

# Policy integration and risk-based management for WaSH and adaptation in the Republic of the Marshall Islands

## POLICY BRIEF

### Research Statement

A review of key policy documents in the Republic of the Marshall Islands (RMI) was conducted to analyse the degree to which climate change adaptation (CCA) and disaster risk management (DRM) have been integrated into water, sanitation and hygiene (WaSH) policy and institutional processes. This policy brief summarises the findings of this research.

### Findings

1. Climate resilience and proactive risk management are key policy objectives in the RMI *National Water and Sanitation Policy* (NWSP). By clearly defining the risk management functions and responsibilities of institutions involved in water and sanitation services, and identifying Integrated Water Resource Management (IWRM) and Water Safety Planning as frameworks to support implementation and management, the NWSP creates an enabling environment for climate-resilient WaSH.
2. Functions and responsibilities for disaster preparedness, response and recovery in the WaSH sector are not well defined in current policies and plans. An Emergency Response Plan and Standard Operating Procedures for the WaSH sector would enhance coordination, monitoring and regulation, and guide capacity building efforts for climate-resilient WaSH.
3. The degree to which NWSP policy objectives can be achieved depends largely on the establishment and adequate human and financial resourcing of the National Water and Sanitation Office. Cross-sectoral coordination and investment in capacity building programs at the local and community level will also be required to support implementation.

### Who is this brief for?

Findings in this brief are intended for policymakers in the Republic of the Marshall Islands, but may also be relevant to other Pacific Island Countries as a case study on policy integration and risk-based management in WaSH.

### Introduction

Climate change is a serious threat to Pacific Island Countries (PICs) and their fresh water resources. Sea level rise, saltwater intrusion, increasing evaporation rates, and changing rainfall patterns will all affect the water cycle and, potentially, the availability of water for human use. Poor sanitation, along with population growth, changing land use patterns, and other human activities in water catchments, pose a further threat to declining freshwater resources and public health in the region (Hadwen et al. 2015). In a region characterised by small economies, scattered and remote islands,



and isolated rural communities, PICs struggle to address governance, management, finance and human resource challenges for the provision of sustainable WaSH services.

The RMI is a low-lying atoll nation, made up of 29 atolls and five islands, the furthest of which is 700 miles from the capital Majuro. All of these atolls have limited freshwater resources, sanitation challenges, and high vulnerability to extreme weather events and climate variability, including the El Nino Southern Oscillation, droughts, typhoons, storm surge and king tides.

With recent efforts to integrated CCA and DRM in national policies and plans, and the development of a NWSP that aims to build resilience to climate change, the RMI provides an illustrative example policy integration and efforts to promote integrated risk-based management in response to climate change.

## Methods

Research described in this policy brief was conducted as part of the Pacific Adaptation to Climate Change for Water, Sanitation and Hygiene (PACWASH) Project, investigating adaptation to climate change for WaSH in PICs. This research was funded by the Australian Government Department of Foreign Affairs and Trade, and managed by International WaterCentre. The research partners were the Water Institute at the University of North Carolina, Griffith University, Monash University, University of Alabama, and the University of the South Pacific.

Data used in this policy brief is drawn from a review of key WaSH, CCA and DRM policy documents, and interviews conducted with stakeholders in Majuro in November 2014.

## Finding 1 – An enabling environment for climate-resilient WaSH

### *Integrating WaSH, CCA and DRM policies and plans*

The RMI is amongst the first PICs to have taken proactive steps towards policy integration for CCA and DRM by developing a *Joint National Action Plan for Climate Change Adaptation and Disaster Risk Management 2014-18* (JNAP). This recently endorsed plan brings together the strategic goals and objectives of the *2011 National Climate Change Policy Framework* (NCCPF) and *2008 National Action Plan for Disaster Risk Management* (NDRMP).

The benefits of adopting a more integrated approach to CCA and DRM, as outlined in the JNAP, include:

- strengthening coordination and rationalising institutional and policy arrangements;
- minimising the duplication of efforts, and optimising limited resources;
- bringing together different funding sources; and,
- improving decision-making and risk management processes for disaster and climate risks.

The JNAP does not provide detailed sectoral guidance on adaptation and risk management, but rather, calls for the integration of CCA and DRM activities into sectoral policies, work plans and budgets, and for capacity building within each sector to support participatory and integrated approaches to risk assessment and management.



In relation to WaSH, the JNAP identifies limited and fragile water resources, poor sanitation and high rates of contamination as key drivers of vulnerability to climate change in the RMI. Storm surges, king tides, typhoons and droughts are identified as having serious impacts on water resources across the atoll country, including the inundation of vital freshwater lenses. While the NCCPF identified water security as one of nine national priority areas for adaptation, it is no longer a standalone goal in the JNAP, however, Goal 5 of the JNAP relates to enhanced local livelihoods and community resilience, and includes reliable access to clean water, the reduction of vulnerability to water-related hazards, and reducing the impacts of climate change on water resources.

The NWSP was endorsed in 2014, prior to the finalisation of the JNAP, but nonetheless supports the objective of CCA and DRM mainstreaming in the WaSH sector. Building resilience to climate variability and extreme events by “*ensuing water and sanitation provision through proactive risk reduction and comprehensive monitoring*” is one of five core policy goals outlined in the NWSP.

#### *Identifying frameworks to guide climate and disaster risk management*

To support an integrated and holistic approach to WaSH management that includes the protection of water resources from climate and other risks, the NWSP promotes IWRM. Policy Target 2 states that “*By the end of 2015, all water management organisations shall have an integrated water resource plan*”, including Community Water Committees. These Committees will be comprised of local water users and other local stakeholders, supported by a National Water and Sanitation Office, which will be established and resourced by the Environmental Protection Agency (EPA), to lead coordination and implementation of the NWSP. A Water and Sanitation Commission will provide governance support and oversight, with representatives from all key stakeholder groups.

The adoption of an IWRM framework should enable participatory management of changing water conditions, uses and demands, through strengthening institutional capacity and coordination at all levels of government, and in the community, in order to reduce and management the impacts of climate change and other risks to water resources and WaSH systems (GWP 2007).

The NWSP identifies Water Safety Planning as the framework to support implementation of a proactive approach to risk management in the WaSH sector. The five-year NSWP Action Plan includes the development of a comprehensive National Water Safety Plan for major urban centres and the outer islands, using a simple, clear, and objective risk assessment system. This process will be led by the National Water and Sanitation Office, who will also be responsible for the development of a comprehensive monitoring program to ensure that data is readily available to inform decision-making for resource management and risk reduction at the national and local levels. A Water Safety Plan has already been developed for Majuro, but was not available for review at the time of this study. Having a clearly defined framework for risk management in the WaSH sector will enable improved coordination and allow for more targeted capacity building activities to support climate resilient WaSH.

## Finding 2 - Strengthening preparedness, response and recovery functions

### *Developing an Emergency Response Plan and Standard Operating Procedures for the WaSH sector*

The JNAP calls for development of Emergency Response Plans and Standard Operating Procedures in each sector, with individual Ministries responsible for the procurement of emergency resources and pre-positioning to support implementation of these plans. The need to develop a disaster and emergency plan, and early warning systems is also identified in the NWSP Action Plan, but at the time of interviews, stakeholders were unaware of progress towards this objective.

When it comes to preparing and responding to disaster events, the NWSP identifies a handful of discrete preparedness activities, such as storage and regulation of water use to ensure availability in times of drought, rainwater harvesting, and the establishment of early warning systems. However, no processes, functions or responsibilities are outlined for a coordinated approach to disaster preparedness, response and recovery within the sector. As one government stakeholder highlighted, there is a need to review the NWSP from a disaster management lens: *“we need to look at what’s in there. What are the arrangements in there in terms of DRR, in terms of CCA”*.

There is also no mention of the WaSH Cluster and its risk reduction, preparedness, response and recovery functions within the NWSP. This Cluster is a relatively new coordination mechanism, activated for the first time in response to the 2013 drought. Previously, the United States’ Federal Emergency Management Agency was responsible for disaster management in the RMI, however, in 2008 this role was handed over to the United States Agency for International Development, who channelled funding for the drought response through the implementing partner International Organisation for Migration. The Cluster was led by the Majuro Water and Sewer Company, with a focus on conducting damage assessment surveys and the distribution of Reverse Osmosis (RO) Units for desalination.

### *Reducing dependency and building adaptive capacity through disaster preparedness, response and recovery*

Stakeholders interviewed for this study commented on the history of emergency interventions by external actors in RMI and the dependency this has fostered. As one stakeholder explained, it is not lack of capacity, but rather, a lack of awareness and understanding of functions and responsibilities for disaster preparedness, response and recovery at the national, local and community levels: *“that traditional knowledge [for adaptation and disaster preparedness] is still there and used, but I think it’s more recently the creation of a dependency state”*. Another stakeholder similarly noted that *“when a disaster does happen or an emergency, people react, people do things. It could be more efficient, and they’re really good at a couple things, but preparedness is not one of them”*.

The absence of an Emergency Response Plan and Standard Operating Procedures in the WaSH sector appears to compound this challenge: *“your standard preparedness state – and that would include who reports rainwater levels, who receives that report, weather station – well that’s not written down in anybody’s responsibilities anywhere.”* Another stakeholder summarised what is needed: *“a better understanding from everyone about what they can do, preparing, responding, recovery. What everyone can do in those different places”*.

With functions, responsibilities and guidelines for disaster preparedness, response and recovery not clearly defined or formalised in any policy or plans, activities are more likely to be ad-hoc, and monitoring and regulation of WaSH interventions during emergencies is unlikely to occur. This can lead to emergency response actions that reinforce dependency in communities and increase vulnerability to extreme events and climate change. Opportunities to build resilience in the preparedness, response and recovery phases of a disaster are likely to be missed. As one stakeholder explained *“Sometimes the interventions that happen here I'm worried about, because it doesn't take into account, or it doesn't show people their own resilience, and how they can be a key actor, you know? They're the first responders, and that type of thing”*.

Several examples of the ad-hoc and uncoordinated approach to disaster response were identified during interviews. One stakeholder commented on the delivery of rainwater tanks to communities as part of the drought response, where there was limited training or information provided to support construction, ongoing operation and maintenance, and regulated use of these facilities as an emergency drinking water source. Another example related to the provision of RO units and the need for guidelines to inform when and how this approach should be used. One stakeholder described the problem of dependence on RO and the need to consider multiple sources of drinking water: *“instead of trying to improve their rainwater harvesting systems, which are low cost and effective and can store more water, if you assume that in the event of a drought they're going to send you an RO or, if you [already] have one, as soon as it breaks, you're done. If you're not also having another coping mechanism for drought or dry seasons, and you're just depending on an RO, the second that RO breaks then there's no other water source.”*

The development of an Emergency Response Plan and Standard Operating Procedures for the WaSH sector, and clearer articulation of the functions and responsibilities of other stakeholders in disaster preparedness, response and recovery, would promote a more coordination approach to disaster preparedness and response in the RMI WaSH sector.

### **Finding 3 – Coordination and capacity building to support implementation**

Implementation of the NWSP depends largely on the establishment and adequate human and financial resourcing of the National Water and Sanitation Office. In addition, the Office and its partners will need to support capacity development at all levels of government and in the community in order to facilitate participatory IWRM and WSP processes, and regulate and monitor the WaSH sector.

#### *Capacity building for climate adaptation and risk management at the local level*

According to the NWSP, for daily management of WaSH services, Community Water Committees comprised of various local stakeholder and user groups will be established. These Committees are also responsible for a range of actions designed to increase adaptive capacity and risk management for climate variability, including monitoring and regulating water use and contamination, promoting diversification of water sources, and developing and managing a local IWRM plan.

Households in communities will be responsible for the provision and maintenance of their own improved water and sanitation facilities, which the NWSP states should be resilient to drought and



extreme weather events, and designed to prevent contamination. The Ministry of Public Works is currently developing a building code that will include standards for household sanitation, while the Ministry of Health will promote improved household water and sanitation through behaviour change and social marketing campaigns.

The National Water and Sanitation Office, as the lead institution for the implementation of the NWSP, will be responsible for coordination, public communication and awareness raising, water quality monitoring at the national and local level, and development of the National Water Safety Plan.

The NWSP suggests that most implementation at the household and community level, including capacity building and community outreach will be supported by the National Water and Sanitation Office, however, there is insufficient detail in the NWSP and associated Action Plan on functions and responsibilities for implementation. These activities are likely to include capacity building and community outreach.

#### *Cross-sectoral coordination for policy implementation*

Opportunities exist to align activities and for cross-sectoral coordination between WaSH actors and those responsible for CCA and DRM under the JNAP, to enhance implementation of the NWSP. NGOs and Multilateral Agencies are active in the RMI WaSH sector, particularly during emergency response and as members of the WaSH Cluster group. The International Organisation for Migration, for example, in addition to playing a leading role in the 2013 drought response, has developed a GIS database mapping water resources across the country. The Majuro Water and Sanitation Company, alongside the Department of Resources and Development, are tasked with supplying all households in RMI with a rainwater tank for emergency water supply. The development of community preparedness and response plans, and public awareness on basic emergency response procedures, are identified as key activity to be led by the Chief Secretary's Office (CSO). Despite this level of engagement, the role of these organisations, and how they link into processes and institutional structures within the WaSH sector, is not articulated in the NWSP.

In interviews, stakeholders reported that there are no systematic processes for monitoring, regulation and coordination of NGOs and donors in the WaSH sector, and that this can create challenges for communication and coordination. As one stakeholder commented, when discussing the contribution of their organisation to WaSH, CCA and DRM sectoral plans: *"who can I report this to, that I'm helping you meet your National Strategic Plan?...We are doing work that's helping with these plans and obviously we want to, we want it to be what the government wants"*.



## References

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