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Consultancy to prepare a National Climate Change and Health Policy (NCCHP) and Revised Action Plan for the Republic of Marshall Islands

D4. Qualitative Assessment of Achievements of NCCHAP 2012

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Summary

Given the vulnerability of the Republic of the Marshall Islands (RMI) to the impacts of climate change, the Government of RMI is aiming to develop a concise and comprehensive National Climate Change Health Policy (NCCHP), and a 5-year Action Plan to support the effective delivery of the NCCHP. The goal of the NCCHP and revised action plan is to improve the coordination and effectiveness of the RMI Environmental Health Unit and lead the country into a climate resilient future.

Specifically this report includes: (i) a qualitative assessment of the achievements of the National Climate Change and Health Action Plan (NCCHAP) of 2012. This is based on a series of interviews with key stakeholders in RMI and the South Pacific Community, review of similar action plans in the literature, and discussion with members of the project advisory group; (ii) recommendations for the development of the National Climate Change and Health Policy and Revised Action Plan (NCCHP-RAP) in 2020.

1. Assessment of Achievements of NCCHAP 2012

1.1. Introduction

The 2050 RMI Climate Change Strategy “Lighting the Way” (2018) outlined a pathway for the Republic of the Marshall Islands (RMI) to facilitate adaptation and climate resilience in a way that ensures the future protection and prosperity of the country and its people. The Strategy noted that ‘whilst the RMI Ministry of Health and Human Services (MOHHS) have a National Climate Change and Health Action Plan (NCCHAP, 2012) and have been actively engaged in addressing environmental health for many years, it does not have a fully established Environmental Health Unit or a clear climate change and health policy to guide the implementation of the NCCHAP 2012’. An Environmental Health Unit has recently been established in the MOHHS, but is currently separate from the Climate Change function located under the Office of Health Planning, Policy Preparedness & Epidemiology in the MOHHS (see Annex 2).

The SPC Request for Proposal document outlined that health was a focus sector of the Global Climate Change Alliance Plus: Scaling Up Pacific Adaptation (GCCA+ SUPA) project, and that the Government of RMI requires a concise, overarching Climate Change and Health Policy that will contribute to climate change resilience. The Policy is to be supported by a 5-year Action Plan with clear objectives, targets and indicators that will improve the coordination and effectiveness of climate change adaptation and environmental health work in RMI more broadly.

The Australian National University Project team has been tasked with preparing this National Climate Change and Health Policy and Revised Action Plan (NCCHP-RAP) for RMI. Its core objective will be to increase the climate change adaptive capacity and resilience of the RMI health system, via the most effective health adaptation strategies that take into account the highly localized contextual factors of the RMI.

In the years since release of the 2012 RMI NCCHAP, climate change has accelerated and climate change adaptation knowledge has advanced. There is now greater understanding of climate-related health threats, globally and within the RMI, as many impacts are currently unfolding. The NCCHP-RAP will incorporate these additional learnings and RMI-specific data, where available. To maximize its potential to protect RMI’s prosperity and the health and wellbeing of its people, the NCCHP-RAP will review the 2012 RMI NCCHAP in terms of its scope, priorities and applicability to the RMI health challenges, as well as its fit within the constraints of the RMI health sector landscape.

As noted in the 2050 RMI Climate Change Strategy, the Paris Agreement specifically notes the right to health. Climate change not only threatens global human health, but also

access to the fundamental determinants of health, social and environmental. Due to the high vulnerability of the RMI, all residents are classified as vulnerable to climate-related health impacts. However, vulnerability is never uniform. Health risks and health needs of sub-populations and residents of the outer atolls will be specifically considered in the development of the NCCHP-RAP.

Drafting of a NCCHP-RAP that is fit for purpose necessitates a solid understanding of the 2012 RMI NCCHAP, its content, its reach, its applicability, strengths, weaknesses and gaps, as well as its suitability for the current and future climatic and health landscapes within the RMI. To ensure this will be fit for the future also requires familiarity with recent global and Pacific advances in climate change adaptation and health policy, and the recent climatic changes and projections. We will ensure the NCCHP-RAP is locally contextualised and takes a people-centric approach.

In recognition of the local expertise, knowledge and cultural understandings of specific relevance to the RMI, we will use qualitative methods to capture this vital source of intelligence and lived experience from key stakeholders holding professional positions, as well as community leaders and members.

1.2. Methods

We reviewed the NCCHAP 2012 and assessed its achievements by applying a two pillar approach:

- (1) Document driven evaluation of the coverage and impact of the existing 2012 NCCAHP plan (as part of Deliverable 2)
- (2) Stakeholder perspectives of the plan's utility, gaps and barriers to implementation.

1.2.1. Desktop Study

The literature review of relevant climate change and environmental health documents includes (see Deliverable 2):

- RMI generated documentation
 - RMI NCCHAP 2012
 - RMI health policies and strategies & related documents of relevance to climate change
 - Relevant documents and policies relating to environmental health determinants
- Documentation relevant to climate change adaptation (CCA) and health in the RMI and Pacific derived from other sources

- Reports from non-governmental organisations (NGOs), the World Health Organization (WHO), the Pacific Community (SPC), and other international groups and research agencies
- Best practice examples of health system response to climate change
- Scholarly literature – searches of bibliographic databases on health, health policy, CCA for health, CCA evaluation

1.2.2. Stakeholder Perspective

This includes four main sources of information:

1. Perspectives from Participants of the Climate Change and Health Symposium on 30-31 January 2020 in Majuro, RMI.

We have generated a summary report of findings from the ANU team's 1st visit to RMI (Deliverable 3), which will be provided to key stakeholders during the team's 2nd visit to RMI.

2. Key Stakeholder Input

Perspectives and expert input from key stakeholders from the health / policy /professional domain, including formal and informal interviews. Perspectives sought from these individuals focused on:

- NCCHAP 2012:
 - Views on strengths, weaknesses, and gaps
 - Views on extent of uptake
 - Implementation barriers, facilitators and impacts
- Expert knowledge on key climate threats facing the RMI
- Expert knowledge on key health threats facing the RMI
- Expert knowledge on changes to RMI climate-related health status
- Views on areas to change for NCCHP-RAP
- Expert views on Environmental Health Unit – optimal capacity & functionality
- Strategies to optimise implementation and broad scale uptake of NCCHP-RAP
- Additional strategies to improve RMI adaptation and resilience to climate change
- Recommendations of additional sources of information and experts to interview

3. Focus Group Discussion in RMI

Strategies to gather perspectives and expert input from key stakeholders from the community sector domain will include focus groups and informal interviews.

Perspectives sought from community groups will focus on

- Observed environmental changes in RMI in the past 20-30 years
- Perceived changes to the health of individuals, families and/or communities arising from these changes? If so, how?
- Climate adaptations adopted by families or communities, motivation for these changes, and factors that made making such changes easier or more difficult
- Benefits or harms arising from any CCA adopted.
- Prioritizing the environmental risks that ought to be addressed as part of the NCCHP-RAP to improve community health.
- Suggestions on how these prioritized environmental factors might best be addressed.
- Perceived obstacles to implementing a NCCHAP? (e.g. cultural, community, bureaucratic, environmental etc.), and strategies to avoid or minimize these.
- Other comments will be invited

We will generate a summary report of findings to be provided to key stakeholders during our 2nd visit to RMI.

4. Input from the ANU Project Team and Advisory Group

We hold fortnightly meetings with the ANU project team and members of our Advisory Group. These meetings have provided insights into the achievements and shortcomings of the NCCHAP 2012.

1.3. Key findings

Interviews with the

- Deputy Secretary, Office of Health Planning, Policy, Preparedness and Epidemiology (MOHHS)
- Health Informatics Director (MOHHS)
- Director of Environmental Health (MOHHS)
- Programme Manager, Pacific Community (SPC)

Interviews with these four key informants yielded much information on the design, implementation and impact of the NCCHAP 2012, and many valuable recommendations were made that should be incorporated into NCCHAP-RAP. The key points from the interviews are summarised here. Other comments, anecdotes and suggestions made will be used to initiate discussion in the mapping workshop, to be held later this year.

Informants explained that the NCCHAP 2012 was derived from information and data collected for a workshop organised by WHO in 2011. This included data on illnesses, such as diarrhoea and vector-borne diseases (VBD), from Majuro and Ebeye, broken-down by

gender and age group. The weather station facility based in Majuro provided the meteorological data for the analyses. The NCCHAP 2012 included a risk level prioritization (high, medium, low) and a number of recommendations made by the working team. It was endorsed by the Secretary of State for Health (i.e. senior public servant appointed by Government and reporting to the Minister of Health), but not formally endorsed by the Minister of Health or taken to Cabinet for Government endorsement.

Some of the adaptation strategies included in the NCCHAP 2012 have been completed, while others have been partially completed, or are ongoing. Informants generally agreed that the impacts of Climate Change on health are far reaching, and affect many different aspects of health, sometimes indirectly. Although NCCHAP strategies have resulted in substantial improvements to MOHHS's approach to protecting community health, they have not yet been sufficient to contain and mitigate the health risks associated with Climate Change. For example, measures to address water-borne diarrhoeal pathogens have included vaccinating children against Rotavirus; providing extensive community education on the importance of clean drinking water, sanitation and hygiene; and providing additional training for health assistants in the treatment of patients with water-borne diseases, there have been several diarrhoeal disease epidemics since 2012, including typhoid on Ebeye in 2019. Similarly, programs to address vector borne diseases, including a program of vector control, have not prevented several outbreaks of dengue fever, and more needs to be done to address respiratory diseases and mental health.

Informants made numerous recommendations as to how the NCCHAP could have been improved. These recommendations, summarised below, will be taken into account in the development of the 2020 NCCHAP-RAP.

- More community consultation is needed. This includes consultation with community groups, including churches, and with community leaders during the development of NCCHAP-RAP strategies, so these groups feel they have ownership. Consultation is also important to ensure community groups are aware of and committed to strategies. It is particularly important to engage with traditional leaders (iroj) and landowners who have great influence in the community, and it is difficult for Government to implement community wide strategies without their support. There should also be engagement with youth groups, such as Jo-Jikum (Marshallese Climate Youth Organisation); women's groups such as Women United Together Marshall Islands (WUTMI); and relevant NGOs such as Marshall Islands Epidemiology & Prevention Initiatives (MIEPI).
- The NCCHAP-RAP needs to prioritise strategies. The climatic extremes associated with Climate Change, including droughts and king tides, tend to precipitate health emergencies that can absorb substantial human and financial resources and divert attention from on-going and underlying issues that need to be addressed. Some of the underlying health issues in RMI are being addressed by other programs, so it is

vital that the specific areas to be addressed by the NCCHAP-RAP are clearly identified and do not duplicate other initiatives but cooperate and coordinate with them. When the NCCHAP-RAP is implemented it is crucial to ensure that every aspect of health covered by its scope receives the attention it needs.

- Critical strategies such as vector control need to be expanded with increased resourcing and more coordination with relevant agencies. Priority areas include more fumigation, more in-house surveillance and more technical assistance.
- Several informants mentioned the importance of appointing a 'champion', a coordinator who will ensure the NCCHAP-RAP is implemented. Their work should include coordinating with other agencies and ministries, collecting information so that new data can be incorporated over time, and coordinating implementation activities.
- The NCCHAP-RAP needs to go to Cabinet and receive endorsement by Government and specific funding for implementation. This may include Government approval to seek external funding. Funding should also be provided for an NCCHAP-RAP coordinator.
- Provision should be made for monitoring and evaluating implementation of the NCCHAP. Monitoring is important to see which activities are on schedule and which are falling behind, and also to obtain feedback so strategies can be adapted when necessary. One informant suggested the Plan should be more focussed and/or could potentially be divided into phases, e.g. Phase 1: Majuro and Ebeye; Phase II: Outer islands. The phases and/or the Plan as a whole should have a fixed duration, e.g. be a 5-year strategy with milestones to facilitate monitoring and evaluation. This would also allow it to be more responsive to changing circumstances and changing needs. It is vital that the NCCHAP-RAP is very specific in terms of deliverables, timescales and responsibilities, and includes costs at least in order of magnitude.

1.4. Discussion

The NCCHAP (2012) was intended to be the key instrument through which the Ministry of Health and Human Services (MOHHS) contributed to the Republic of the Marshall Islands Joint National Action Plan on Climate Change Adaptation and Disaster Risk Reduction (JNAP) 2014-2018. Specifically, the NCCHAP 2012 was created to address the health goals outlined in the JNAP.

The NCCHAP 2012 was a good document and contained useful information on the association between climate and disease in RMI. However, there was: (1) no funding or staff at the MOHHS to implement it; (b) progress in certain areas but no overall coordination; (c) no monitoring or reporting.

The NCCHAP 2012 includes potential adaptation strategies to deal with climate-sensitive health risks in RMI (Table 2). For many of these adaptation strategies, content was imported from the Marshall Islands MoH Draft Strategic Development Plan, in order to identify overlap and align priorities. However, it is not entirely clear how some of these adaptation strategies were taken forward to be included in the list of “recommendations” (pages 32-23). Furthermore, the recommendations do not have an “owner” or “responsible agency”, or a timeframe for delivery.

The NCCHAP 2012 concluded that RMI MOHHS should:

- Consider appropriate timelines for implementation of the adaptation strategies suggested;
- Prioritize adaptation activities based on consideration of the climate sensitive health risk, timelines, feasibility, resources, and cost and aim to have commenced some of the highest-priority adaptation activities within the following 6-12 months;
- Review this NCCHAP document on an annual basis, with updating and/or modifying as necessary.

However, the above actions did not take place due to the lack of clear prioritization and dedicated resources at the MOHHS. The JNAP is a better example of a plan with specific actions, results, lead / supporting agency, indicators and costs (see example in Annex 3).

2. Conclusions and recommendations

Despite its scientific merits, NCCHAP 2012 did not achieve the intended impacts due to internal and external factors discussed in section 1.4.

A list of recommendations for the development and implementation of the NCCHP-RAP are listed here:

- The NCCHP-RAP will have to be concise, realistic and achievable.
- It will need to have clear objectives, actions, responsible agencies, timescales for delivery, and (approximate) costs.
- The NCCHP-RAP will need to suggest implementation measures and include a plan to generate the necessary funding. Costing the action plan is important when applying for funding from donors such as the Green Climate Fund. Funds absorbing capacity is also an issue that might need to be addressed.
- The action plan should have a reporting system for regular (at least yearly) monitoring and evaluation.
- It is important to have an influential and committed local champion (e.g. MOHHS Deputy Secretary) for the plan.
- Ministerial endorsement of the policy and action plan is important for securing funding and buy-in from other Government Departments and Agencies.
- Engagement with traditional leaders and landowners, and Local Authorities, from an early stage is essential for successful implementation.
- Engagement with church / faith groups, NGOs, and women and youth organisations from an early stage is also essential.
- Successful implementation of the NCCHP-RAP will require dedicated resources, including a co-ordinating officer who will take care of the day-to-day tasks of the plan.
- The NCCHP-RAP will need to be embedded in related policies and plans across all sectors taking into account both environmental and public health priorities.

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Annex 1: Interviews

Interview 1 (Majuro, Monday, 3rd February 2020)

The NCCHAP 2012 collected all information and data required from a workshop organised by WHO in 2011 (involving those listed in the 2012 report) to develop the plan. This included data on illnesses, such as diarrhoea and vector-borne diseases (VBD), from Majuro and Kwajalein broken down by gender and age group. The weather station facility based in Majuro provided the meteorological data for the analyses.

The plan included a risk level prioritization (high, medium, low). It was developed following a three-phase approach:

1. Data gathering
2. Prioritisation workshop
3. Writing up of the plan

The NCCHAP 2012 included a number of recommendations made by the working team. The Plan was endorsed by the Secretary of State for Health (i.e. senior public servant appointed by Government and reporting to the Minister of Health), but it was not followed up. That is, it was not formally endorsed by the Minister of Health, whose responsibility would be to take the Plan to the Cabinet for formal Government endorsement.

Some of the NCCHAP 2012 potential adaptation strategies (listed in Table 2) are completed, or partially completed, or ongoing. For example, under health issue “water-borne diarrhoeal pathogens”:

- Rotavirus vaccine has been provided to children to prevent rotavirus gastroenteritis diarrhoea.
- Educational materials on clean drinking water, sanitation and hygiene have been developed.
- Two training sessions on water-borne diseases were conducted, but it is not clear that the relationship to climate change was included.
- Training to improve the skills of health assistants in the treatment of patients with water-borne diseases.
- A new Environmental Health Department was established within the Ministry of Health and Health Services (MOHHS) in 2019). However, it is not clear if meetings with health councils and communities on environmental health have been conducted.
- A poster aiming to strengthen public education on hygienic practices within the country was developed and widely distributed through the media (recommendation partially achieved).
- No clear progress in the coordination between MOHHS and the Environmental Protection Agency (EPA) on water quality testing.

- No clear progress in sewage treatment. This needs to be a high priority. MOHHS needs to advise and assist on this process. Hygiene is still an issue, e.g. there was a typhoid outbreak in Kwajalein in 2019.

Some of the recommendations need to be more specific. For example, under “food-borne disease”:

- Hire two inspectors (it is not clear where?)
- Coordinate with EPA and the Ministry of Resources and Development (R&D) on food safety monitoring (is this happening?)

The interviewee was not sure if the potential adaptation strategies under “malnutrition” have been implemented.

Under “**vector-borne diseases**” (e.g., dengue, malaria):

- Significant strengthening required in this area given severe impact of previous dengue outbreaks; mosquito surveillance and control as well as community education and environmental health training should all be part of this process (check previous and latest entomological survey reports).
- Since the NCCHAP 2012, two training sessions/programmes on VBD control were carried out, and there is an action plan for dengue outbreaks.

Regarding “**respiratory diseases**” (including influenza, TB, obstructive airways disease), one of the potential adaptation strategies:

- Strengthen the early detection of TB cases – a TB screening programme has been rolled-out, with screenings already conducted in Ebeye (2017), Majuro (2018), and Arno (2019), with more to come in other islands.

Under “**mental health**”:

- A new psychiatrist has been hired at MOHHS.
- There was a psychiatric nurse, but (s)he left a few years ago.
- Create a working committee in collaboration with the Mental Health Council to develop a policy for mental health (this exists – but is climate change included?)
- Purchase a vehicle for Majuro (there is a vehicle).
- Develop a rehabilitation center (this has been deferred).

Other points made:

“A lot of (good) things are happening and work is ongoing, but the NCCHAP 2012 was not followed up with meetings. We say “we have a policy” if we are asked, but our (i.e. MOHHS) work is not really influenced by this policy.”

“There has been no funding to implement the NCCHAP 2012. Also there has been no process for **monitoring and evaluation**.”

“There is progress being made due to other needs, but there is no **climate change and health champion** and no follow-up.”

“Also, nobody has checked for **new data** to be incorporated in the analyses.”

“We need a “champion” to implement the NCCHAP 2012, coordinate with different agencies, and collect information. This is more of a coordinator’s role (at Environmental Health Director’s level, reporting to MOHHS Deputy Secretary for Health Planning, Policy, Preparedness and Epidemiology), somebody who will coordinate activities. This coordinator will need a **budget** – there is no funding for this role currently and all staff are very stretched.”

“The **coordinator** should be someone with good managerial skills (report writing, project management, organising meetings) who can learn about climate change and health data. Of course, somebody enthusiastic about this plan.”

Other key recommendations:

- RMI **community engagement** is very important through:
 - Church / faith groups
 - Landlords (people listen to them, e.g. to clean-up gardens); there are hundreds of them and they follow their traditional chief.
- “**Traditional leaders’ engagement** at an early stage solves a lot of problems. If only MOHHS asks people to do something, it is not going to be effective”.
- NCCHAP 2012 – it is a good plan, but there was no: (1) funding/staff to implement it, (b) coordination, or (c) reporting.

“This time round we need something more “concrete”. The old plan was not known by the traditional leaders (they were given the plan, but this was not followed up). There was no community involvement in the development of NCCHAP 2012, no traditional leader involvement, no focus groups.”

Other issues raised during the interview:

- Carbon emissions from the health sector. There is a need to reduce energy consumption in hospitals.
- Mass purchase of bicycles – seems impractical (e.g. many dogs, no cycling lanes, it is dangerous, some people (female?) don’t know how to bike).
- Overall, retention of health professionals is an issue.
- There is a section on health in the Joint National Adaptation Plan (JNAP), but it is very high level.
- Collaboration between MOHHS and other agencies is already happening.
- Important to have Ministerial level endorsement of the NCCHP-RAP (2020) to access funding for implementation.

What should be the key **priorities** for NCCHP-RAP?

- Flooding, typhoons, infrastructure vulnerability (e.g. bridge linking the two Majuro islands).
- How do we identify places for relocation?
- More emergency health staff is needed.
- The NCCHP-RAP should be linked with other RMI plans. For example, there are already the following plans:
 - Communicable Disease Response Plan
 - Hospital Preparedness Plan
 - Public Health Emergency Preparedness Operations plan (outside hospitals, e.g. dealing with flooding or diarrhoea outbreaks)
 - Mental Health plan

Concluding remarks:

“NCCHAP 2020 should complement other existing plans. It should not be just a stand-alone plan. It should be referred to in other plans.”

“A plan is only effective when you see it’s been used when something comes up”.

“There has to be ongoing implementation, but the plans should also be triggered when there is an emergency.”

Interview 2 (Majuro, Monday, 3rd February 2020)

Key priorities for the NCCHP-RAP:

- WASH (water, sanitation, hygiene)
- Food safety
- Vector-borne disease control

Vector-borne diseases (VBD):

- Dengue has reached four RMI islands – fumigation is needed.
- Dengue is endemic in Kiribati. In RMI there are outbreaks – more surveillance is needed
- More surveillance done in-house is needed. Currently mosquito identification is done overseas. Training is needed for this.

Currently, the Environmental Health Department (only 3 staff) is very stretched:

- 2 staff doing vector (mosquito) control
- 1 staff member responsible for food- and water-borne diseases

The Environmental Health Department needs technical assistance from WHO. Currently funding and staff support are missing. “There is an Environmental Health Department now, but no funding”.

Climate change and other emerging issues are also important. “Climate change is linked to everything. In my mind, everything is climate change.”

Climate change is affecting mental health.

Climate change is affecting natural resources, including farming and fishing, and food security.

An anecdote: “Somebody gave up farming because he was struggling to make enough money, and he is now selling drugs.”

“I didn’t have a chance to use the old NCCHAP 2012, but it hasn’t been used by others either.”

People don’t link disease to climate change – there is lack of awareness. We need to do more awareness-raising about the plan.

Endorsement by the **Minister of Health** / Government is very important.

It is also important to involve the landowners (“Alap”) and traditional leaders (sometimes these are the same people). They have more authority than the EPA. They need to have “ownership” of the plan.

How do we engage the **traditional leaders**?

- We need to set up a meeting (arranged with Government support) of the “House of Iroj” (i.e. “Iroj” are the traditional chiefs). They were not present in the Climate Change and Health Dialogue symposium (30-31 January).
- Ebeye has very strong traditional leadership. If the traditional leader says to clean up, people will do it.
- Traditional leaders know about climate change and changes in their islands. For example “they will remember the days we never got fish poisoning” or they will know about the “bleaching of the corals”.
- The traditional leadership system is very hierarchical, with Paramount Chiefs (Iroj, only 2 for Majuro), Chiefs, and Landowners (Alap, 200+ for Majuro)

Local Authorities are also important to engage, i.e. the locally elected Mayor and local councillors.

Recommendation: Bring Traditional Leaders and Local Government together in a workshop, or two separate workshops (there are many landowners). Landowners are close to local government.

What should be the key **priorities** for the NCCHP-RAP?

- King tides and related increase in diarrhoeal infections
- Droughts are also associated with diarrhoea
- Droughts also bring salinity of well water which has increased in recent years.

Interview 3 (teleconference, Thursday, 20th February 2020)

Feedback on the NCCHAP 2012:

- It was done in a rush to meet a deadline, and there wasn't really community input.
- It was not really an "action plan". It was vague and needs to be redone.
- The plan was not implemented. There was no programme or somebody in place to have oversight of the plan and carry out the monitoring.

There have been continuous outbreaks of infectious diseases.

Climate change is embedded in the MOHHS organisation chart (see Annex 2), but there is still nobody in place to sustain the programme.

It is recommended to involve the following local organisations:

- Marshall Islands Epidemiology & Prevention Initiatives (MIEPI)
- Jo-Jikum (Marshallese Climate Youth Organisation).

Interview 4 (teleconference, Monday, 24th February 2020)

Feedback on the NCCHAP 2012:

- It is difficult to develop a feasible climate change and health action plan in a Small Island Developing State in the Pacific.
- The NCCHAP 2012 was a "wish list" – not really an action plan.
- It is better to have a plan that is more limited in scope and smaller in scale, but more realistic and achievable. "A short, sharp policy would be best".

Recommendations for NCCHP-RAP:

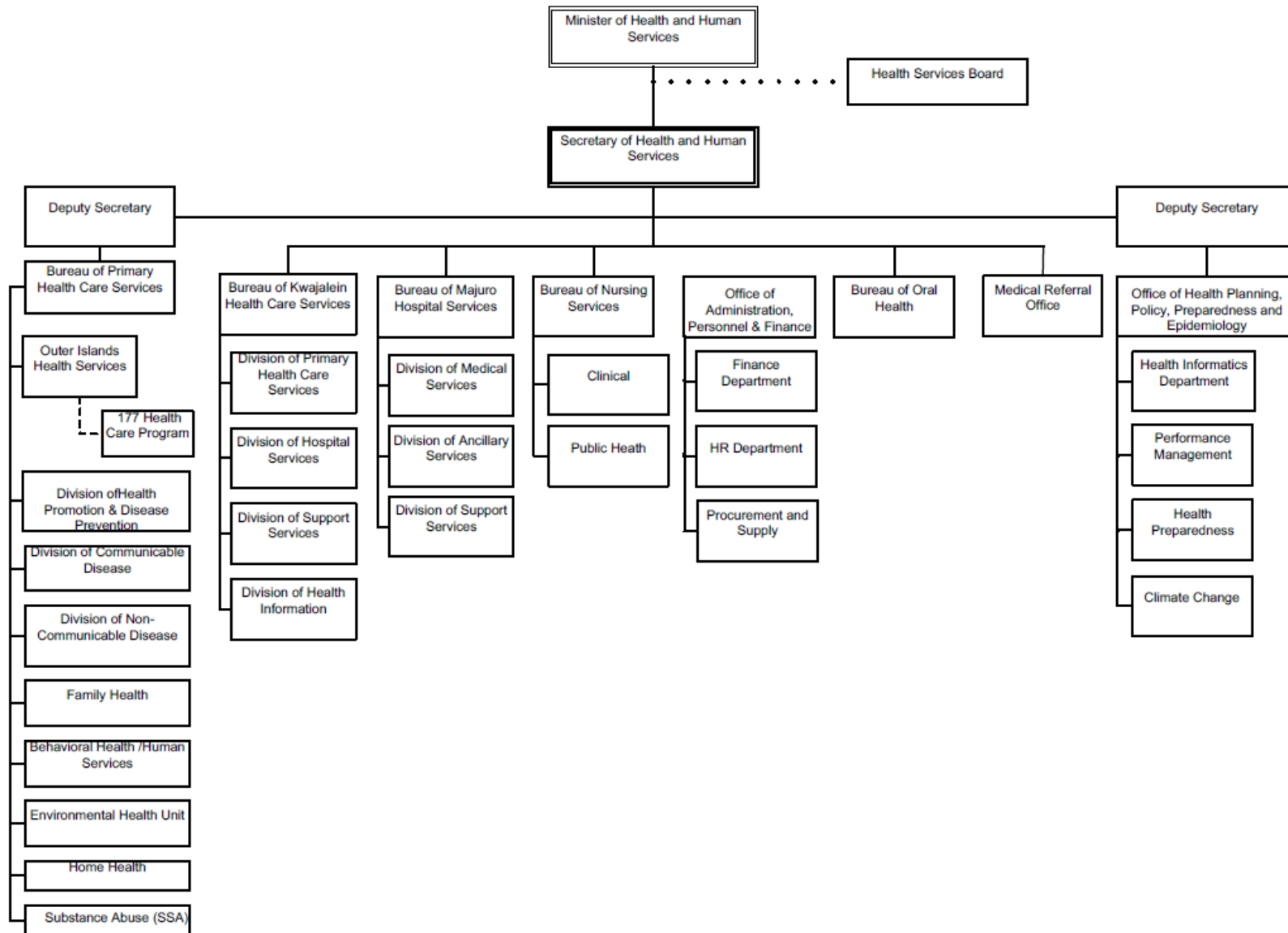
- The revised action plan needs to have a set period for implementation (e.g. 5 years) and milestones.
- There has to be a clear understanding of who is implementing what.
- It may require two phases for implementation. For example:
 - Phase 1 – Majuro and Ebeye (5 year plan);
 - Phase 2 – outer atolls (10 year plan).
- The Policy should provide a short but comprehensive framework
- The Action Plan should be very specific (deliverables, timescales, owners, etc.) and include costs (at least order of magnitude).

Other points made during the interview:

- The Climate Change Policy for Palau is a good example, although it is a very ambitious strategy that covers all sectors (not just health) and took 2 years of consultations and working groups to develop.

- The RMI National Climate Change and Health Dialog symposium in Majuro, 30-31 January 2020 focused mainly on vector-borne and other infectious diseases (see Deliverable 3). There was very little discussion on non-communicable diseases (NCDs). However, there are other NCD policies in RMI, therefore the stronger focus on infections may be well justified.

Annex 2: RMI Ministry of Health and Human Services organogram



Annex 3: Republic of the Marshall Islands Joint National Action Plan on Climate Change Adaptation and Disaster Risk Reduction 2014-2018 – Results Matrix

Goal 5: Enhanced local livelihoods and community resilience (extract)

Objective	Actions	Results (Outcomes/Outputs)	Lead Agency	Supporting Agency/ies	Indicator	Cost
5.1 Strengthen national and local coordination and collaboration mechanisms and technical capacity of the water services to improve management of freshwater resources	5.1.1 Develop and implement an ongoing capacity building program for staff at MWSC and KAJUR	Improved planning and coordination of water services to residents of Majuro and Ebeye	EPA	MWSC EPA, R&D	Existence of a proactive national water committee with broad representation Number of technically competent staff in MWSC and KAJUR increased by 50% following the first year of implementation of the capacity building program Number of contamination cases reported decrease in every reporting year Number of households reported to be suffering from water shortages decreased	\$291,612
	5.1.2 Strengthen sewerage collection and treatment infrastructure on Majuro and Ebeye		MWSC/KAJUR EPA	MWSC, CMI		
	5.1.3 Equip communities with the means to test, purify and report on water quality/quantity on the Outer Islands		R&D	EPA, MWSC		
	5.1.4 Examine feasibility of centralized and household solar-powered water purification / desalinization systems for the Outer Islands	Reduced wastage and contamination of water linked to failing infrastructure Improved management of sewerage and solid waste	MWSC/R&D (Outer Islands) CSO	EPA		
	5.1.5 Implement existing policy for installing rainwater catchment tanks in all new public and households buildings	Access to sufficient amounts of clean water during droughts and other disasters	MWSC/R&D (Outer Islands)	EPA, CMI		
	5.1.6 Supply all households in Marshall Islands with rainwater catchment tanks					
	5.1.7 Address substantial leakage/waste/evaporation (immediate issue)					
	5.1.8 Address failing and climate-exposed infrastructure (e.g. underground pipelines, airport catchment, reservoirs)		MWSC			
	5.1.9 Undertake evaluation of groundwater resources on relevant islands (including the more densely populated islands of Majuro and Ebeye)	Understanding of groundwater resources for the possibility of sustainable extraction	MWSC			