

Santo Community Kwajalein Atoll

Hazard Vulnerability Capacity Mapping Report

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Hazard Vulnerability and Capacity Mapping with Early Warning Systems Methodology

Introduction:

The Community Hazard Vulnerability and Capacity Mapping with Early Warning System (HCVM) has been designed to assist communities and facilitators in conducting HVCM exercise and producing HVCM reports as part of the IOM Community Vulnerability and Capacity Mapping Exercise and Assessment (CVM) Project. The objectives and steps taken allow the facilitators to implement in a way that follows facilitators to ensure the communities is leading the process. It acknowledges that each community is unique, certain variations in the methodology are possible; however, the three sessions included are considered the minimum in order to effectively conduct the exercise. Community members' time is voluntary and valuable and there are many competing pressures, so it is essential that facilitators are always well prepared, efficient and mindful of not wasting time. The minimum time required to conduct all the activities in the HVCM is ten hours of community time. Not all members will be required for all ten hours.

Objectives and Process:

Under the objective of the CVM program, IOM and its partners will conduct HVCM exercises in up to 10 communities across the RMI. HVCM is set to complement and inform other community based climate adaptation and disaster risk reduction activities such as:

The specific objective of the HVCM is to increase community members' awareness of disaster risk and the impacts of climate change in their community and help them to plan activities to reduce vulnerability and increase resilience to both slow and fast onset disasters as well as impacts of climate change. HVCM is a participatory, community-led series of activities that provides essential context-specific information on the local impact of climate change and community vulnerability and existing capacities.

In addition to assessing existing disaster preparedness capacity, HVCM can also help us to better understand the communities we work in in order to address their unique concerns. HVCM is an effective entry point to the community and offers an opportunity to allow community members to share their opinions on what is important to them. The results of the exercise can help us to focus future climate adaptation and disaster risk management plans, trainings and disaster mitigation measures towards the specific concerns of the community.

Where feasible, it is preferable for the activities to be conducted in Marshallese. Facilitators are Marshallese and speak both English and Marshallese.

The HVCM exercise will generally require three sessions:

1. Sensitization and Community Profile
2. Physical Mapping and Hazard Vulnerability Matrix

3. Early Warning System Mapping and Profile
4. Summary and Action Plan Generation

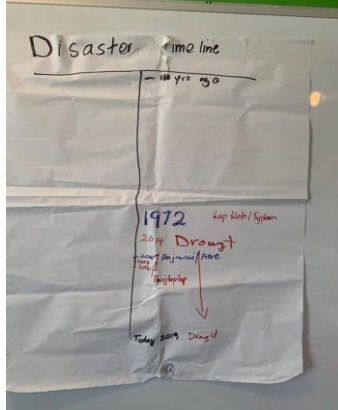
In all sessions, we should emphasize to participants that we are here to learn from them; we need them to teach us about their community. Much of the success or failure of the exercise will hinge upon everyone's participation and input. In all sessions, it is important to ensure participation of all groups in the community including women, different age groups including youth and any 'outsiders' in that community such as immigrant or under represented groups. It is essential that the community feel ownership of this process with facilitators only guiding the process. As with all community engagement, it is also important to be very clear at the outset as to what IOM's role and not to raise unrealistic community expectations. Sessions 2 and 3 will require snacks and drinks for all participants. Where possible community contributions such as coconuts or other refreshments should also be encouraged.

Throughout the HVCM, it is important that special consideration be provided to ensure the participation and engagement of traditionally under-represented groups. Ensuring women and youth are actively encouraged to participate is a critical ingredient to the success of the process. Natural disasters have the capacity to disproportionately affect vulnerable groups in society and the mapping exercise should assist the community in appreciating that physically and mentally disabled persons in particular will require additional support in protecting them from the identified hazards. It is therefore a critical outcome of the mapping exercise that these people be identified and their locations identified on the map. If possible ensure their participation in the HVCM exercise.

The following report is the output of the HVCM exercise.

Community Profile Questions

About how many people live in your community?	600+
What are the major occupations of community members? (income and subsistence activities)	Most of the community members have occupations on Roi Namur
What local resources does your community depend on? Explain why.	Fish, local vegetation for food, although most food supplies are bought from Roi
How are decisions made in your community? Who has the authority?	Council, Local Gov't., Traditional Leaders
What social groups are active and what purpose do they serve?	Women Church group, church, men fellowship, community women's group
What natural hazards affect your community?	The participants have identified King Tide and Drought as their two main natural hazard concerns
What are the social problems your community is facing?	Primary social concerns expressed by the community members were lack of support from local jurisdiction. For example, there request do not come in on exacted time they needed and more often there needs are never meet.
What are the main strengths of your community?	The strengths of this community include the variety of social groups, including Kwajalein Atoll Local Government, Traditional Leaders, Community Members, Church Group and Families, Political Leaders, and Women Group. The community members are driven through strong generosity, cultural reliance and recogisation deeply manifested into their very old and respected foundation roots. LOOK IN HVCM
Are there any new community improvement projects planned?	Reverse Osmosis donated by Taiwan Government
Is the community participating in programs to improve natural protective barriers? (Mangrove, Steep slopes, rivers)	NONE

<p>What natural disasters have occurred here in the past 100 years?</p>	 <p>Drought, Kingtides, and Typhoon</p>
<p>Are there many people of different heritage in the community?</p>	<p>Fijian</p>

Santo Community: Santo Community Hazard, Vulnerability, Capacity Mapping Exercise – Final Report

Introduction:

The first session of the Hazard, Vulnerability and Capacity Mapping (HVCM) and Early Warning System (EWS) exercise was commenced on January 30th 2019 followed by another second session on February 1st 2019 at

Santo Elementary School. A total of 17 community members attended the workshop. 10 Male and 7 Female attended the workshop for Santo Hazard Vulnerability Capacity Mapping and Early Warning System.



Community Consultation Breakdown	
Male	10
Female	7
Total	17
Children	20+
Disabled	
Government	



Santo Community Profile Statement

Background: Santo is one of the many islands that lies on the Ralik chain falling on the jurisdiction of Kwajalein Atoll Local Government and its Traditional Leaders.

The population of Santo is approximately 600+ according to the interview conducted. Employment is the main core of survival on Santo. Majority of employment are from Roi Namur Military Base and contracted. Local Resource is scarce on Santo therefore they depend on Roi Namur to buy their groceries.

The protocol to conduct any activities with community members and local government is paying respect to the Iroj. While paying respect that is when activity is introduced. Once the Iroj and his fellow traditional leaders/land owners give their blessings, coordination is made through with the Mayor and Local Government.

Primary social concerns expressed by the community members were lack of support from local jurisdiction. For example, their requests do not come in on the exact time they needed and more often their needs are never met.

Geography and location:

Hazards: Because Santo was severely affected by a Drought and King-tide once and the locals still remember what they experienced majority of the community members voted for Drought leading it to be their number one most hazardous hazard and King-tide to be their second most hazardous.



Figure 1 Santo Community member's votes for Prioritizing their highest hazards

Effects of Climate Change on hazards:

The community of Santo have voted for Drought has their number one most hazardous hazard. Drought has been on Santo on and off, on and off. The community of Santo reported that they have been experiencing drought very often.

Working in groups the community listed down the impact of drought. Disease outbreak is one of the top problems they encounter. Swells, pinkeye, coughing, skin rash on kids multiply and spread due to lack of water and knowledge of how to prepare for drought as well has not being informed ahead of time about an upcoming drought.

Capacities: The strengths of this community include the variety of social groups, including Kwajalein Atoll Local Government, Traditional Leaders, Community Members, Church Group and Families, Political Leaders, and Women Group. The community members are driven through strong generosity, cultural reliance and recognition deeply manifested into their very old and respected foundation roots.

Hazard Vulnerability Risk Map 9

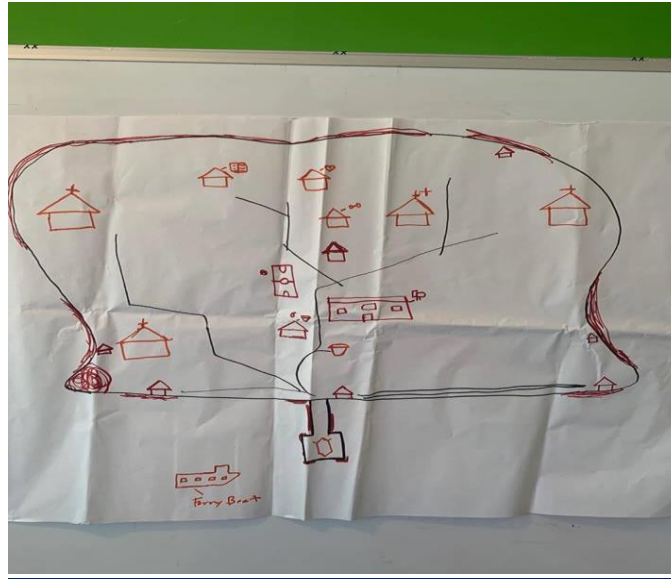


Figure 2 Map drawn by Santo community members.

Hazard Vulnerability Matrixes

Hazards	Impacts	Strength	Weakness	Needs
Drought	Disease outbreak Swells Diarrhea Pinkeye Skin rash for kids Lack of medication Damage crops Damage water catchment Dusty environment Not enough water catchment	Traditional leaders Church pastors KALGOV Aid and in kind donation from military base at Roi-Namur Family and community members School	No enough transportation. vehicle and boat No generator No RO UNIT Lack of medication Lack of education and awareness on how prepare for drought and how to save water	Need more water catchment Medication Transportation Generator Power Plant Solar System Disaster Office RO Unity Community Hall Gymnasium
King-tide	Island decreasing in size Destroy crops Too many trash in the sea There are houses that the king-tide have move and destroy Sea-level rise	Traditional leaders Church pastors KALGOV Aid and in kind donation from military base at Roi-Namur Family and community members	Not enough seawall Not enough boat	Seawall Lifejackets Flashlight Radio Boat Housing aid Food Agriculture Programs Transportation First Aid Kit

		Schools Church		Community Hall Gymnasium
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Community Action Plan Table

Hazards	What can be done	Community Focal	Focal Point from outside the community	When can be done?
Drought	Disaster Office RO Unit	Joseph Joseph	MIRCS National Gov't NDMO IOM	JAN 2020
King-tide	Seawall Boat	Joseph Joseph	MIRCS National Gov't NDMO IOM	JAN 2020

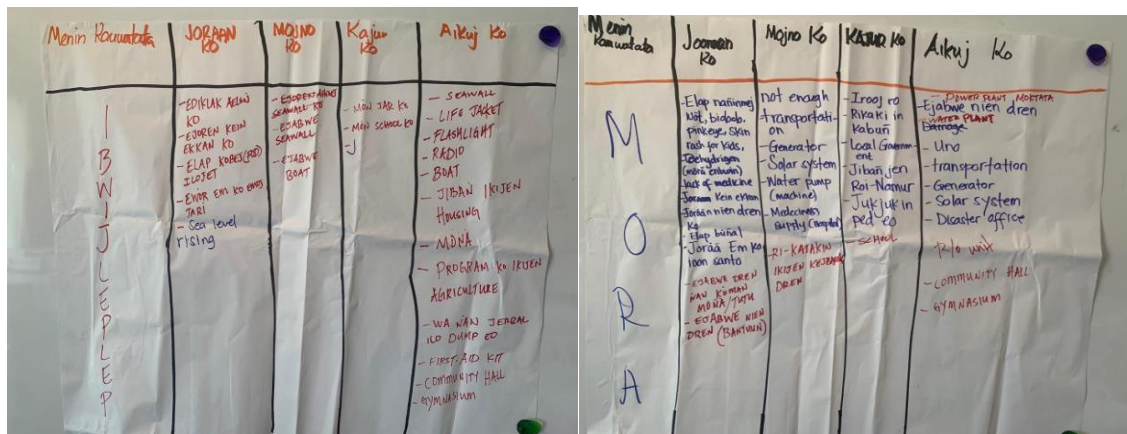


Figure 3: Flipcharts showing what the community members listed during Hazard Vulnerability Capacity Mapping Workshop

Early Warning System

Community Early Warning System Mapping	
Type of hazard	Drought and King-tide

How does early warning (EW) information reach the community?	Where does the EW message come from? Kwajalein Local Gov't, Office of the Chief Secretary, Mayor, USAKA (United States Army Kwajalein Atoll)
	Who in the community receives the EW message? Santo's Lieutenant Joseph Joseph
	How is the EW message sent? TV ROI NAMUR POLICE MAN PHONE NEIGHBOR/COMMUNITY MEMBERS
How does the EW message get passed to the rest of the community?	Does the community have an alarm system? No
	If so, what type of alarm is it? (List any that apply).
	If so, how many community members can hear the alarm system? Circle all that apply. Few Most Other:
	Some All
	Does the community have a word-mouth-system? No
If so, is there a plan for contacting every community member? No	
After receiving the EW message, how does your community prepare?	How many hours/days before this hazard would the community receive the EW message? Depends, various sometimes we hear on the Radio and most of the time Santo EW gets from Roi Namur.
	What type of preparations do families do for this specific hazard? Rally all our families take them down to the evacuation sites Help neighbors First Aid Kit Emergency Kit
	What type of preparations would community leaders be responsible for?

	<p>Making sure the words get out to the community. Having the shelters ready also making sure they have enough supplies of food and water. Also making sure there are enough emergency kits.</p>
<p>Does your community early warning system adequately warn all community members?</p>	<p>Please describe whether or not you believe all community members receive early warnings?</p> <p>Not all members in the community can receive early warning.</p> <hr/> <p>Are there any groups in your community that may not receive early warnings?</p> <p>No</p> <hr/> <p>Are there special considerations for vulnerable groups, like people with disabilities or the elderly?</p> <p>No</p>
<p>How could your community's early warning system improve?</p>	<p>Would equipment like sirens or alarms help? If so which specifically and why?</p> <p>Yes, Siren so that all the members in the community can hear and be well prepared.</p> <hr/> <p>Would better early warning coordination and planning help? If so, how do you think this could be achieved?</p> <p>Yes, through the help of outside training/ Awareness. Like IOM, MIRCS and other Ministries that does awareness on disaster. Early warning and coordination can also be from Roi Namur. Roi Namur is the neighboring island that is also under USAKA(United States Army Kwajalein Atoll). Word of the mouth is also being used.</p>

Summary

The participants have identified Drought and King-tide as their two main natural hazard concerns.

An underlying theme in the action plan is recognition that laws, programs and plans are already in place but education, participation, and implementation are needed.

In conclusion, the HVCM and EWS Mapping Exercise for the Santo Community was successful and points were taken that ownership and initiative has to be community driven by utilizing their existing capacities to address their concerns.

In terms of the community prioritization process, possible short-term Climate Adaptation/Disaster Mitigation activities that were identified include the following:

- Rehabilitation of the community evacuation centre to ensure minimum standards and safety measures
- Further training and awareness raising with community members on enhancing disaster response capacity
- Formation of community working group to further develop these initiatives.
- Strengthening disaster preparedness through establishments of Emergency Kits, Water catchments, and Medication.

The strengthening of individual homes could be facilitated through the development and printing of a how-to manual giving homeowners specific instructions.