rest of the funds are provided by donors, largely by the USA and the Republic of China, Taiwan.

Context & Constraints:

A dedicated and adequately resourced approach to DRR, with specific DRR approaches being included in strategic plans at the national and sector level, is lacking in the RMI. Capacity once again is a key constraint, in addition to limited awareness of what DRR means in practice. Before any mainstreaming of DRR can occur, a level of understanding is required so as to better encourage and incorporate DRR related activities. To do this, funding would be required, in addition to better resourced ministries to go about mainstreaming more effectively.

Priority for action 1: Core indicator 3

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Do local governments have legal responsibility and budget allocations for DRR? No
- * No: Legislation
- * No: Budget allocations for DRR to local government

Description:

Given the sparse and scattered nature of the RMI's outer islands, activity outside the urban centres of Majuro and Ebeye is overseen and implemented by local governments, community organizations and NGOs. It is decentralized due to the geographical nature of the islands. Local governments (e.g. mayors) have legal authority in the outer islands; however, it is traditional land owners who have the legal rights to over-rule local mayors on issues on their own land. Local level disaster plans are yet to be developed; however, this is identified as an activity in the NAP. Limited resources (both human and financial) in outer islands are also an issue, and no specific funds for DRR are available.

Context & Constraints:

Land issues are highly sensitive in the RMI and it is challenging to offer advice to the land owners how to use or develop their land. Public awareness of why certain legal regulations exist and what sustainable development means needs to be strengthened, i.e. to maintain a healthy environment and to ensure future generations have access to resources such as water, food and land. An ongoing awareness campaign in Marshallese is desperately needed to overcome this challenge. A collaborative

effort is required between national and local level decision makers on the issue of DRM/DRR to deliver a consistent message.

NGOs are active at the local level, and many undertake DRR activities. Women United in the Marshall Islands (WUTMI) is a strong NGO with headquarters in Majuro, and networks reaching to all atolls. Their activities include developing sustainable livelihoods and education and awareness on health and nutrition, amongst other things.

The Coastal Management Advisory Committee's (CMAC) member organisations support local risk management efforts with the inclusion of local and traditional knowledge and alignment of their activities to the goals of DRR.

Priority for action 1: Core indicator 4

A national multi sectoral platform for disaster risk reduction is functioning.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Are civil society organisations , national planning institutions, key economic and development sector organisations represented in the national platform? No

* 0 civil society members (specify absolute number)

* 0 sectoral organisations (specify absolute number)

* 0 women's organisations participating in national platform (specify absolute number)

Description:

Currently RMI does not have a functioning national multi-sectoral platform for disaster risk reduction. The NAP outlines the arrangements for DRM in the RMI and includes the National Disaster Committee, the NAP Implementation Unit (NAPIU, as yet not formalized) and the NAP Task Force, which has multi-sectoral (but not civil society) representation. In addition, there is a national committee on Sustainable Development, under which the NAP Task Force sits. It is intended that once additional donor funding comes through, the NAPIU will play the role of coordinating, facilitating and implementing NAP activities.

The Coastal Management Advisory Committee (CMAC) is a government / non-government partnership group, with a wide membership. Member organisations support local risk management efforts with the inclusion of local and traditional knowledge, but without reference to, or knowledge of, the NAP. Their activities are aligned to the goals of DRR, and include conservation, awareness raising and educational initiatives, baseline data collection and hazard mapping.

Context & Constraints:

There is a current disconnection between the activities of civil society organizations and the national government. NGOs and civil society organizations are rarely, if ever, present in any of the various committees or forums associated with national planning. This represents a gap in what could be achieved, given the active nature of several NGOs, including the women's NGO – Women United in the Marshall Islands (WUTMI).

Many of the RMI's various task forces and committees contain the same members. This demonstrates the level of capacity that exists in government to deal with a range of issues, and the need for members to sit on a range of committees. Therefore, until DRR is given a higher priority, and the NAPIU is strengthened, progress on this core indicator will remain limited.

Priority for action 2

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 2: Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

* Is there a national multi-hazard risk assessment available to inform planning and development decisions? No

* No: Multi-hazard risk assessment

* 0 % of schools and hospitals assessed

* 0 schools not safe from disasters (specify absolute number)

* No: Gender disaggregated vulnerability and capacity assessments

* No: Agreed national standards for multi hazard risk assessments

Description:

Although not fully coordinated, some progress is being achieved in relation to the development of national and local level risk assessments. Outer Island Profiles are being developed through a partnership between Ministry of Internal Affairs (IA), International Organization for Migration (IOM) and USAid and local organizations such as Marshall Islands Conservation Society (MICS). The Outer Island Profiles collect information on response capacity by stocktaking things such as number of schools (and their ability to serve as an Emergency Shelter), number and condition of water catchments, warehousing, radios, internet access etc. Basic demographic information is also collected (e.g. number of house holds, people and gender breakdown).

Coastal risk assessments and surveys are being undertaken by several organizations, including EPA, MICS, Natural Resource Assessments Surveys (NRAS) Team, Marshall Islands Marine Resources Authority (MIMRA) and assistance from the University of Auckland. While the EPA has plans to develop a database with baseline information, progress on this front is limited. CMAC provides a forum for information exchange and also provides the means to implement cost sharing especially when undertaking work on the outer islands.

Context & Constraints:

The fact that there has not been a major disaster for some time is a challenge in raising the profile of DRR and DRM. If a disaster is not in the living memory of most of the population, it remains a challenge for disaster managers to highlight the importance of DRR/DRM amongst the public and the importance of understanding the procedures for emergency communications and response.

Conducting risk assessments is a time consuming and resource intensive activity, made more difficult by

the scattered and isolated nature of the RMI's islands and atolls. Government ministries and civil society organizations overcome part of this challenge by cost sharing where possible, and increasingly, through sharing of information.

Priority for action 2: Core indicator 2

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Are disaster losses systematically reported, monitored and analysed? No

* No: Disaster loss database

* No: Reports generated and used in planning

Description:

Detailed data and general information on past disasters is limited in the RMI, with no disaster loss database and few reports on previous events. The inadequate resourcing of NEMCO is partly a reason for this, in addition to the insufficient level of importance placed to data collection and distribution within ministries. The National Weather Service (NWS) provides regular information on hazards and vulnerabilities (e.g. impending drought) to newspapers and radio. However, it is up to the media as to whether or not the information makes the news. NWS also provide weather and climate data to ministries such as the Ministry of Health (MoH), EPA and donors such as USAID. There are a number of technical agencies that collect and maintain GIS databases for their respective areas of expertise. EPA collects and maintains spatial datasets of current land use, vegetation, coastal development, water quality, sewage and potential pollution sources as well as monitor ongoing development.

Context & Constraints:

As mentioned above, the lack of major disaster events in recent years has led to a little emphasis on this core indicator. It is difficult for time-poor ministry personnel to dedicate themselves to something they see little benefit in doing. Thus, the current lack of a data collection system (and responsibility for doing so) has resulted. There are opportunities within agencies such as EPA to build on existing databases developed for environmental monitoring.

Priority for action 2: Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Do risk prone communities receive timely and understandable warnings of impending hazard events?
Yes

* No: Early warnings acted on effectively

- * No: Local level preparedness
- * No: Communication systems and protocols
- * Yes: Active involvement of media in early warning dissemination

Description:

The National Weather Service (NWS) communicates on a regular basis with US National Oceanic and Atmospheric Administration (NOAA) counterparts on potential events which may lead to disasters, e.g. typhoons, drought, high seas etc. NWS has also trained five people from outer islands on early warnings for disaster events and cell phones were distributed for this purpose. Other equipment NWS has access to includes radios, “chatty beetles” (early warning devices), batteries and solar power equipment for times of disaster.

The Office of the Chief Secretary is responsible for warning the public of disasters, and has radio contact with all outer islands. Most schools also have radios which can be used for distributing early warnings. Some WUTMI members have personal radios, and MICS has a radio network of 15 – 17 radios on outer islands. The media, via the radio station, is active in distributing warnings in times of disaster.

An additional achievement of incidental nature is that the Alele Museum has traditional knowledge workshops on weather forecasting, which can also be used as a form of early warning.

Context & Constraints:

Again, the absence of severe disasters in recent decades has led to considerable levels of apathy towards the importance of early warning systems. It is thought that if needed, the radio network, in addition to word-of-mouth, will suffice. However, if radios are to be relied upon, far more are needed and back-up energy supplies and batteries should be better resourced.

A further constraint is the isolated nature of outer islands, which makes communication difficult at all times. Regular testing of radios and back-up energy supplies is therefore needed to ensure communication channels are functioning when they are most needed.

Priority for action 2: Core indicator 4

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Does your country participate in regional or sub-regional DRR programmes or projects? Yes
- * Yes: Programmes and projects addressing trans-boundary issues
- * Yes: Regional and sub-regional strategies and frameworks
- * Yes: Regional or sub-regional monitoring and reporting mechanisms

* Yes: Action plans addressing trans-boundary issues

Description:

Regional and trans-boundary risks affecting the RMI include tropical storms and typhoons; climate change; earthquakes, volcanic eruptions and tsunamis; pollution, including exposure to hazardous waste and commercial transport accidents; health pandemics; and external market influences.

RMI is an active participant in several regional and global strategies and frameworks, including:

- Micronesia Challenge
- Convention on the Conservation of and Management of High Migratory Fish Stocks in the Western and Central Pacific Ocean
- Pacific Disaster Risk Reduction and Disaster Management Regional Framework for Action 2005-2015
- Pacific Regional Framework for Action on Climate Change
- Pacific Plan
- Pacific Regional Action Plan on Sustainable Water Management
- Pacific Adaptation to Climate Change (PACC)
- Mauritius Strategy for Sustainable Development of Small Island Developing States 2005
- Hyogo Framework for Action 2005 – 2015
- UN Framework Convention on Climate Change

Climate change is being addressed via several regional initiatives such as the PACC-Project (GEF-UNDP and SPREP partnership). The Action for the Development of Marshall Islands Renewable Energy (ADMIRE) project also contributes to climate change mitigation. The aim of the newly drafted National Policy on Climate Change is to eventually mainstream climate change issues into all sector plans.

The Micronesia Challenge is a sub-regional initiative, aiming to achieve effective conservation across Micronesia. The Reimaanlok National Conservation Area Plan aims to fulfill the RMI's obligations under the Micronesia Challenge, addressing conservation issues such as marine and terrestrial pollution. Traditionally, conservation has been very much part of Marshallese culture, however, over time, this has been weakened.

At a national level, the RMI's National Energy Policy (2009) promotes indigenous renewable energy sources, and a focus on promoting local food crops and increasing domestic water reservoirs addresses the high reliance on imported products and lessens the impact of external global market influences on RMI.

Context & Constraints:

Being a low lying, isolated atoll nation, the RMI is highly exposed to regional trans-boundary risks, especially climate change. Its high reliance on imports and limited capacity to cope heightens its levels of vulnerability, thus it is dependent on donor assistance to overcome challenges associated with climate change. It will become even more necessary for land owners to be aware of the risks imposed by climate change, so that future development is modified and strengthened accordingly.

Priority for action 3

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 3: Core indicator 1

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Is there a national disaster information system publicly available? No

* No: Web page of national disaster information system

* No: Established mechanisms for accessing DRR information

Description:

There is currently no national database for disasters, nor are there established mechanisms for accessing DRR information.. The EPA intends to establish a comprehensive website containing disaster information; however, technical capacity and lack of funds are proving difficult obstacles to overcome.

Progress has been achieved in capacity building in mapping with the expansion of geographic information systems (GIS) software. Two EPA staff undertook a GIS course through the University of the South Pacific (USP). The College of the Marshall Islands (CMI) assists MICS with mapping tasks. CROP organizations such as SOPAC and SPREP have provided assistance in GIS capabilities over the past few years. Digital mapping provides relevant data on disaster vulnerability and information sharing allows various ministries and NGOs access to the data collected.

Several ministries and NGOs run successful public awareness campaigns on various aspects of DRM. Public awareness initiatives exist within the MoH and the EPA, both drawing upon various forms of media (radio, newspaper) and targeted educational products in Marshallese. WUTMI is also active in public awareness on a range of issues, and reach outer islands via their vast network of members. The US Land Grant, implemented through CMI, includes public outreach and involves capacity building for agriculture, aquaculture, fishing, cooking and nutrition. The NGO Youth-to-Youth in Health undertake elements of risk reduction via their program relating to health, well-being and disease. Most information relating to DRM is distributed in the outer islands by initiatives run by NGOs such as MICS and WUTMI, which provide effective information and educational materials (often in Marshallese).

CMAC members effectively share information, and given their wide membership which spans the local to the national level, they are able to share relevant lessons learned in an effective manner.

In times of disaster, radios are relied upon heavily for distributing information.

Context & Constraints:

Although radios provide an effective means to distribute information to a wide audience, not everyone has access to radios. It was noted that only approximately 40% of people own a radio. Some people who do own a radio cannot afford to power it. Other educational materials may only be available in English. It is recommended that further materials are also made available in Marshallese to engage more

effectively with the RMI population.

Priority for action 3: Core indicator 2

School curricula , education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Is DRR included in the national educational curriculum? No
- * No: Primary school curriculum
- * No: Secondary school curriculum
- * No: University curriculum
- * No: Professional DRR education programmes

Description:

DRR is not formally integrated into the school curriculum. However, some progress in introducing DRR to students has made by the EPA. The EPA visited 41 schools both on Majuro and Ebeye and presented on water quality, pollution, littering, solid waste, global warming, climate change and high tides. Total number of students on hand to receive and learn from EPA's environmental awareness presentations was 6944. Other visits to the CMI, Majuro Boys Scouts and RMI Youth Council to raise awareness were also conducted. The "Close-Up" Program, funded by US Department of Interior (US DoI) also sends students to Washington DC and included in the program is a module on climate change.

The CMI runs an Integrated Coastal Management course, which includes modules on coastal development and climate change. CMI also have a Marine Science Certificate, which includes DRM content.

Context & Constraints:

There is a clear need and desire from Ministry of Education representatives to incorporate DRR into the school curriculums at all levels. However, once again, the RMI lacks the capacity to do so. Additional funding would therefore be required to effectively mainstream DRR (and potentially climate change) into schools programs. While some activities are associated with risk reduction (e.g. programs on water safety, local food crops and health and nutrition), a more robust and comprehensive program is needed.

Raising the standard of science in schools was also highlighted as a priority. By incorporating a higher standard of teaching of science, students would be better equipped to undertake further studies at the tertiary level, and alleviate some of the capacity issues currently causing limited progress in DRM in the RMI.

Priority for action 3: Core indicator 3

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strengthened.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Means of verification:

- * Is DRR included in the national scientific applied-research agenda/budget? No
- * No: Research outputs, products or studies
- * No: Research programmes and projects
- * No: Studies on the economic costs and benefits of DRR

Description:

There is no dedicated budget to perform research associated with DRM in the RMI. Any such research is generally undertaken by donors, or donor funded programs. An example is an initiative within the MoH called Health Vulnerability and Adaptation working group, which is investigating the links between climate and health. This program is being assisted by US Centre for Disease Control (CDC), WHO, SPC and EPA.

Research is not generally high on the RMI's agenda with regard to DRM. It is not given any priority in the DRM NAP, and seen by most government representatives as somewhat of a luxury when more urgent requirements (such as supply of fresh, clean water) are apparent.

Context & Constraints:

This core indicator is constrained by the limited priority given to research. National budgets are therefore unlikely to cover research initiatives until potential benefits of doing so are realised.

Priority for action 3: Core indicator 4

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Do public education campaigns on DRR reach risk-prone communities? Yes
- * Yes: Public education campaigns.
- * Yes: Training of local government
- * No: Availability of information on DRR practices at the community level

Description:

Significant progress is being achieved against this core indicator, although again it appears to be unrelated to the priority given to education in the DRM NAP. Despite this fact, government ministries and civil society groups are educating the public in various ways to reduce underlying risk, and how to better

prepare for and respond to disasters. The NWS run an annual Hazards Workshop (with assistance from NOAA) for Mayors and government officials providing information on climate and disaster related hazards. The Ministry of IA run annual Mayors Workshops, which include information on disaster preparedness and response, thus understanding of response procedures should filter to the public.

As previously mentioned, public awareness initiatives exist within the MoH and the EPA, both drawing upon various forms of media (radio, newspaper) and targeted educational products in Marshallese. WUTMI are also active in public awareness on a range of issues, and reach outer islands via their vast network of members. The US Land Grant via CMI includes public outreach and involves capacity building for agriculture, aquaculture, fishing, cooking and nutrition. Youth-to-Youth in Health, a youth-led NGO, undertake elements of risk reduction via their program relating to health, well-being and disease.

The ADMIRE project conducted a workshop on renewable energy at Majuro Middle School, and other school related programs are also underway. The EPA visited 41 schools both on Majuro and Ebeye and presented on water quality, pollution, littering, solid waste, global warming, climate change and high tides. The "Close-Up" Program, funded by US Department of Interior (US DoI) sends students to Washington DC and included in the program is a module on climate change.

Context & Constraints:

The main challenge associated with this core indicator is raising the awareness of the importance of viewing risk reduction as a development issue, thus something worth taking seriously across and within all sectors. And as mentioned, this is particularly needed for alaps (traditional land owners) so as to make a real difference at the local level. A dedicated awareness strategy, in Marshallese, is required to overcome this challenge, as ignoring this obstacle will result in lack of real progress for local communities for years to come.

The development of a DRM knowledge base as a resource for developing public awareness programming material is a challenge for the RMI. The EPA is updating its website, which aims to provide a comprehensive source of information on DRM and environmental issues, however, once again, limited resources hamper the establishment of a 'one-stop' resource center for information on DRM.

Priority for action 4

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 4: Core indicator 1

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Is there a mechanism in place to protect and restore regulatory ecosystem services? (associated with wet lands, mangroves, forests etc) Yes
- * No: Protected areas legislation
- * No: Payment for ecosystem services (PES)
- * No: Integrated planning (for example coastal zone management)
- * Yes: Environmental impacts assessments (EIAs)
- * Yes: Climate change adaptation projects and programmes

Description:

While some capacity building initiatives highlight the importance of incorporating DRR into environmental policies and plans, and land use and resource management (e.g. TAF / OFDA, and the NWS Annual Workshops), much more is needed to highlight the importance of DRR. The Reimaanlok Conservation Strategy addresses DRR via its approach to conservation. Coastal management is a priority of CMAC, and the group is achieving progress in their integrated approach which works effectively with local groups in the outer islands.

Environmental Impact Statements (EIAs) are required for developments; however, enforcement is a capacity challenge for the EPA. There are many Marine Protected Areas (MPAs), and therefore growing awareness of the importance of conservation – assisted greatly by MICS and the awareness of the Micronesia Challenge and the Reimaanlok Strategy. The EPA operates under two main pieces of legislation: the Environmental Protection Act and the Coast Conservation Act, and carries out both Act's duties with nine regulations. The more recent Coastal Management Framework (2008) provides the basis for local coastal management and guides environmental concerns for strategic development, including mention of DRR and climate change.

There are a growing number of initiatives relating to climate change adaptation, and this is set to increase over coming years as additional funding comes on line. It is hoped that the National Climate Change Policy, which is currently being drafted, will facilitate a coordinated approach to climate change programs.

Context & Constraints:

Much more is needed to be done to raise the awareness of DRR, and what it means in practice. Some

activities are occurring within key ministries that address DRR in an incidental manner. If DRR is given a higher priority, these activities and initiatives may be scaled up and broadened so as to address DRM and DRR in a more robust and meaningful way. As stated in the Coastal Management Framework, coastal data is collected sporadically and in response to the availability of donor grants. A more manageable and coordinated approach is required, and one which is relatively low cost so as to be sustainable in the long term.

Priority for action 4: Core indicator 2

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Do social safety nets exist to increase the resilience of risk prone households and communities? Yes
- * No: Crop and property insurance
- * No: Employment guarantee schemes
- * No: Conditional cash transfers
- * No: DRR aligned poverty reduction, welfare policy and programmes
- * Yes: Microfinance
- * No: Micro insurance

Description:

As with many Pacific Island Countries, family and community support remains the most common form of social safety net, especially in the outer islands where non-cash livelihoods and practices such as "handicrafts for fuel" are common. In the urban areas traditional social safety nets are lacking with the adoption of a more Western lifestyle, leading to higher levels of vulnerability for some people. This is the case for some women in urban areas, who remain without traditional forms of protection (e.g. from male family members). WUTMI, the women's NGO, is highly active in addressing this issue and have programs on domestic violence and the protection of women, both urban and rural.

The Compact of Free Association (COFA) between the USA and the RMI provides economic assistance to the RMI, with the US assistance accounting for 45% of GDP. The current COFA arrangement covers the period up to 2023. Additional compensation is paid to populations affected by the US nuclear testing which occurred in the 1940s and 1950s, as the health impacts continue to be visible in the population.

The government has subsidized copra and costs associated with transportation, and this has been a steady income earner for many people, particularly in the outer islands. However, with copra prices falling, it is uncertain how long the subsidy will continue for, given the high costs incurred by the government.

Microfinance schemes exist in the RMI, with small loans taken out by fishermen, farmers and handicraft

makers. Most loans are for consumables and are usually for between US\$2000-3000 with a maximum of US\$10,000. The main microfinance scheme is funded by Republic of China (Taiwan). Insurance remains a relatively foreign concept in the RMI, although insurance companies are present and active on the Chamber of Commerce.

Context & Constraints:

There is currently limited / no inclusion of DRR or CCA criteria mainstreamed into microfinance loan policies. This represents a constraint in taking DRR measures seriously in the private sector.

As the urban population continues to rise, the erosion of traditional social support may consequently be reduced. This presents a challenge to organizations such as WUTMI, who may find an escalation in the level of support they are required to provide. Additional non-traditional forms of social support will therefore be required in urban areas to supplement the traditional forms that no longer exist to the degree they once did.

Priority for action 4: Core indicator 3

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability of economic activities

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Are the costs and benefits of DRR incorporated into the planning of public investment? No
- * No: National and sectoral public investment systems incorporating DRR.
- * No: Investments in retrofitting infrastructures including schools and hospitals

Description:

The State of Economic Emergency in 2008 highlighted the RMI's vulnerability to external markets, especially the price of energy and imported food. As a result, considerable efforts have been made to address this risk, including the development of a National Energy Policy in 2009 to provide direction in terms of renewable energy use for the RMI. The goal is for 95% of rural outer islands to have electricity by 2015 and that 20% is provided with indigenous renewable sources. Some progress can be reported against this national goal; for example, RoC Taiwan provides solar energy to outer islands via Outer Islands Economic Development Fund. The Action for the Development of Marshall Islands Renewable Energy (ADMIRE) project, overseen by the Office of Environment, Policy, Planning and Coordination (OEPPC), aims to broaden the scope and utilization of renewable energy across the RMI. ADMIRE project activities include public awareness on the importance of renewable energy, and technical capacity building on specific types of renewable energy (e.g. solar and wind).

Local food production initiatives for outer islands include the Food and Agriculture Organisation (FAO), SPC and Small Grants Programme (SGP) projects, all of which continue to promote local crops to address food security and sustainable livelihoods. Ministry of IA promotes local foods and supports sustainable livelihoods through the sale of handicrafts made by women of outer islands, which are sold at monthly markets in Majuro. Ministry of Resources and Development (R&D) also holds regular workshops, where outer island representatives come to Majuro to learn about agricultural practices such as planting and composting. R&D's Strategy and Action Plan include food security and disaster

preparedness and it promotes local foods such as pandanus and breadfruit through their replanting scheme..

The National Training Council's (NTC) Sustainable Livelihoods Youth Food Initiative been successfully re-introduced on two islands.

Context & Constraints:

Although several initiatives are addressing this core indicator, a more coordinated approach to this Core Indicator is required. Once again, limited capacity is a challenge, and responsibility for coordination is unclear, however, R&D are an obvious choice given their mandate for both agriculture and energy.

A further challenge is that of the cost of imported versus local food. For local food to be embraced, it must fetch a price where farmers are willing to accept for their efforts. At the same time, consumers must see local foods as an attractive alternative, both economically and via the health and nutritional benefits. For the latter to be achieved, greater educational awareness on the health outcomes of food is required, especially given the high rates of non-communicable diseases such as diabetes, obesity and cardiovascular diseases.

Priority for action 4: Core indicator 4

Planning and management of human settlements incorporate disaster risk reduction elements, including enforcement of building codes.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Means of verification:

- * Is there investment to reduce the risk of vulnerable urban settlements? No
- * No: Investment in drainage infrastructure in flood prone areas
- * No: Slope stabilisation in landslide prone areas
- * No: Training of masons on safe construction technology
- * No: Provision of safe land for low income households and communities

Description:

The multi-stakeholder workshop in November 2010, part of the NAP progress review, revealed the widely different views of the participants on building codes and zoning. Some stakeholders were unaware of the existence of building codes, while others understood them as general guidelines for development. An underlying level of awareness of what building codes and zoning means, and why these practices are important, is desperately needed.. Furthermore, a consistent message from various sectors (e.g. Public Works, EPA, the private sector) on what building codes are, why they are important, and how they are enforced is needed, especially given the high rates of urbanization and development in Majuro and Ebeye.

Inadequate management of rapid urbanization has led to densely populated and poorly planned settlements, often containing structurally deficient buildings. The potential for fires is exacerbated by the high use of kerosene (43% of households) and charcoal/wood (20% of households) and fire can spread

rapidly from house to house. A lack of adequate settlement planning and management means that emergency access lanes often do not exist for fire trucks. A lack of fire and accident preparedness is equally evident in the commercial and industrial areas.

The importance for awareness of the links between zoning and vulnerability to disasters must be successfully conveyed at the community level especially amongst the land owners since they determine how development proceeds at the local level. An ongoing awareness campaign in Marshallese is desperately needed to overcome this challenge. A collaborative effort is required between national and local level decision makers on the issue of building practices to deliver a consistent message. As was eloquently stated by an interviewee, "The government has no say in traditional land issues – we need to merge the two levels of authority and raise the understanding of development issues with traditional leaders."

Context & Constraints:

High population growth driven by a high birth rate and migration from outer islands increases the vulnerability of urban centres including Majuro and Ebeye. Additional pressures are placed on access to water, food and energy as well as living space. There is currently a lack of a managed approach to development of human settlements, and lack of awareness of the links between zoning, development and vulnerability to disasters.

To properly enforce building codes, engineers are required. There is a clear lack in the number of suitably qualified engineers and architects to properly support this core indicator. Similarly, the Ministry of Public Works also lacks technical capacity, admitting that there is limited engineering and architectural capacity in country. Public Works lack the capacity to ensure building codes are followed and were unsure if the private sector was adhering to guidelines.

Priority for action 4: Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

- * Do post-disaster recovery programmes explicitly incorporate and budget for DRR? No
- * 0 % of recovery and reconstruction funds assigned to DRR
- * No: Measures taken to address gender based issues in recovery

Description:

The Disaster Assistance Emergency Fund (DAEF) provides funds for relief efforts and rehabilitation, and is made up of annual contributions of \$200,000 each from US and RMI governments. It is unclear how much post disaster reconstruction and rehabilitation incorporates DRR as detailed data on such events is lacking.

Context & Constraints:

The level of commitment to DRR appears lacking in the RMI. This may in part be due to the lack of major disaster events over the past years and decades. The population may have developed a sense of apathy towards DRR as a result. This in turn makes it difficult to raise the profile of DRR, and to gain support for

introducing and mainstreaming DRR across different sectors.

Priority for action 4: Core indicator 6

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Are the impacts of major development projects on disaster risk assessed? Yes

* No: Assessments of impact of projects such as dams, irrigation schemes, highways, mining, tourist developments etc on disaster risk

* Yes: Impacts of disaster risk taken account in Environment Impact Assessment (EIA)

Description:

The EPA's Environmental Impact Assessments (EIAs) take DRR into consideration to some degree; however the limited capacity of the EPA to enforce EIA regulations is limited. EIA's also tend to focus more on environmental impacts rather than disaster risk vulnerability. Developments have been disallowed by the EPA in the past due to EIA criteria not being met, however, this is still rare, and most developments still go ahead, mainly due to the limited capacity of the EPA to enforce regulations. It could therefore be argued that the procedure is in place to assess disaster risk impacts of developments (via the EIA process), but the capacity to enforce the procedure in practice is limited.

The land tenure system allows traditional land owners to decide on the use their land, thus the EPA and local governments have limited power at the local level (see below).

Context & Constraints:

A further challenge mentioned by the EPA is that of conflict of interest. Given the small population of the RMI, many people are related to each other, and it is difficult for the EPA to enforce regulations on members of their family, or close connections of their families. Land issues are also highly sensitive in the RMI and it is difficult to advise land owners how to use or develop their own land. A challenge among others is therefore public awareness of why the regulations exist and what sustainable development means, i.e. to maintain a healthy and safe environment and to ensure future generations have access to resources such as water, food and land.

Priority for action 5

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

Priority for action 5: Core indicator 1

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

Level of Progress achieved:

1: Minor progress with few signs of forward action in plans or policy

Means of verification:

- * Are there national programmes or policies to make schools and health facilities safe in emergencies? No
- * No: Policies and programmes for school and hospital safety
- * No: Training and mock drills in school and hospitals for emergency preparedness

Description:

Currently, there is no Disaster Plan for the school system. The Ministry of Education (MoE) has indicated their willingness to develop such a plan, but requires assistance to do so. MoH is one of the sectors that have developed an emergency plan (see Core Indicator 2 for details). MoH, along with Police, Fire and several other ministries, were involved in a recent drill at the airport which was a mock airplane crash. USP-RMI have developed and tested their Emergency Plan once, and also recognize the need to do so regularly.

There is limited progress in terms of evaluating and improving preparedness capacity, thus a Level 1 is assigned to this indicator.

Context & Constraints:

Given the limited number of major disasters in recent years, conducting drills is not a high priority for many sectors, whose capacity is limited in their routine work they are required to complete. Until DRR is more highly prioritized at the national level and adequately supported, key sectors are unlikely to see the benefits of undertaking DRR measures themselves.

Priority for action 5: Core indicator 2

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

Means of verification:

- * Are the contingency plans, procedures and resources in place to deal with a major disaster? No
- * No: Contingency plans with gender sensitivities

- * No: Operations and communications centre
- * Yes: Search and rescue teams
- * Yes: Stockpiles of relief supplies
- * Yes: Shelters
- * No: Secure medical facilities
- * No: Dedicated provision for women in relief, shelter and emergency medical facilities

Description:

A RMI Emergency Response Plan, developed in 2009, is under consideration of the CSO. The Emergency Response Plan provides details of response functions, lead and support agencies and their roles, for the following:

- Health and Medical
- Fire and Rescue
- Evacuation
- Community Welfare
- Logistics Supply
- Information Management
- Impact Assessment

Sectoral Emergency Response Plans and Standard Operating Procedures (SOPs) have been developed by ministries and agencies including the EPA, NWS, MoH, USP-RMI and MICS. The MoE recognizes the need for a disaster plan and is seeking assistance to develop one.

The USAid-led tabletop exercise in October 2010 on disaster response described the change from Federal Emergency Management Agency (FEMA) support to the current USAid support. The exercise assisted in strengthening the overall coordination of disaster response, by describing the steps required at the national level to access US support via United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA).

Outer Island Profiles are being developed through a partnership between the Ministry of Internal Affairs (IA), International Organization for Migration (IOM), USAid and local organizations such as MICS. The Outer Island Profiles collect baseline information on disaster response capacity (see PFA2, Core Indicator 1 for more details) highlighting available resources, gaps, needs and challenges, as well as best practices

The NWS has increased response capacity via the purchase of four early warning devices (“chatty beetles”) activated in times of emergency. NWS also run an annual Hazards Workshop (with assistance from NOAA) for Mayors and government officials providing information on climate related hazards.

Ministry of IA run an annual Mayors Workshop which includes information on disaster preparedness and response. WUTMI also has informal training in how to communicate during emergencies and MICS are currently undertaking a program to train Conservation Officers in hazard and vulnerability assessments.

Context & Constraints:

There has been a lack of progress at the national level in terms of a National Emergency Operations Centre (NEOC), as the location has not yet been decided. Coordination of disaster response at the national level therefore remains weak.

Little progress has been made in developing local plans for emergency response. Although NGOs are working with outer island communities, there is a lack of a coordinated approach to disaster preparedness and response. There is a general lack of awareness that developing a plan for disaster response does not always require additional funding, and that a simple emergency response plan is better than no plan at all, even if a dedicated emergency shelter is lacking. The lack of support for local disaster plans may stem from the lack of severe disasters in recent years - it is not something people have at the forefront of their minds.

Priority for action 5: Core indicator 3

Financial reserves and contingency mechanisms are in place to support effective response and recovery when required.

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Are financial arrangements in place to deal with major disaster? Yes

* Yes: National contingency funds

* No: Catastrophe insurance facilities

* No: Catastrophe bonds

Description:

Under the Compact of Free Association (COFA), the USA provides an annual US\$200,000 grant to the Disaster Assistance Emergency Fund (DAEF) for disaster response purposes. This amount must be matched by the RMI government with an equal amount, which accrues over the years if not needed to be drawn upon. The current amount in the fund (as of November 2010) is circa US\$893,000. This money is to be used for disaster rehabilitation only, and is not to be invested in DRR measures, as stated in the COFA.

Context & Constraints:

The regulations in which the DAEF is to be used presents a challenge, since it is not permitted to be used for DRR measures. The money therefore sits idle instead of being put to effective use in reducing underlying risks thereby lessening the impact any disaster may have in the future. This in part highlights the limited commitment to DRR, and the lack of awareness that being proactive in terms of reducing risk can reduce the cost of disaster response and rehabilitation.

In addition to the above, it is unlikely the DAEF will cover the total costs, should a disaster such as a typhoon, occur. The last major typhoon was Typhoon Paka in 1997, which caused approximately US\$80 million in damages.

There is also a relatively high level of dependence on the US in times of disaster. The population of the RMI has received US support from FEMA in the past after disasters, and many assume the US will come to their aid again if and when it is needed. There is little sense of a need to commit national efforts to disaster preparedness in financial terms, since it is thought likely the US will support the RMI in times of disaster.

Priority for action 5: Core indicator 4

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

Means of verification:

* Has an agreed method and procedure been adopted to assess damage, loss and needs when disasters occur? Yes

* Yes: Damage and loss assessment methodologies and capacities available

* Yes: Post disaster need assessment methodologies

* No: Post disaster needs assessment methodologies include guidance on gender aspects

* Yes: Identified and trained human resources

Description:

As stated in the RMI Emergency Response Plan, the role of assessing disaster impacts falls to several agencies, depending on the nature of the impact. The Central Control Group (within the Chief Secretary's Office) is responsible for Initial Damage and Needs Assessment, and may be assisted by the United Nations Disaster Assessment and Coordination (UNDAC) team. Police, Fire, EPA, Public Works, Majuro Water and Sewage Company, Marshalls Energy Company and RMI Ports Authority are also listed as lead agencies, with roles and responsibilities also included. The NWS has increased response capacity via the purchase of four early warning devices ("chatty beetles") worth approximately US\$5000 each. These devices are activated in times of emergency and respond with an alert sound.

The Asia Foundation / Office of the US Foreign Disaster Assistance (TAF/OFDA) has completed several training sessions over the past few years and included Emergency Operation Centres, Initial Damage Assessment, Training for Instructors and Introduction to Disaster Management. Participants were from a range of government agencies, including:

- National DR Management Coordination Office (formerly NEMCO)
- Chief Secretary's Office
- RMI Ports Authority
- Ministry of Health
- Ministry of Education
- Ministry of Transportation and Communications
- Ministry of Resources and Development
- Department of Public Safety
- NOAA NWS Weather Service Office
- USP – Marshall Islands Campus
- Environmental Protection Authority (EPA)
- Ministry of Internal Affairs
- RMI Sea Patrol
- RMI Broadcasting Station
- Majuro Water and Sewer Company
- Ministry of Justice
- Ministry of Public Works
- Marshalls Energy Company

- Ministry of Finance
- Ministry of Foreign Affairs

Context & Constraints:

The Emergency Response Plan (2010) is still yet to be endorsed, thus not operational as yet. This presents a challenge, as although it includes relevant and useful information, it is still in a draft form .

An additional challenge is that there has been a lack of progress at the national level in terms of a National Emergency Operations Centre (NEOC), as the location has not yet been decided. Coordination of disaster response at the national level therefore remains weak.

There is some capacity to conduct post-disaster impact/needs assessments, however this remains an area of weakness, partly due to the isolated nature of the outer islands. MICS is currently in the process of increasing capacity for vulnerability assessments via their program to train Conservation Officers. Part of the training involves post-disaster needs assessments.

Little progress has been made in developing local plans for emergency response. Although NGOs are working with outer island communities, there is a lack of a coordinated approach to disaster preparedness and response. There is a general lack of awareness that developing a plan for disaster response does not always require additional funding, and that a simple emergency response plan is better than no plan at all, even if a dedicated emergency shelter is lacking. The lack of support for local disaster plans may stem from the lack of severe disasters in recent years - it is not something people have at the forefront of their minds.

Drivers of Progress

a) Multi-hazard integrated approach to disaster risk reduction and development

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?:

Yes

If yes, are these being applied to development planning/ informing policy?:

-- not complete --

Description (Please provide evidence of where, how and who):

Awareness that DRR is a key development issue and that proactive risk reduction can reduce the cost of disaster response and rehabilitation, needs to be improved amongst all national and local level stakeholders and decision makers. For example, funds from the Disaster Assistance Emergency Fund (DAEF) can only be used for assistance and rehabilitation resulting from disasters and emergencies. The DAEF places the RMI in a good position to respond to disasters, however, currently it does not enable the funds to be invest in any risk reduction measures to help mitigate the potential impact of future disasters. The last disaster to occur in the RMI resulted from the storm swells back in 2008. This event is estimated to have caused damages in the region of \$1.5 million, of which the entire DAEF fund would only cover 63 per cent. This poses the question of whether some part of the fund may be better invested in risk reduction measures and addressing underlying risk to reduce the costs of future disasters.

There are opportunities to strengthen the DRR governance arrangements and coordination. The new DRM Arrangements, yet to be endorsed, describe the institutional structure of the disaster management, mitigation, preparedness, response and relief in the RMI giving more focus on DRR instead of a more traditional DM-approach. The currently developed Joint NAP for CCA and DRM will strengthen the integration of CCA and DRM activities, support the implementation of risk reduction activities in a more holistic manner and facilitate the implementation of the new Climate Change Policy and on-going DRM efforts.

Studies and reports on multi-hazard analyses are available through a risk exposure database under development by SOPAC/SPC and other partners such as GNS New Zealand, AIR Worldwide and the Pacific Disaster Center with funding support from the World Bank and ADB.

b) Gender perspectives on risk reduction and recovery adopted and institutionalized

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

Description (Please provide evidence of where, how and who):

Currently no gender disaggregated vulnerability and capacity assessments are available to ensure that risk reduction strategies are correctly targeted at the most vulnerable groups and are effectively implemented through the roles of both women and men.

Increased urbanization in the RMI has resulted in weakened traditional social safety nets leading to higher levels of vulnerability of people. This has been observed as the case for some women in urban areas, who remain without traditional forms of protection (e.g. from male family members). The Women's

NGO WUTMI - Women United Together in the Marshall Islands - is highly active in addressing this issue and has programs on domestic violence and the protection of women, both urban and rural. WUTMI is also the recipient of the global Trust Fund to End Violence against Women.

The national NGO WUTMI has networks reaching to all atolls. WUTMI is undertaking an integrated approach to local level development (including risk reduction) and their activities include developing sustainable livelihoods and education and awareness on health and nutrition. In 2009 WUTMI organized "Women as agents of change"-conference where the Office of Environmental Policy and Planning Coordination (OEPPC) assisted in raising climate change awareness.

c) Capacities for risk reduction and recovery identified and strengthened

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

National Action Plan for Disaster Risk Management 2008-2018 identifies several priorities in terms of DRR and recovery capacity development. These include:

- Strengthen human resource capacity of key organizations for DRM at national and local government levels
- Strengthen the capacity of key community groups and NGOs in Marshall Islands
- Build capacity for mainstreaming DRM for planners and decision makers at the national and local government levels
- Raise the understanding of DRM mainstreaming as a development issue within the Nitijela (lower house of RMI's bicameral legislature)
- Strengthen the National Emergency Operations Center (NEOC) infrastructure to better prepare for, and respond to, disaster events
- Strengthen capacity for coordination during disasters
- Strengthen response capacity amongst relevant ministries at national and local levels
- Assist communities in the Outer Islands to develop their own mechanisms to supplement the national and local government plan for emergency preparedness and response

An underlying and cross-cutting issue in achieving progress in DRR in the RMI is the limited capacity (i.e. resources and skills) within all sectors, including government and non-government groups. The underdevelopment of the NAP Implementation Unit (NAPIU), lack of Technical Expert and under-resourcing of NEMCO has hampered coordination efforts and overall progress in the implementation of the NAP. More effective engaging with donors from the early stages could strengthen support for key activities.

Across the board, NAP stakeholders are multi-tasking and undertaking a range of roles making the implementation of DRR initiatives very challenging. For some stakeholders, the NAP seems overwhelming in its scope, and donor requests e.g. on incorporating DRR in sectoral plans are sometimes met with frustration as the requests might be considered as additional workloads especially when capacity and resourcing is not made available.

d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

Levels of Reliance:

No/ little reliance: no acknowledgement of the issue in policy or practice; or, there is some acknowledgement but nothing/ little done to address it

Description (Please provide evidence of where, how and who):

There is little reliance on this driver to date.

e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

At the local and community level, NGOs are active with networks reaching the Outer Islands and many undertake DRR activities. Civil society organizations were identified as one of the key sectors for DRM in RMI in the situation analysis conducted for the development of the NAP DRM. The Government of RMI recognizes their potential in the NAP for DRM and aims to engage more effectively with non-government counterparts for example by strengthening the capacity of key community groups and NGOs in Marshall Islands and by assisting communities in the Outer Islands to develop their own mechanisms to supplement the national and local government plan for emergency preparedness and response.

The most important Civil Society Organizations (CSOs) in the Marshall Islands are local community organizations, including parents-teachers associations, sports clubs, women's clubs, and the very active churches (many of which also provide important school services). The Marshall Islands has a small number of Non-government organizations (NGOs), all based in Majuro, that provide an assortment of services from education to vocational training, to advocacy on women's issues. The private sector is represented by the Chamber of Commerce, also located in Majuro. The business sector has a history of greater influence over public policy. The Republic of the Marshall Islands has a relatively open and active media community. Radio is the primary media source and foremost Marshallese, particularly the government-controlled AM station, which reaches the outer islands. There is also an independent newspaper in Majuro that has a weekly readership of roughly 20,000 (print and electronic versions) and several privately-run FM radio stations.

f) Contextual Drivers of Progress

Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Description (Please provide evidence of where, how and who):

The Republic of the Marshall Islands is a scattered collection of 29 atolls and 5 islands. With a land area of 181km², RMI's low lying atolls and islands lie in an expanse of ocean of almost 2 million km². The two urban centres, Majuro and Ebeye, have populations in the order of 28,000 and 9,343 respectively, corresponding to extremely high population densities. Two thirds of the population of approximately 60,000 resides on Majuro and Kwajalein atoll.

The country is vulnerable to a range of natural and human-induced hazards which are linked to both the physical and social characteristics and unsustainable development practices. Key drivers of the RMI's vulnerability include:

- Rapid population growth and over-population in urban centres
- Environmental degradation and unsustainable development
- Localised pollution and waste management

- Potential climate change impacts including accelerated sea level rise
- Limited resources (particularly food, water and fuel)
- Limited economic potential due to small size and remoteness
- High exposure to external market shocks (demonstrated by the State of Economic Emergency declared in 2008 following unprecedented increases in costs of imported food and fuel – See RMI, 2009b)
- Sparse and scattered nature of islands and atolls, making communication and transportation to outer islands more difficult, with infrequent and at times unreliable transport links

The risk profile of the outer islands is largely linked to their isolation as well as to behavioral changes linked to modernization. While population numbers on these islands tend to be small, there is little emergency infrastructure to assist in times of disaster. The main hazards affecting these islands are typhoons and droughts, and resultant water and food shortages. Due to integration into the monetary economy, the island communities have lost much of their self-sufficiency, and now rely heavily on remittances and purchased commodities, including food.

Future outlook

Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

Overall Challenges:

-

Future Outlook Statement:

To complete a Joint National Action Plan for Climate Change and Disaster Risk Management thereby integrating national, sectoral and community level measures to address underlying risks to development posed by both climate related and geophysical hazards

Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

Overall Challenges:

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Future Outlook Statement:

The complete proposed DRM governance arrangements and support on going implementation to ensure that Government and other stakeholder groups address DRM in a cooperative and collaborative manner

Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

Overall Challenges:

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Future Outlook Statement:

The finalisation and implementation of DRM governance arrangements and the CC and DRM National Action Plan will support the incorporation of risk reduction in emergency preparedness, response and recovery programmes.

Stakeholders

Departments/organizations that have contributed to the report

- * Office of the Chief Secretary (Gov) - Casten Nemra, Chief Secretary
- * Office of Chief Secretary (Gov) - Jorelik Tibon, Deputy Chief Secretary, Chairman DRM TF
- * Office of Environmental Policy and Planning Coordination (OEPPC) (Gov) - Yumiko Crisostomo, Director
- * Office of Environmental Policy and Planning Coordination (OEPPC) (Gov) - Kaminaga Kaminaga, SNC Coordinator
- * Office of Environmental Policy and Planning Coordination (OEPPC) (Gov) - Desmond N. Doulatram, Support Officer
- * Office of Environmental Policy and Planning Coordination (OEPPC) (Gov) - Warrick Harris
- * National Emergency Management and Coordination Office (NEMCO) (Gov) - Clement Capelle, Director
- * National Weather Service (Gov) - Reginald White, Meteorologist in Charge
- * Ministry of Public Works (Gov) - Imang Chong-Gum, Deputy Secretary
- * Ministry of Public Works (Gov) - Smith Ysawa, Secretary
- * Ministry of Public Works (Gov) - Melvin Dacillo, Architect
- * Office of Chief Secretary (Gov) - Antonio Eliu, Chief of Administration
- * Ministry of Education (Gov) - Richard Bruce, Assistant Secretary
- * Ministry of Education (Gov) - Allison Nasion, Acting Secretary
- * Ministry of Education (Gov) - Cassiano Jetnil, Assistant Secretary
- * Ministry of Education (Gov) - Hosia, Assistant Secretary
- * Ministry of Education (Gov) - Lokeijak, Assistant Secretary
- * Ministry of Internal Affairs (Gov) - Angela Tibon, Acting Secretary
- * Ministry of Internal Affairs (Gov) - Wallace Peter
- * Ministry of Internal Affairs (Gov) - Arlon Sorimle, V7AB Radio
- * Ministry of Internal Affairs (Gov) - Kino Kabua, Secretary
- * Ministry of Internal Affairs (Gov) - Bruce Kijiner, Foreign Service Officer

- * Ministry of Internal Affairs (Gov) - Annette Note
- * Public Safety (Gov) - Herson Aloka, Captain for Traffic Division
- * Environmental Protection Authority (EPA) (Gov) - Lowell Alik, Deputy GM
- * Environmental Protection Authority (EPA) (Gov) - Julian Alik
- * Department of Climate Change and Energy Efficiency (DCCEE) (Gov) - Cameron Darragh
- * Ministry of Health (Gov) - Justina Langidrik, Secretary of Health
- * Marshall Islands Marine Resources Authority (MIMRA) (Gov) - Glen Joseph, Director
- * Ministry of Resources and Development (RND) (Gov) - Rebecca Lorennij, Deputy Secretary
- * College of the Marshall Islands (Acad & Research) - Kenneth B. Woodbury, Jr, President
- * College of the Marshall Islands (Acad & Research) - - Carl Hacker, VP, College and Community Resource Development
- * College of the Marshall Islands (CMI) (Acad & Research) - Donald Hess, CMAC Member
- * School of Assumption (Acad & Research) - Sandy Dismas, Principal
- * Marshall Islands Conservation Society (NGO) - Henry Muller, Assistant Project Manager
- * Marshall Islands Conservation Society (NGO) - Albon Ishoda
- * Bank of the Marshall Islands (Private) - Patrick Chen, Manager
- * Bank of the Marshall Islands (Private) - Sultan Korean, Compliance Officer
- * Majuro Water and Sewage Company (MWSC) (Private) - Alington Robert, Acting General Manager
- * RMIEPA (Private) - Michael Honeth, CMAC Member
- * National Training Centre (Gov) - Marie Maddison
- * COI (Networks & Others) - - Frances Horiechi
- * DPS (Gov) - George Lanwi
- * Foundation for the Peoples of the South Pacific (NGO) - Roshni Chand, DRR Focal Point
- * SOPAC (Regl Inter-gov) - Mosese Sikivou, Manager, Community Risk Programme
- * SOPAC (Regl Inter-gov) - Samantha Cook, Disaster Economist, Community Risk Programme
- * SOPAC (Regl Inter-gov) - Tasleem Hasan, Water Services Coordinator
- * SOPAC (Regl Inter-gov) - George Beck, Project Manager, EU Disaster Risk Reduction Project

- * SOPAC (Regl Inter-gov) - Chris Paterson, Consultant – GEF Pacific IWRM Project
- * SOPAC (Regl Inter-gov) - Marc Wilson, Regional Program Manager – GEF- IWRM Program
- * SOPAC (Regl Inter-gov) - Anna Gero, Consultant
- * SPREP (Regl Inter-gov) - Netatua Pelesikoti, Programme Manager
- * Taito Nakalevu, Project Manager (Regl Inter-gov) - Taito Nakalevu, Project Manager
- * UNDP (UN & Intl) - Bernie Joash, Programme Manager
- * GEF-UNDP Small Grants Program (UN & Intl) - Ned Lobwijn, Acting Program Manager
- * USAID (UN & Intl) - Bart Deemer, Director
- * US Embassy (UN & Intl) - Eric Watnik, Deputy Chief
- * AusAid (UN & Intl) - Tukatara Tangi, Programme Officer
- * IFRC (UN & Intl) - Ysabeau Rycx, DRM Officer
- * IFRC (UN & Intl) - Helga-Bara Bragadottir, International Disaster Response Law Delegate
- * UNDP Pacific Centre (UN & Intl) - Moortaza Jiwanji, Disaster Risk Management Advisor
- * UNDP Pacific Centre (UN & Intl) - Tracy Vienings, Manager, Crisis Prevention and Recovery Team
- * UNISDR (UN & Intl) - Angelika Planitz, Sub-Regional Coordinator – Pacific
- * UNISDR (UN & Intl) - Suzanne Paisley, Consultant, UNISDR NAP Review for Solomon Islands
- * UNISDR (UN & Intl) - Laura Niskanen, Associate Expert for Disaster Risk Reduction - Pacific
- * UNOCHA (UN & Intl) - Peter Muller, Sub-Regional Coordinator – Pacific
- * UNDP MCO (UN & Intl) - Emma Mario, Environment Programme Analyst
- * UNICEF (UN & Intl) - Hamish Weatherly, Emergency & Preparedness Response Coordinator
- * WHO (UN & Intl) - Kamal Khatri, Water Programmes Officer
- * Pacific DRM Training Program - The Asia Foundation (UN & Intl) - Kathryn Hawley, Programme Director
- * Ministry of Resources and Development (Gov) - Tommy Kijiner, Secretary for RND
- * Ministry of Resources and Development (Gov) - Henry Capelle
- * Ministry of Resources and Development (Gov) - Karness Kasto
- * Ministry of Finance (Gov) - Kayo Kotton

- * Health Vulnerability and Adaptation Working Group (Gov) - Dr Godfrey Waidubu, Chairman
- * Health Vulnerability and Adaptation Working Group (Gov) - Jennifer de Brum, Chief of Finance (OEPPC)
- * Health Vulnerability and Adaptation Working Group (Gov) - Marita Edwin, Specialist on Mental Health (MoH)
- * Ministry of Health (Gov) - Russell Edwards
- * Marshall Islands Marine Resources Authority MIMRA (Gov) - Candice M. Guavis, CMAC Member
- * Marshall Islands Marine Resources Authority MIMRA (Gov) - Darren Nakata, CMAC Member
- * Marshall Islands Marine Resources Authority MIMRA (Gov) - Doreen Debrum, CMAC Member
- * Marshall Islands Marine Resources Authority MIMRA (Gov) - Island representatives
- * Nitijela (RMI Parliament) (Gov) - Alvin Jacklick, Honourable Speaker
- * Nitijela (Gov) - Gary Ueno, Clerk
- * Nitijela (Gov) - Lena, Assistant Clerk
- * Nitijela (Gov) - Divine, Legal Counselor
- * Nitijela (Gov) - Frederick Muller, Senator
- * Marshall Islands Business Advisory Council (NGO) - Mark Stege, Member of MICNGOs
- * Marshall Islands Council of Non-Government Organisations (MICNGOs) (NGO) - Bonnie Taggart, Acting Director
- * RMI Chamber of Commerce (NGO) - Stephen W. Philip, President
- * RMI Chamber of Commerce (NGO) - Jerry Kramer, Member
- * Women United Together in the Marshall Islands (WUTMI) (NGO) - Daisy Alik-Momotaro, Executive Director
- * USP – RMI (NGO) - Dr Irene Jane Taafaki, Director
- * University of Hawaii Sea Grant (Acad & Research) - Murray Ford, CMAC Member