

2023

NATIONAL ADAPTATION PLAN COMMUNITY ENGAGEMENT SUMMARY REPORT

Majuro Atoll



Marshall Islands Conservation Society

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OVERVIEW

The International Organization for Migration (IOM) was engaged by the Government of the Republic of the Marshall Islands (RMI) to lead community engagements on the National Adaptation Plan (NAP) in eight Atolls. The engagement team was comprised of IOM staff and three Non-Governmental Organization partners; Jo-Jikum focusing on youth, Women United Together Marshall Islands (WUTMI) focusing on women and inclusion, Marshall Islands Conservation Society (MICS) focusing on livelihoods. This Summary Report reflects the results of all agencies engagements that elevate and articulate the community members voices.

COMMUNITY BACKGROUND

Majuro Atoll is in the Ratak Chain and the capital of the Republic of the Marshall Islands (RMI). It has 64 islands and a total land area of 9.7 square kilometres (3.7 sq. mi.), with a lagoon area of over 295 square kilometres (114 sq. mi.). According to the 2021 preliminary census, it has a total population of 23,156 (59% of the total population of the RMI), down from 27,797 in 2011. Majuro Atoll attracts a large influx of immigration from outer islands (1,772 people for the 2006-2011 period) but is also a steppingstone for outmigration to the US (1,174 for the same period, 2011 Census). In terms of working status, 51% of the Majuro Atoll population are formally employed and the median income is USD\$9,600; almost half of the population (47%) get remittances from overseas. Education-wise, 80% of the total population are high school graduates and 7% have tertiary education. The median age is 23 years old. A total of 629 Majuro residents (2.7% of the population) reports a disability.

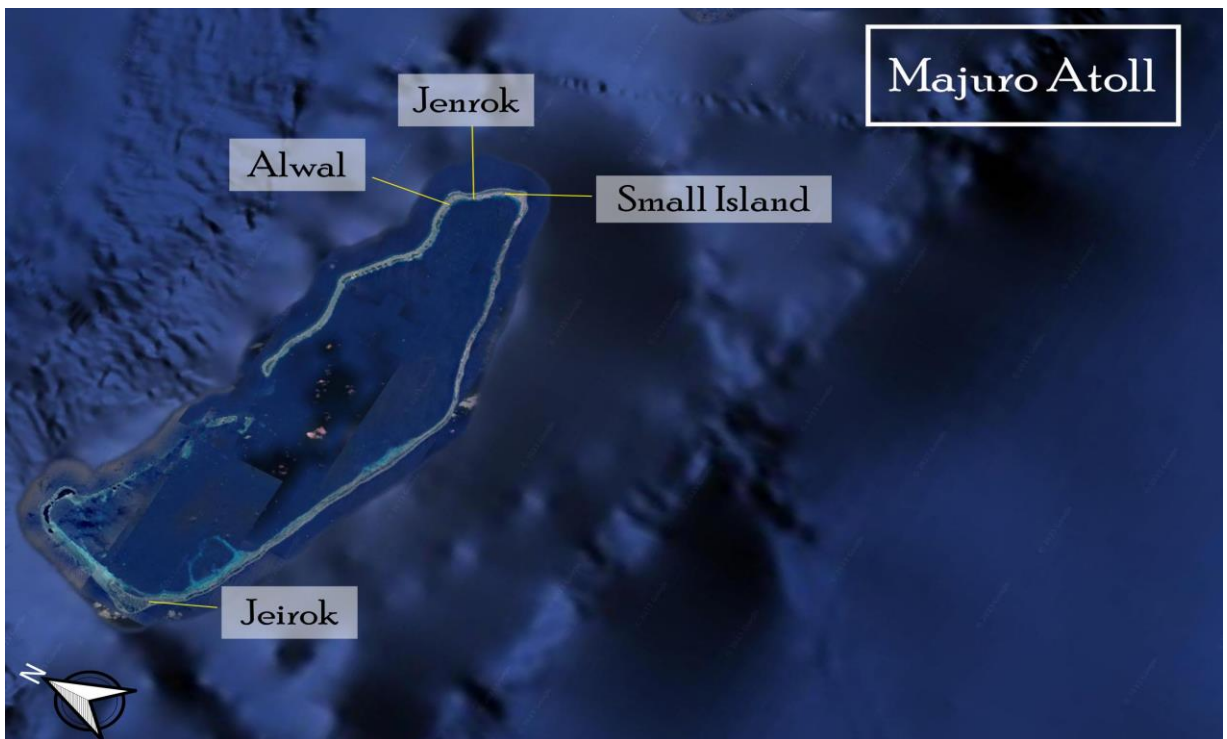


Figure 1: Satellite view of Majuro Atoll

As for historical document climatic impacts, Majuro Atoll experiences regular king tides and associated flooding; these destroy houses and infrastructure and disrupt everyday activities, as well as creating breeding grounds for vector-borne diseases. Majuro Atoll is also subject to periodic droughts and associated health issues (e.g. conjunctivitis, diarrhea and respiratory diseases). Evidence from community mapping exercises shows erosion both on the lagoon and ocean sides in the Delap area and in the Laura community on the Western end of the atoll. Erosion is also reported on many of the islets that lie on the Northern side of the atoll.

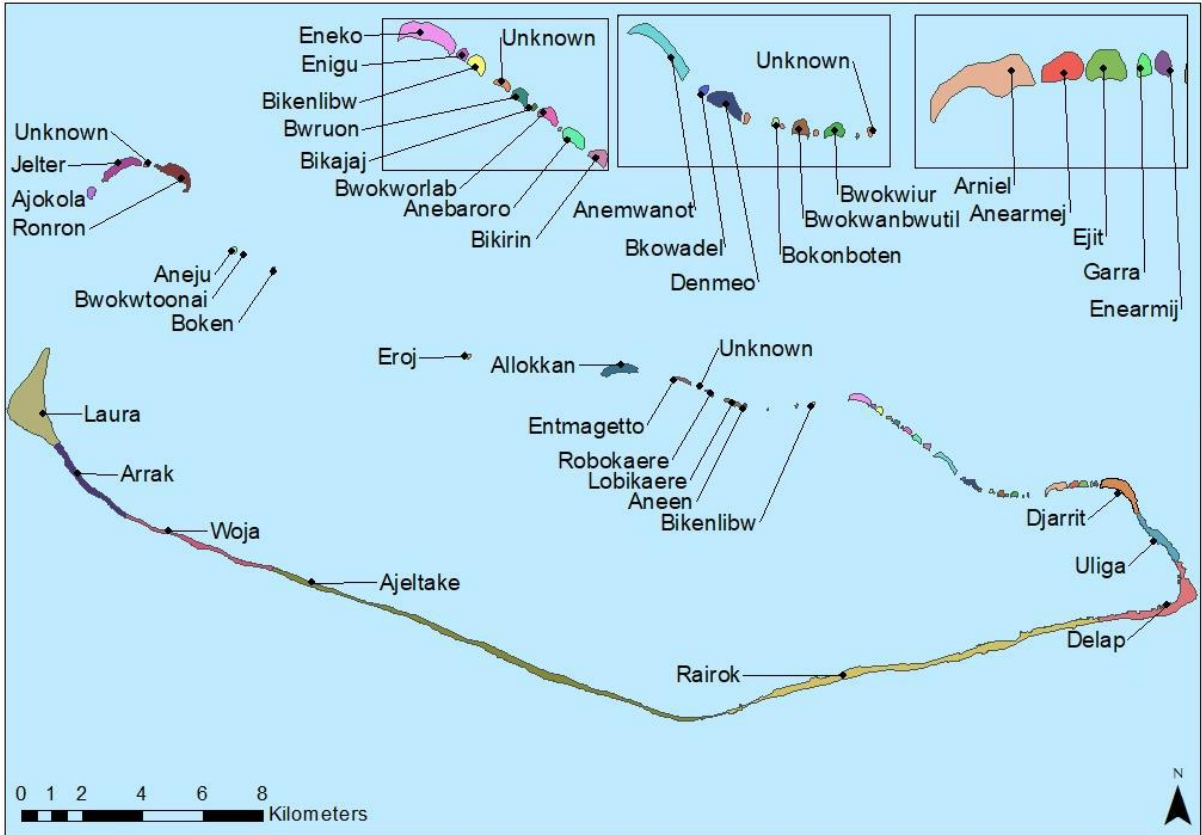


Figure 2: Majuro atoll place names (source: Delatares Technical Report)

CONSULTATION PROCESS

The National Adaptation Plan (NAP) community consultation team carried out work in Majuro in between October 2022 and May 2023. The first thing to take place during the consultations is the introduction presentation where information is provided to the group on the purpose of the consultation, what the NAP is, and how it is going to support their community in the future. This is a vital step in setting the scene for the methodologies to follow. Each community and target group consultation for the NAP involved 5 different data collection methods: a baseline survey to capture views on current and future adaptation; a Day in the Life (DIL) activity where participants were asked about their observations of environmental change, social impacts and how they anticipate daily activities to be affected in the future; a focus group discussion; semi-structured interviews with community members; and community profiles. Some individuals may have participated in more than one consultation. During the project period, both target group consultations and community engagements took place to gain perspectives across different social groups, genders and communities reaching various socio-economic backgrounds.

One major difference, in terms of methodologies, between community consultations and target group consultations under the NAP is the absence of Hazard, Vulnerability, and Capacity Mapping (HVCM) and transect walks during target group consultations. While no HVCM's/transect walks were conducted during the target group consultations, transect walks were conducted during the community consultations in Jenrok, Alwal, and Small Island. Two HVCM's were also collated for two communities (Jeirok and Small Island) during the pre-consultation process and are referenced/annexed in this report.

Participants for all community consultation methods were recruited around Majuro, including urban (e.g. Delap, Jenrok, Rita) and rural areas (e.g. Laura, Arrak and the small islands in the northern side of the atoll).

Target Group Consultations	Number of participants
Majuro Disabled Persons Organization (MIDPO)	7 (2 women, 5 men)
Pacific Youth Leaders of Tomorrow (PLYLOT)	4 (1 women, 3 men)
Majuro Expats/Migrants	13 (7 women, 6 men)
Council of the Irooj	7 (2 women, 5 men)
Majuro Local Government (MALGov)	4 (1 woman, 3 men)
Faith-based Organizations	11 (11 women)
Criminal Deportee Community	11 (5 women, 6 men)
Chamber of Commerce	3 (2 women, 1 man)
TOTAL	60 (31 women, 29 men)

Figure 3: Target group consultation participants.

Community Consultations	Number of participants
Alwal Community	44 (16 women, 28 men)
Jenrok Community	26 (14 women, 12 men)
Small Island Community	46 (20 women, 26 men)
Jeirok Community	8 (6 women, 2 men)
TOTAL	124 (56 women, 68 men)

Figure 4: Community consultation participants

Method	Total	Women	Men	Undiscl osed	Youth	Middle aged	Elderly	Undiscl osed
Baseline survey	6	2	4	0	1	5	0	0
Day in Life	127	67	54	6	n/a	n/a	n/a	n/a
Hazard mapping	41	22	19	0	n/a	n/a	n/a	n/a
Transect walk	2	1	1	0	n/a	n/a	n/a	n/a
Focus groups	184	87	97	0	23	n/a	n/a	n/a
Interviews	9	n/a	n/a	9	n/a	n/a	n/a	n/a
TOTAL	369	179	175	15	23	5	0	247

Figure 5: Community and target group consultation respondents by research methods.

GUIDING VALUES FOR ADAPTATION

People’s values were gleaned from observing and discussing their daily activities and from specific questions asked by discussion facilitators in focus groups. The findings show that despite being an urban atoll, there are not many differences between Majuro Atoll and rural atolls when it comes to values: church and family are mainstays of the community, and solidarity remains a guiding principle even in the capital.

“My aspiration is to see a future where everyone can work together to come up with solutions for our country to address issues like climate change impacts (sea level rise, king tides, etc), corruption, land issues, have better medical care, better educational opportunities, and more.” (Majuro Participant)

Men’s most cited daily chores were working and, in some cases, fishing, while women tend to look after children and do the cooking and cleaning. There are many women making handicrafts in Majuro, although not as many as in the neighboring islands. Young people are focused on their studies, homework and practicing team sports. Everybody irrespective of age or gender dedicates time to socializing, and participants indicate that people look after each other and share resources with their neighbors such as food or water when needed to sustain healthy communities. In that sense, preventing alcohol consumption and gender-based violence are also cited as community goals.

Despite being an urban atoll, environmental concerns are also important in Majuro Atoll. Many participants give priority to living in healthy surroundings, which they see as crucial to prevent diseases, and act on these concerns by engaging regularly in environmental stewardship activities such as cleaning and planting.



Community consultation on climate change and the National Adaptation Plan taking place in Majuro Atoll. Photo: IOM 2023

CLIMATE CHANGE EXPERIENCES AND CONCERNS

The three most observed impacts of climate change in Majuro Atoll are sea-level rise, increased air temperature and increased frequency/intensity of typhoons, in that order. When discussing typhoons community members also mentioned that it's not just a typhoon, but damaging winds that can happen before a tropical depression or named storm. More frequent/intense droughts and erratic rainfall are also observed, and some people also pointed to the ocean being hotter.

“The lime trees and breadfruit trees don't bear any more fruit during harvest season. The breadfruit fall before they reach the appropriate stage to consume. It's not like before where we could make bwiro (fermented breadfruit) during the harvest, and those who sell them can't rely on that to fill their pockets. The lime trees are infested with a new pest we haven't seen before. It's not just in Jeirok, it affects the entire Laura village. It's starting to infest the other villages. It's giving our farmers a really hard time making a living. The soil is different too. The crops are getting smaller and they don't taste the same.

The heat is almost unbearable, we can't drive anywhere without blasting the AC and that wastes the gas that is already expensive. Before we could just crack the windows but now it's like the wind is hot too.” (Majuro Participant)

Climate change observations

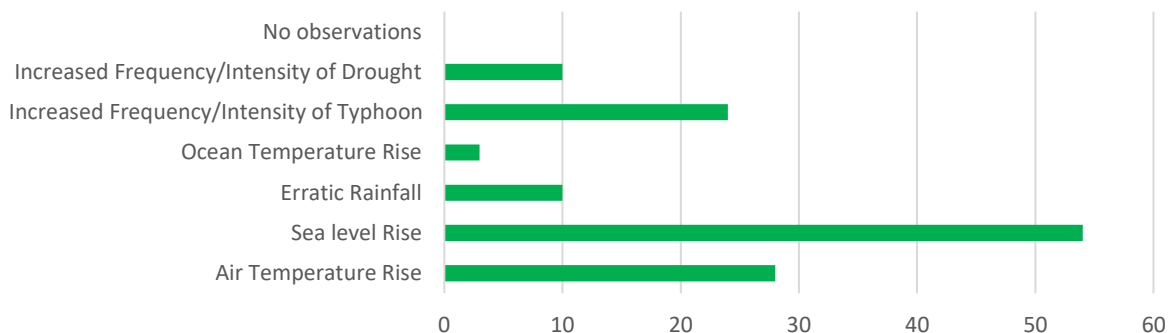


Figure 6: Observation of climate change in Majuro (number of responses)

Sea-level rise causes coastal erosion, destroying houses, causing power outages, and killing plants and crops. It also affects key infrastructure such as rainwater catchments and water tanks, undermining the adaptive capacity of the atoll (58% of households in Majuro Atoll get their drinking water from rainwater tanks). Land erosion is also a threat for recreational places popular with families such as for example Laura beach, one of the few places where children can swim. Coral bleaching and changes in fish patterns are also a concern.

“...the ocean/lagoon is affected [by climate change]. The coral reefs are dying. When people go snorkeling, they hardly see any coral. The fisherman also have to go all the way to small islands or farther into the deep part of the ocean to get enough fish to feed their families.” (Majuro Participant)

Sea-level rise is directly related to and compounded by flooding events associated with typhoons, heavy rains, or king tides, all of which severely disrupt everyday activities and peoples' livelihoods. People's mobility and access to services are negatively impacted as a result of inundation. For example, when youth members from rural areas in Majuro Atoll (e.g. Ajeltake-Laura) are unable to access the town or the airport during high tide season causing road delays due to debris, or when heavy rainfall prevents them from going to school. The consultation also found out that the more vulnerable groups such as women, youth, and persons with physical and mental disabilities are lacking support when there are high tides and inundations.

High tides affect the sewage system and spread rubbish around, bringing unhygienic conditions, while flooding creates breeding grounds for mosquitoes. These events often result in vector-borne diseases outbreaks (e.g. dengue, chikungunya, zika virus) that can spread to the rest of the country, causing fatalities and having very high costs in terms of public health.

In Majuro Atoll, droughts and increased heat episodes not only affect crops, diminishing their availability, but they also have many negative health and social consequences. Dry weather brings more dust, provoking eye and respiratory diseases. The dust also ends up in the water tanks, dirtying drinking water that is already scarce in an atoll where most people rely on rainwater tanks for their drinking supply. Diarrhea and other diseases become frequent when people try to save water by not washing their hands. Women also indicate that heat decreases their opportunities for socializing and increases episodes of abuse and gender-based violence.

“There should also be mental health awareness; currently there is no outlet for people when they feel depressed or anxious. There is a lot of trauma and stress [among heads of households] caused by not being able to provide for their families. These stressors result in social issues such as domestic violence and substance abuse.” (Majuro Participant)

Despite extensive climate change impacts, the people of Majuro Atoll show strong place attachment and are committed to stay in their land and their homes: the majority of participants consulted plan to cope/adapt locally, versus a minority (10%) who plan to migrate as a potential response to much higher sea-levels in the future (noting that this question came after a presentation on extreme scenarios of sea level rise risk). Given these values, adaptation initiatives should consider the aspirations of local communities to live in a clean, healthy, and disease-free environment in Majuro Atoll.

Imagined Futures

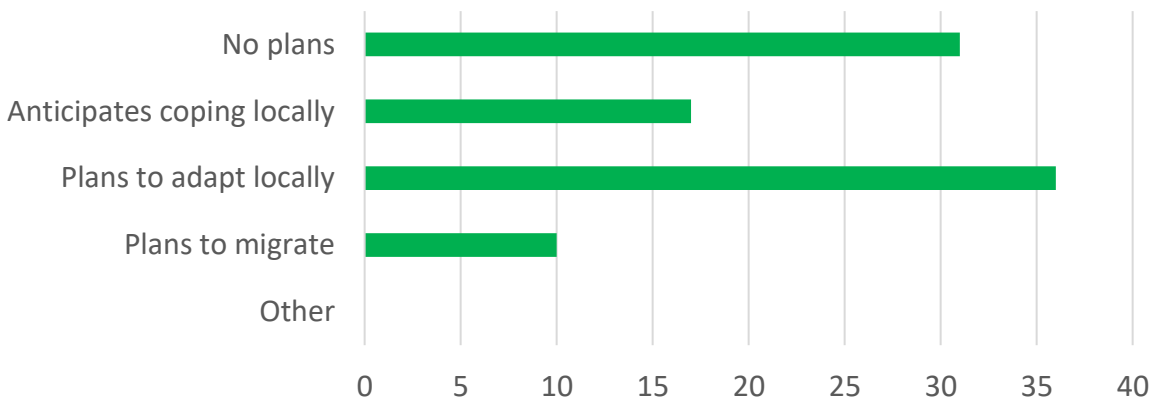


Figure 7: Imagined Futures

ADAPTATION PRACTICES AND IDEAS

Currently, seawalls are perceived as the main adaptation strategy, although there is disagreement in terms of their efficacy. Some participants in the focus groups are concerned about the lack of seawalls' maintenance in the future, and how that might result in further damage to houses and infrastructure. Other participants are worried that seawalls are directing wave energy to areas with no protection, causing beaches not to be replenished with sand, and increasing erosion in some areas. Some Majuro Atoll residents instead would like to have more seawalls built, especially on the ocean side of Jenrok and in the northern islets where erosion is perceived to be higher.

Besides seawalls, many participants consulted suggested planting trees and crops as an adaptation measure. Coastal reforestation was perceived as a good way to attenuate waves and wind and slow down erosion.

Adaptation Ideas

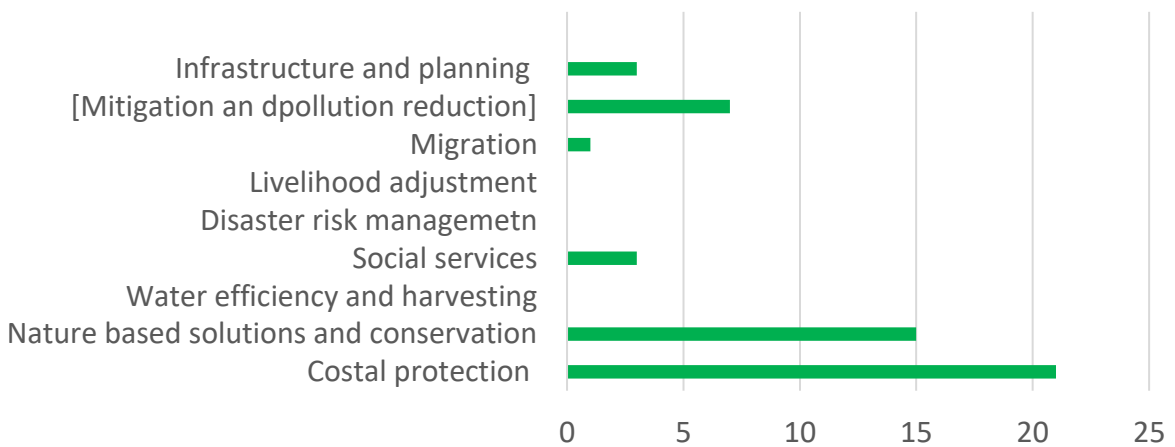


Figure 8: Adaptation ideas mentioned by participants in DIL survey

Focus groups participants pointed to improving infrastructure as an adaptation measure. Water security will require more rainwater catchments and water tanks so that households can increase their water storage capacity. This should go hand in hand with house retrofitting, so that homes can withstand the effects of storms and inundation, including the securing of catchments and elevating houses and water tanks that are often damaged during high tides.

SPECIFIC FINDINGS FROM THE TARGET GROUP CONSULTATIONS

The target group with the Chamber of Commerce demonstrated key concerns around local businesses ability to adapt to the challenges of climate change:

- Lack of flood insurance for businesses negatively affects their adaptive capacity.
- Current land tenure system makes it hard for businesses to flood proof as there is no incentive to invest in buildings that will return to the landlords at the end of the lease period.
- Advocated for better transport networks to foster new business opportunities within Majuro and also between the capital and outer islands, such as maintaining a reliable supply of produce to Majuro supermarkets, which would help economic development and enhance adaptive capacity through livelihoods diversification.
- Need for improvements in training and pay for skilled workers to avoid outmigration.
- Private sector needs to be better prepared. More information, training, and awareness needs to be given to businesses on how best to prepare, respond, and recover from climatic events.
- Innovative business ventures could potentially boost local economy - call centers based in Majuro, floating gardens, and opening up more opportunities for foreign investment in closed sectors such as agriculture.

The youth leaders target group participants focused on the challenges and barriers associated with climate change adaptation:

- Explained that there is a class system in Majuro – the haves and the have nots. Some will have the ability to successfully adapt to climate change (including the option of outmigration), while other’s difficulties will be compounded by the progression of climate change.
- Expressed a loss of faith and confidence in the government. Detailed instances where government corruption and nepotism have had negative impacts on themselves, their families, and their communities.
- Expressed their intentions to stay in Majuro rather than relocating overseas as their preferred option. Migrating to the US was seen as a last resort option entailing many difficulties due to a lack of skills and the potential loss of Marshallese culture and identity, something evidenced by several young participants who have returned from the US. Despite this, migration from Majuro to the US remains a reality, even though there is no evidence so far that this is due to climate impacts.

“The government should do more public outreaches like what this team is doing. People need to be more aware on this matter because I know there are people who knows what climate change is but does not know what the long-term effects are. We should do more surveys, forums, and promote climate change awareness like they did with covid or dengue. Since everything is more virtual now I think we can get through a lot of people.” (Majuro Participant)

The migrants and expats target groups discussed changes Majuro Atoll over the years and difficulties in climate change adaptation going forward:

- Stated that king tides have led to sanitation issues and an increased risk of diseases like Dengue and Chikungunya. In the cases of recent outbreaks, the effects were compounded by a lack of medical supplies.
- Explained the persistence of waste and pollution in the local and marine environments of Majuro was identified as a co-driver of climate impacts, as trash in the ocean was connected to a reef degradation and the lack of sightings of marine mammals in the Majuro lagoon.
- Pollution and overfishing were also said to be causing a decrease in the availability of fish stocks in the local Majuro area.
- Housing was identified both as an immediate concern and a key issue for improvement in managing climate risks into the future, and one that was immediately relevant to migrants and expats, but also to other target groups such as participants from the Jenrok area. Rental and affordable housing is limited in Majuro and are seen as a risk into the future if the population of Majuro is to grow.
- Participants suggested that growing more food locally and teaching children to grow food would be a positive future response

The target group consultation with persons with disabilities focused on how the effects of climate change disproportionately effect those with disabilities:

- Noted a decline and lack of community social cohesion and detailed how vulnerable populations are dependent on the ability of the community to take care of one another.
- Expressed a desire to stay in their community - sighting the lack of freedom in the US (specifically relating to land rights) as a main reason why people move back to the RMI.
- Pointed to the importance of increasing accessibility (e.g. ramps, dedicated parking spots) and adapting transport infrastructure (e.g. wheelchair accessible roads and vehicles) to the needs of people with reduced mobility.
- Improving transport infrastructure would also have co-benefits for other segments of the population, as the residents of rural areas of Majuro atoll such as Laura are often prevented from reaching basic services (e.g. healthcare) during flooding episodes.

“Before when someone would cook, they will share it with their neighbours and then the neighbours will also do the same by returning the dish with another cooked meal inside. Nowadays, they don’t do that anymore. Before there used to be teamwork – when one man would go out fishing and comes back, all the men in the village would go out and help (carry the fishes, help with the boat, whatever work needs to be done they will help each other). Nowadays there is no help.”
(Majuro Participant)

The target group consultations with faith-based organizations and deportees focused largely on the concerns and issues they face as a community:

- Wetos are full and crowded. There is no control or monitoring on how many people live on a plot of land. Landowners need to be informed and educated on best practices for climate change adaptation.

- Household repairs from inundation, strong winds, and other climate change events come at a personal cost. It often takes families a long time to recover from these financial burdens.
- Concerns that incidence of gender-based violence is increasing between and across genders. More outreach and education needs to be given on the different kinds of abuse (emotional, physical, verbal) and how to prevent instances going forward.
- Inflation is a real concern; prices are rising and pay stays the same.
- Government support and initiatives are not reaching all. For example, solar power at the household level is only making it to a select few and not everyone is benefiting.
- There are a severe lack of resources available to those with disabilities
- Personal debt and lending practices by local banks is an area of concern,. For example, many have multiple loans with different banks which result in pay checks of only a few to zero dollars. Additionally, there are concerns around those defaulting on loans or leaving the country and the stress on those that co-signed the loan,.

BARRIERS, OPPORTUNITIES, AND IMPLICATIONS FOR ADAPTATION

Lack of job opportunities matching the available skill sets and educational levels means Majuro Atoll has high unemployment rates, which coupled with the rising cost of life translates into higher vulnerability for the atoll’s population. Unemployment is a barrier to adaptation as it is also associated to alcohol and drug-related problems that often result in gender-based violence and other social issues such as high rates of suicide, impacting upon the community’s cohesion and adaptive capacity.

Lack of appropriate communication and transparency from government and institutions is also perceived as a barrier, particularly by women, youth and people with disabilities, all of which find it difficult to access services, especially in times of need such as after natural disasters. Some participants also noted that the support that local leaders provide is contingent or heavily influenced by whether you voted for them in the last election. The exclusion of youth and other vulnerable groups from participation in decision-making processes is also due to language inaccessibility. For example, youth members think that the language of the Compact of Free Association should be more understandable, as they would like to know where funds are allocated, and how much of these go into adaptation.

It is worth noting that despite Majuro Atoll being the steppingstone for most Marshallese to migrate to the US, migration was hardly mentioned as a potential adaptation strategy, and only 10% of participants in the DIL survey considered migrating elsewhere. Migration to the US is mentioned in relation to accessing better education and job opportunities, or for family reunification, rather than as a strategy to avoid existing and future climate impacts. In fact, in some cases outmigration is perceived as a barrier to adaptation. Not unlike rural atolls, some participants in Majuro Atoll observed that outmigration poses problems for individual adaptation, as there are many homes in need of maintenance due to their owners now living abroad. When discussing future concerns and plans a Majuro participant stated:

“I would be scared because there’s nothing I can do to stop these kinds of things. I will run out of foods and supplies I need. I cannot go to my appointments at the hospital..... I don’t know whether to stay or migrate, but if I have to migrate, I will keep my culture and our Marshallese way of life.”
(Majuro participant)

Community solidarity was often mentioned by participants as a shared positive value that has assisted people in dealing with environmental changes in the past, and there is a perception that people will help each other when needed in the future. Community-organized clean-ups are common in Majuro Atoll, evidencing both community strength but also a lack of much-needed public services. From the interviews, surveys and focus group discussions transpires a mandate to “work together” and the idea that cooperation and social cohesion is an asset in the fight against climate change.

The proposed adaptation options below are indicative of the values and ideas members of the Majuro Atoll community have expressed.

Adaptation activities that could begin immediately (identified by community and low risk of regret)
Improve access to clean water and sanitation by: replacing old rainwater catchments and water tanks; providing periodic maintenance of existing water infrastructure (including filters, annual cleaning, etc.); and providing all households with at least one water tank.
Elevate water tanks to avoid damage caused by king tides and other inundation episodes.
Run periodic community awareness programmes and training on basic hygiene to prevent communicable diseases.
Tree planting to help protect shorelines, reduce heat, and increase food supply.
Guarantee access to basic services for people with disabilities during flooding and other disasters by mapping out where they live and designing a plan of action to reach out to them when needed.
Government to help subsidize insurance schemes for flooding/storms.
Provide tools to communities for gardening and for cleaning to guarantee healthy, rubbish-free environments.
Raise awareness to prevent breeding conditions for mosquitoes after heavy rains and flooding.

Adaptation activities that could begin in the next five years (identified by community and requiring further consultation and planning)
Plan a well-coordinated, cohesive and integrated strategy based on preliminary technical studies and in consultation with coastal geomorphologists, government officials, landowners, local residents and other community stakeholders to project coastal protection options.
Roll out a scheme to provide solar panels and batteries to households to diminish reliance on the power grid and decrease vulnerability during power outages.
Draft and implement building codes for new constructions that take into account the increased frequency and intensity of typhoons and flooding and incentivize the building of raised homes.
Invest in sustainable sea transportation to increase business opportunities for people in Majuro and promote outer island development and livelihoods diversification.
Develop online learning for students ahead of increased school accessibility problems due to flooding.

KEY OBSERVATIONS FROM THE FIELD ENGAGEMENT TEAM

During a final debrief and workshop session with project team members shared their naturalistic observations that were observed in the field. These are key takeaways from each community and key action points for each community provided by IOM, Jo-Jikum, WUTMI, and MICS.

Key Takeaways

- To have better relationship with their landowners and chief because the first step for them to understanding climate change
- A safe evacuation center and strengthening the disaster community in responding to disasters.
- Better understanding of gender-based violence
- The community's demands and needs for more transparency on the Compact of Free Association - where the climate funds go, and what they are being used for
- Some parts of the community use their religious perspectives to question the preparations of combating climate change issues - "The Bible says," or "God has promised"
- The community's concerns of the effects of climate change on very vulnerable groups of people: women, youths, and the disabled

Key Actions

- Coastal protection, both sea walls and nature-based solutions.
- Request for the already started sea walls on Majuro to be completed.
- Sea wall all of Majuro – because those that don't have sea walls are being negatively affected by the ones built beside their land.
- Need more quality checks of home, business, ships – there are oil dumps happening that are not being monitored. Some of the restaurants don't have good quality of food practices and are unclean. For homes some aren't safe, need building codes and support to ensure they are safe.
- Better understanding across all levels of traditional leadership on what climate change is. That way if one level (i.e. rijerbal) wants to improve their homes or land, or decide to change their practices, and if the other traditional leadership doesn't understand about climate change needs he/she may not approve.



Youth consultations taking place in Majuro Atoll at University of the South Pacific. Photo: IOM 2022

Action points continued

- Fix drainage system in Majuro
- Climate change awareness in school curriculums required.
- Enforce laws on pollution and environmental protection, Environmental Protection Authority to be more active.
- Protocols for how assistance in post disaster situations or for climate change impacts – ie the roles and responsibilities at different levels (homeowners, local government national government) – who is supposed to do what. Then the community needs to be informed for better understanding.
- More social programs in general required. Right now most social gatherings are taking place at night and around kava. There are not a lot to do in Majuro, this can lead to unhealthy behaviours and activities.
- More education on gender-based violence required – only 5 active WUTMI chapters – places where they have chapters see change in gender-based violence behavior, but the others don't.
- More solar power in Laura is needed, Laura is highly impacted from power outages – one example is when the week-long power outage happened. fridges and freezers failed and everyone's food went bad.
- Laura specifically, needs to ensure there is more water conservation plans in place to protect the Laura water lens from depletion.
- More advocacy for mental health awareness and responses required.
- When discussing health care, the Laura community noted that they required all the necessary supplies to be available in Laura. More consistent schedule for doctor to go there because they don't show up when they are supposed to. The Ambulance is out of fuel often and can't make trips to hospital.
- Farmers requesting training on new diseases threatening their crops and how to treat these concerns.
- Minimum wage increase required to have a living wage.
- More availability of affordable housing is required.
- Request for home and street addressing so people can be better located during emergencies in emergencies settings.
- Alcohol is being sold to minors; one suggestion is to only sell at one store to control the issue.
- Solar panels, there are some being delivered, but are only going to those that need it most. It's creating social tensions around how the criteria of who is most in need is developed and how distributions take place.

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Annex

Annex 1 – Alwal, Majuro Community Profile

Annex 2 – Jeirok, Majuro Community Profile

Annex 3 – Jenrok, Majuro Community Profile

Annex 4 – Small Island, Majuro Community Profile

Annex 5 – Jeirok, Majuro HVCM

Annex 6 – Delap, Majuro HVCM

Annex 7 – Jenrok Socioeconomic Survey

Annex 8 – Majuro Rapid Vulnerability Assessment

Community Profile

Name of your community? (Etan jukjuk in bed in am?)

Ex. Enejalar, Ailuk

Alwal, Majuro

About how many people live in your community? / Emaron jete armej ilo jukjukin pad in am?

To your knowledge

100

Has the population increased, decreased, or stayed the same over the past 10 years? (Umwin 10 iio emootlok, elon lok k, edik lok k, elakar baj jonan eo ot oran armej ie?)?)

From your perspective

- Increased (Elon lok)
- Decreased (Edik Lok)
- Stayed the same (Elakar Jonan Eo Ot)

If increased (Elon lok) or decreased (Edik Lok), by how much?

150

Does your community have any vulnerable populations? (Elon k armej ro im romojno im raikuj jiban ilo jukjuk in bed in am?)

- Physically disabled (Ejoreen Anbwinin)
- Mentally disabled (Ejab lukun eman kamlij eo an)
- Deaf (Jaronron)
- Blind (Jab loe lak ijen)
- Elderly (in need of assistance) (Elukun rutto [aikuj jiban nan jabdewot])
- Those that do not speak Marshallese / Foreign nationals (Ro rejab maron kajin majol ak kajin ko jet)
- None (Ejelak)

If so, how many of which? (Ne elon, Jete uwaer innem kain mojno rot ko rej ioone?)

Ex. We have 2 hearing impaired (1f, 1m), 1 physically disabled (male), and a Chinese foreign national

2 deaf 2 elderly

What are the major occupations of community members? / Jerbal ta ko ekka an armej ro ilo jukjukin pad in kommani?(Jerbal ko rej kommani nan mour jani)

Ex. Local government is the largest employer but many of the population receive income from copra and handicrafts

Government jobs

What local resources does your community depend on? Explain why./Ta ko ewor ilo jukjukin pad eo am me ro ilo jukjukin pad eo remaron bok tokjan jani? Jouj im komelele.

Ex. Reef fish for eating and selling; copra for income; pandanis for handicrafts

Fish to eat and sell Land for plants- to grow vegetation/plants, local medicines

What services does your community have available - select all that apply (Ewor k jikin ko im rej jiban armej in jukjukin bed in am? kelet kajojo men ko im ewor ilo jukjuk in bed in am.)

- MIMRA Fish Base (Jikin Wia/Wiakake EK)
- Post Office (Jikin ebbok mweik ko jen aelon ko jet)
- Bank (Jikin kakon ak kadiwoj jeen)
- Copra processing facility (Jikin Komman Waini ko)
- Elementary school (Jikin jikuul kilaaj juon nan jijno)
- High school (Jikin jikuul kilaaj ruatimjuon nan jonoul ruo)
- College or University (Jikin jikuul ko im kwoj ebbok am pepa in jerbal)
- MISCO Markets (Mon Wia)
- Hospital (Mon Takto)
- Community center (Mon kabbed/ippen doon)
- Churches (Mon Jar)
- Ralik Ratik Radio Club (Juon club/kroub in kenaan imejatoto eo im ej na etan Ralik Ratak)
- National Telecommunications Authority ([NTA] Moko rej koman menin ad maron tobar ro jet ilo ad kojerbal Telephone/Call)
- Power plant (Jikin eo ej kwalok jarom)
- Internet
- Community garden
- Trading (within the community for goods)
- Other (Jikin ko jet im ejelak ilo kokeelel kein lon)

If others, detail additional services / (Ne jikin ko jet im ejelak lo kokeelel kein lon, kwalok bar jet iaan jikin ko jet)

How are decisions made in your community? Who has the authority? /Ewi waween ak elemen an jukjukin pad eo kommani pepe ko? Won eo ewor an maron ilo pepe ko?

Ex. Combination of traditional management (chiefs) and local/municipal government. Traditional management is still honored by the people, but legally needs to be backed by local government

Traditional leaders Elders of the community

What social groups are active and what purpose do they serve? / Douluul ta ko rej jerbal wot im ta ko rej kommani?

Ex. Council of Chiefs (make major decisions regarding land and marine resources) Women's Group (ensure women's input is included in decision making) - also youth groups, church groups

Public health group- public health awareness outreach in coordination with the hospital

Are there any ongoing engagements within your community? If so, what are they doing? (Ewor k rej jiban jukjuk in bed in am? Im ne elon, ta ko rej jiban kaki?)

Ex. Yes, the R2R project is doing a project on sustainable livelihoods. They are building clam tanks.

Not sure

Community Profile

Name of your community? (Etan jukjuk in bed in am?)

Ex. Enejalar, Ailuk

Jeirok, Majuro

About how many people live in your community? / Emaron jete armej ilo jukjukin pad in am?

To your knowledge

400

Has the population increased, decreased, or stayed the same over the past 10 years? (Umwin 10 iio emootlok, elon lok k, edik lok k, elakar baj jonan eo ot oran armej ie?)?)

From your perspective

- Increased (Elon lok)
- Decreased (Edik Lok)
- Stayed the same (Elakar Jonan Eo Ot)

If increased (Elon lok) or decreased (Edik Lok), by how much?

200

Does your community have any vulnerable populations? (Elon k armej ro im romojno im raikuj jiban ilo jukjuk in bed in am?)

- Physically disabled (Ejoreen Anbwinin)
- Mentally disabled (Ejab lukun eman kamlij eo an)
- Deaf (Jaronron)
- Blind (Jab loe lak ijen)
- Elderly (in need of assistance) (Elukun rutto [aikuj jiban nan jabdewot])
- Those that do not speak Marshallese / Foreign nationals (Ro rejab maron kajin majol ak kajin ko jet)
- None (Ejelak)

If so, how many of which? (Ne elon, Jete uwaer innem kain mojno rot ko rej ioone?)

Ex. We have 2 hearing impaired (1f, 1m), 1 physically disabled (male), and a Chinese foreign national

We have 3 physically disabled (2m, 1f), 4 mentally disabled (3m, 1f), 1 hearing impaired (f), 10 elderly (6m, 4f), and a family of Kiribati foreign nationals

What are the major occupations of community members? / Jerbal ta ko ekka an armej ro ilo jukjukin pad in kommani?(Jerbal ko rej kommani nan mour jani)

Ex. Local government is the largest employer but many of the population receive income from copra and handicrafts

Local schools are the largest employer of the community but many of the population receive income from handicrafts and local crops

What local resources does your community depend on? Explain why./Ta ko ewor ilo jukjukin pad eo am me ro ilo jukjukin pad eo remaron bok tokjan jani? Jouj im komelele.

Ex. Reef fish for eating and selling; copra for income; pandanis for handicrafts

Local crops for eating and selling (pandanus, coconuts, limes, bananas, apple bells, and breadfruit); coconut and pandanus leaves for handicrafts; reef fish for selling and eating; local water lens for fresh water

What services does your community have available - select all that apply (Ewor k jikin ko im rej jiban armej in jukjukin bed in am? kelet kajojo men ko im ewor ilo jukjuk in bed in am.)

- MIMRA Fish Base (Jikin Wia/Wiakake EK)
- Post Office (Jikin ebbok mweik ko jen aelon ko jet)
- Bank (Jikin kakon ak kadiwoj jeen)
- Copra processing facility (Jikin Komman Waini ko)
- Elementary school (Jikin jikuul kilaaj juon nan jijno)
- High school (Jikin jikuul kilaaj ruatimjuon nan jonoul ruo)
- College or University (Jikin jikuul ko im kwoj ebbok am pepa in jermal)
- MISCO Markets (Mon Wia)
- Hospital (Mon Takto)
- Community center (Mon kabbed/ippen doon)
- Churches (Mon Jar)
- Ralik Ratik Radio Club (Juon club/kroub in kenaan imejatoto eo im ej na etan Ralik Ratak)
- National Telecommunications Authority ([NTA] Moko rej koman menin ad maron tobar ro jet ilo ad kojerbal Telephone/Call)
- Power plant (Jikin eo ej kwalok jarom)
- Internet
- Community garden
- Trading (within the community for goods)
- Other (Jikin ko jet im ejelak ilo kokelel kein lon)

If others, detail additional services / (Ne jikin ko jet im ejelak lo kokelel kein lon, kwalok bar jet iaan jikin ko jet)

Local food stands

How are decisions made in your community? Who has the authority? /Ewi waween ak elemen an jukjukin pad eo kommani pepe ko? Won eo ewor an maron ilo pepe ko?

Ex. Combination of traditional management (chiefs) and local/municipal government. Traditional management is still honored by the people, but legally needs to be backed by local government

Combination of local leaders and local government. Religious leaders are respected by the people, but legally need to be backed up by the local leaders.

What social groups are active and what purpose do they serve? / Douluul ta ko rej jermal wot im ta ko rej kommani?

Ex. Council of Chiefs (make major decisions regarding land and marine resources) Women's Group (ensure women's input is included in decision making) - also youth groups, church groups

The youth and church groups are the most active- they are responsible for mindful and safe social gatherings to bring the community together. Some groups from downtown (WUTMI, Jo-Jikum, YTYIH, etc) come visit when they're doing outreach programs.

Are there any ongoing engagements within your community? If so, what are they doing? (Ewor k rej jiban jukjuk in bed in am? Im ne elon, ta ko rej jiban kaki?)

Ex. Yes, the R2R project is doing a project on sustainable livelihoods. They are building clam tanks.

Not recently. There were sewing classes in the community center a year ago and a Jaki-ed workshop as well.

Community Profile

Name of your community? (Etan jukjuk in bed in am?)

Ex. Enejalar, Ailuk

Jenrok, Majuro

About how many people live in your community? / Emaron jete armej ilo jukjukin pad in am?

To your knowledge

1000

Has the population increased, decreased, or stayed the same over the past 10 years? (Umwin 10 iio emootlok, elon lok k, edik lok k, elakar baj jonan eo ot oran armej ie?)?)

From your perspective

- Increased (Elon lok)
- Decreased (Edik Lok)
- Stayed the same (Elakar Jonan Eo Ot)

If increased (Elon lok) or decreased (Edik Lok), by how much?

120

Does your community have any vulnerable populations? (Elon k armej ro im romojno im raikuj jiban ilo jukjuk in bed in am?)

- Physically disabled (Ejoreen Anbwinin)
- Mentally disabled (Ejab lukun eman kamlij eo an)
- Deaf (Jaronron)
- Blind (Jab loe lak ijen)
- Elderly (in need of assistance) (Elukun rutto [aikuj jiban nan jabdewot])
- Those that do not speak Marshallese / Foreign nationals (Ro rejab maron kajin majol ak kajin ko jet)
- None (Ejelak)

If so, how many of which? (Ne elon, Jete uwaer innem kain mojno rot ko rej ioone?)

Ex. We have 2 hearing impaired (1f, 1m), 1 physically disabled (male), and a Chinese foreign national

30 total (vulnerable populations)

What are the major occupations of community members? / Jerbal ta ko ekka an armej ro ilo jukjukin pad in kommani?(Jerbal ko rej kommani nan mour jani)

Ex. Local government is the largest employer but many of the population receive income from copra and handicrafts

Private sector, government (police, local/national) - full spectrum of occupations.

What local resources does your community depend on? Explain why./Ta ko ewor ilo jukjukin pad eo am me ro ilo jukjukin pad eo remaron bok tokjan jani? Jouj im komelele.

Ex. Reef fish for eating and selling; copra for income; pandanis for handicrafts

well water for cooking, cleaning, bathing

What services does your community have available - select all that apply (Ewor k jikin ko im rej jiban armej in jukjukin bed in am? kelet kajojo men ko im ewor ilo jukjuk in bed in am.)

- MIMRA Fish Base (Jikin Wia/Wiakake EK)
- Post Office (Jikin ebbok mweik ko jen aelon ko jet)
- Bank (Jikin kakon ak kadiwoj jeen)
- Copra processing facility (Jikin Komman Waini ko)
- Elementary school (Jikin jikuul kilaaj juon nan jijno)
- High school (Jikin jikuul kilaaj ruatimjuon nan jonoul ruo)
- College or University (Jikin jikuul ko im kwoj ebbok am pepa in jerbal)
- MISCO Markets (Mon Wia)
- Hospital (Mon Takto)
- Community center (Mon kabbed/ippen doon)
- Churches (Mon Jar)
- Ralik Ratik Radio Club (Juon club/kroub in kenaan imejatoto eo im ej na etan Ralik Ratak)
- National Telecommunications Authority ([NTA] Moko rej koman menin ad maron tobar ro jet ilo ad kojerbal Telephone/Call)
- Power plant (Jikin eo ej kwalok jarom)
- Internet
- Community garden
- Trading (within the community for goods)
- Other (Jikin ko jet im ejelak ilo kokeelel kein lon)

If others, detail additional services / (Ne jikin ko jet im ejelak lo kokeelel kein lon, kwalok bar jet iaan jikin ko jet)

How are decisions made in your community? Who has the authority? /Ewi waween ak elemen an jukjukin pad eo kommani pepe ko? Won eo ewor an maron ilo pepe ko?

Ex. Combination of traditional management (chiefs) and local/municipal government. Traditional management is still honored by the people, but legally needs to be backed by local government

5 alaps are in charge of 6 wetos. 2 iroj's. 1 weto has no iroj.

What social groups are active and what purpose do they serve? / Douluul ta ko rej jerbal wot im ta ko rej kommani?

Ex. Council of Chiefs (make major decisions regarding land and marine resources) Women's Group (ensure women's input is included in decision making) - also youth groups, church groups

Church groups (youth, deacons, women) - 3 churches. 1 Iroj has an informal committee that focuses community activities.

Are there any ongoing engagements within your community? If so, what are they doing? (Ewor k rej jiban jukjuk in bed in am? Im ne elon, ta ko rej jiban kaki?)

Ex. Yes, the R2R project is doing a project on sustainable livelihoods. They are building clam tanks.

IMDB is trying to get people to apply for home loans.

Community Profile

Name of your community? (Etan jukjuk in bed in am?)

Ex. Enejalar, Ailuk

Small Island, Majuro

About how many people live in your community? / Emaron jete armej ilo jukjukin pad in am?

To your knowledge

130

Has the population increased, decreased, or stayed the same over the past 10 years? (Umwin 10 iio emootlok, elon lok k, edik lok k, elakar baj jonan eo ot oran armej ie?)?)

From your perspective

- Increased (Elon lok)
- Decreased (Edik Lok)
- Stayed the same (Elakar Jonan Eo Ot)

If increased (Elon lok) or decreased (Edik Lok), by how much?

100

Does your community have any vulnerable populations? (Elon k armej ro im romojno im raikuj jiban ilo jukjuk in bed in am?)

- Physically disabled (Ejoreen Anbwinin)
- Mentally disabled (Ejab lukun eman kamlij eo an)
- Deaf (Jaronron)
- Blind (Jab loe lak ijen)
- Elderly (in need of assistance) (Elukun rutto [aikuj jiban nan jabdewot])
- Those that do not speak Marshallese / Foreign nationals (Ro rejab maron kajin majol ak kajin ko jet)
- None (Ejelak)

If so, how many of which? (Ne elon, Jete uwaer innem kain mojno rot ko rej ioone?)

Ex. We have 2 hearing impaired (1f, 1m), 1 physically disabled (male), and a Chinese foreign national

More information needs to be obtained

What are the major occupations of community members? / Jerbal ta ko ekka an armej ro ilo jukjukin pad in kommani?(Jerbal ko rej kommani nan mour jani)

Ex. Local government is the largest employer but many of the population receive income from copra and handicrafts

Govt jobs, MIMRA, Public Works

What local resources does your community depend on? Explain why./Ta ko ewor ilo jukjukin pad eo am me ro ilo jukjukin pad eo remaron bok tokjan jani? Jouj im komelele.

Ex. Reef fish for eating and selling; copra for income; pandanis for handicrafts

What services does your community have available - select all that apply (Ewor k jikin ko im rej jiban armej in jukjukin bed in am? kelet kajojo men ko im ewor ilo jukjuk in bed in am.)

- MIMRA Fish Base (Jikin Wia/Wiakake EK)
- Post Office (Jikin ebbok mweik ko jen aelon ko jet)
- Bank (Jikin kakon ak kadiwoj jeen)
- Copra processing facility (Jikin Komman Waini ko)
- Elementary school (Jikin jikuul kilaaj juon nan jijno)
- High school (Jikin jikuul kilaaj ruatimjuon nan jonoul ruo)
- College or University (Jikin jikuul ko im kwoj ebbok am pepa in jermal)
- MISCO Markets (Mon Wia)
- Hospital (Mon Takto)
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- Power plant (Jikin eo ej kwalok jarom)
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- Community garden
- Trading (within the community for goods)
- Other (Jikin ko jet im ejelak ilo kokelel kein lon)

If others, detail additional services / (Ne jikin ko jet im ejelak lo kokelel kein lon, kwalok bar jet iaan jikin ko jet)

How are decisions made in your community? Who has the authority? /Ewi waween ak elemen an jukjukin pad eo kommani pepe ko? Won eo ewor an maron ilo pepe ko?

Ex. Combination of traditional management (chiefs) and local/municipal government. Traditional management is still honored by the people, but legally needs to be backed by local government

A combination o traditional, local/national government, and church leaders

What social groups are active and what purpose do they serve? / Douluul ta ko rej jermal wot im ta ko rej kommani?

Ex. Council of Chiefs (make major decisions regarding land and marine resources) Women's Group (ensure women's input is included in decision making) - also youth groups, church groups

Most social groups are through the churches

Are there any ongoing engagements within your community? If so, what are they doing? (Ewor k rej jiban jukjuk in bed in am? Im ne elon, ta ko rej jiban kaki?)

Ex. Yes, the R2R project is doing a project on sustainable livelihoods. They are building clam tanks.

None



**Jeirok Weto Laura Community
Hazard, Vulnerability, Capacity, Mapping Exercise**

FINAL REPORT

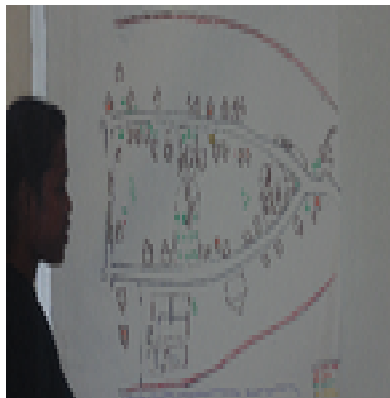
Introduction:

The Hazard, Vulnerability, Capacity, Mapping (HVCM) Exercise is conducted in selected schools and communities across the Marshall Islands, in partnership with Women United Together Marshall Islands (WUTMI). HVCM is a component of the Climate Change Adaptation, Disaster Risk Reduction & Education (CADRE) Program implemented by International Organization for Migration (IOM) with funding available through the Australian Agency for International Development (AusAID). CADRE seeks to build resilience of vulnerable communities and schools in the Federated States of Micronesia (FSM) and the Republic of Marshall Islands (RMI) to natural hazards, particularly those that are climate induced.

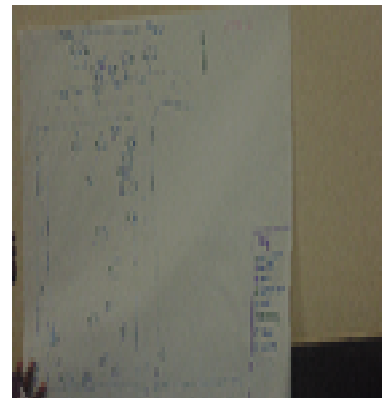
The Jeirok community HVCM exercise was conducted on January 7th 2015 at the Laura High School. Jeirok community is one of the communities on Majuro Atoll. Majuro is situated 7° 6' 0" North, 171° 23' 0" East. There were 44 participants present at the exercise. Participants were inclusion of Traditional Leader/Alap, NGO (s), youths, men and women of the community.



Men listing vulnerabilities



Youths presenting map



Women presenting map

The table below shows a list of the attendees based on gender, organization and other representatives of a few of the offices in RMI.

Note: *The population of the people living in Jeirok community is approximately 1000. The inclusion of Traditional Landowners/ Alaps), Youths, Teachers, men and women of the community ensures the sustainability of the project as, Jeirok community leaders, they will carry the message to other residents of Jeirok Community.*

HVCM Participants breakdown for January 7th 2015

MALE	11
FEMALE	9
Breakdown of Participants	
GOVERNMENT	3
PRIVATE SECTOR	
YOUTHS	6
PEOPLE with Disability	
<ul style="list-style-type: none"> • PARTICIPATION NON-GOVERNMENT ORGANIZATION (NGO) members • Community members • Church leader 	4 7
TOTAL	20

Jeirok Community Profile

Background:

Jeirok community is one of the communities on Majuro Atoll and it surrounds Laura High School. There are approximately 1000 people residing in this Community. People live around the school campus and along the coastlines. Employment is the core of dependency besides fishing, running small canteen, mini stores, making copra, farming and selling handicrafts. Some families receive money from families living abroad in USA mainland, Guam, Hawaii and Ebeye.

The school decisions are made by the PTA and school faculty. All community decisions are made by the Traditional leadership, National and Local Governments. Jeirok community is the largest community in Laura and it is where the communities' water catchments and largest well are located. The water catchments and ground well not only supply water to Jeirok community but it also supplies water to other communities in Laura, Woja community and Ajeltake community. It also supplies water to Rairok and Rita communities when the water reservoir in Rairok community is low. ROC Taiwan piggery and farm, National Telecommunication substation (NTA), Majuro Waste Sewage Company substation (MWSC) and Resources & Development Department of agriculture are also located in this community.

The Local Government, Jeirok councilman, Youths and Women and Men groups assist the traditional leadership in all the community affairs such as Health and climate change awareness's and sports tournament that are being held in the community and they also help organize to do the community cleaning. The Women and Men groups are also involve in planting trees for beautification of the community and they also do farming at their homes to feed their families and to sell fruits and vegetables at the Delap Market to earn some income to support their families.

Jeirok community has been affected by typhoon, inundation, dengue fever and measles. Besides being

affected by these natural hazards the community is facing social problems such as teen-pregnancy, substance abuse, domestic violence, youth suicidal, school drop outs and unemployment. The main strengths of the community are the National and Local Governments, Church leaders, traditional leadership, Women and Men groups, Youth groups and the Councilman. They are working together to address the problems that the community is facing. There are community improvements that they have planned to help the community. They do tree planting to protect their shorelines from being eroded and they invite the Government Ministries to do awareness on climate change and health issues. The office of the Mayor has been encouraging families in the community to beautify and plant trees and start their own food security. The community has been participating in many programs to improve and make their community a healthy and productive community.

In the past 100 years Typhoon and King Tides have occurred in the community. The National and Local Governments have been helping the Jeirok community when these natural hazards occur.

Hazard:

The hazards identified are Drought, Typhoon and King Tide

Capacities:

Traditional Leadership, National and Local Government Leadership, Women and Men groups and Youths groups, Church leaders are the strengths of the community. They are the ones that help the community at times of Disaster and events that take place in the community. They all work together to help the community with their needs especially in keeping the community to be Drug Free and have clean and healthy environment. They believe that the children are the future and they encourage them to stay in school. Youths have been involved in community tournaments sponsored by the Laura Sport club and Local Government Recreation Department to help prevent them from problems they are facing. They have been involved in beautification and cleaning the community so they can take ownership in keeping the community a clean, healthy and Drug free community.

Hazards	Vulnerabilities/ Weakness	Adaptive capacities/ Strength	Short term measure
<i>Drought</i>	<p>(a) <i>Not enough water catchments @ the schools, homes, churches and community center</i></p> <p>(b) <i>Not enough training for the community</i></p> <p>(c) <i>Health center is not equip for drought</i></p> <p>(d) <i>No transportation to locations of water catchments to fetch water.</i></p>	<p><i>A) Large ground well</i> <i>Water reservoir</i> <i>B) Community water catchments @ schools & community center</i> <i>C) Local & National Government</i> <i>D) Councilman</i> <i>E) Church leaders</i> <i>F) Women groups</i> <i>G) Men groups</i> <i>H) Youths groups</i> <i>I) Community involvement</i></p>	<p><i>a). Build concrete water catchments for each household, schools, churches & Health center</i></p> <p><i>b). Have more awareness training for the community</i></p>
<i>King Tide</i>	<p>(a) <i>Not enough water catchments</i></p> <p>(b) <i>No concrete water catchments</i></p> <p>(c) <i>No seawall</i></p> <p>(d) <i>No heavy equipment</i></p> <p>(e) <i>No medical kits at the Health Center</i></p> <p>(f) <i>No communication and Transportation support</i></p> <p>(g) <i>No community shelter</i></p>	<p>(a) <i>Large well</i> (b) <i>Water catchments</i> (c) <i>Councilman</i> (d) <i>Police forces</i> (e) <i>Traditional leaders</i> (f) <i>Church leaders</i> (g) <i>Women groups</i> (h) <i>Men groups</i> (i) <i>Youth groups</i> (j) <i>Community involvement</i> (k) <i>School buildings</i></p>	<p><i>a) Get more water catchments</i></p> <p><i>b) Build concrete water catchments</i></p> <p><i>c) Build seawall-lagoon and ocean sides</i></p> <p><i>d) Get First Aid Kits</i></p> <p><i>e) Communication & transportation</i></p>

Jeirok Weto Laura Community ACTION PLAN

Wednesday January 7th 2015

Start Time: 8:00pm Duration: 3 hours

Venue: Laura High School Building

Kauatata ko rejelet jukjuk im ped eo <i>Identified Hazards/Threat</i>	Buñten ko rekkar <i>Proposed solutions</i>		Won ej lolorjake? <i>Who is responsible?</i>		Naat eo enaj kōjeimooj buñten kein? <i>When are the tasks to be implemented?</i>
	Ta ko emōj kommani? <i>What has been done?</i>	Ta ko jemaroñ kommani? <i>What can be done?</i> ST: SHORT TERM LT: LONG TERM	Ilo jukjuk im ped eo? <i>(Within Community?)</i>	Tu lik in jukjuk im ped eo? <i>(Outside Community?)</i>	
<i>Drought</i>	Not enough awareness training Not enough water catchments & no concrete water catchments	ST: Awareness Training LT: Water catchments	1) Councilman 2) Mr. Abo 3) Mr. Jina David	<ul style="list-style-type: none"> • IOM • Red Cross • GoRMI • MAL Gov't • Federal • Grants • WUTMI 	ST: June 2015 LT: Jan. 2017
<i>King Tide</i>	No communication system & transportation School buildings are not enough for shelter.	ST: Communication & Transportation- <ul style="list-style-type: none"> • Warning system • Vehicle LT: Shelter	1) Councilman 2) Mr. Abo 3) Mr. Jina David	<ul style="list-style-type: none"> • IOM • Red Cross • GoRMI • MAL Gov't • Federal • Grants • WUTMI 	ST: Jan. 2015 – Jan. 2016 LT: Jan. 2015 - Jan. 2021

Summary: *The Jeirok community is the 12th community in the RMI to have completed the Hazard Vulnerabilities Community Mapping exercise (HVCN). The Jeirok Community have worked hard and produced a community action plan. It is now within their hands to start implementing the activities written on their action plan. The challenges now for them are to seek appropriate funding to implement some of the activities, and acquire some of the necessary skills and initiatives. The Majuro*

Chapter will continue to support the action plan for Jirok community and WUTMI will continue to render support as required.

Delap Community

Majuro, Marshall Islands

Hazard Vulnerability Capacity Mapping Report

Last updated

June 2019



GFDRR
Global Facility for Disaster Reduction and Recovery

ACP-EU Natural Disaster Risk Reduction Program

An initiative of the African, Caribbean and Pacific Group, funded by the European Union and managed by GFDRR

IOM
UN MIGRATION

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This project would not have been possible without the leadership and support of the National Disaster Management Office, Majuro Atoll Local Government and Majuro Atoll Leadership. Special thanks to the World Bank for funding International Organization for Migration (IOM) to implement the project in Delap Community.

For more information contact IOM at micronesiaenquiries@iom.int.

Acronyms

CBDRM - Community Based Disaster Risk Management
CVM - Community Vulnerability and Capacity Mapping Exercise and Assessment
EWS - Early Warning System
HVCM - Hazard Vulnerability Capacity Mapping
IOM - International Organization for Migration
MIRCS - Marshall Islands Red Cross Society
NDMO - National Disaster Management Office
RMI - Republic of the Marshall Islands

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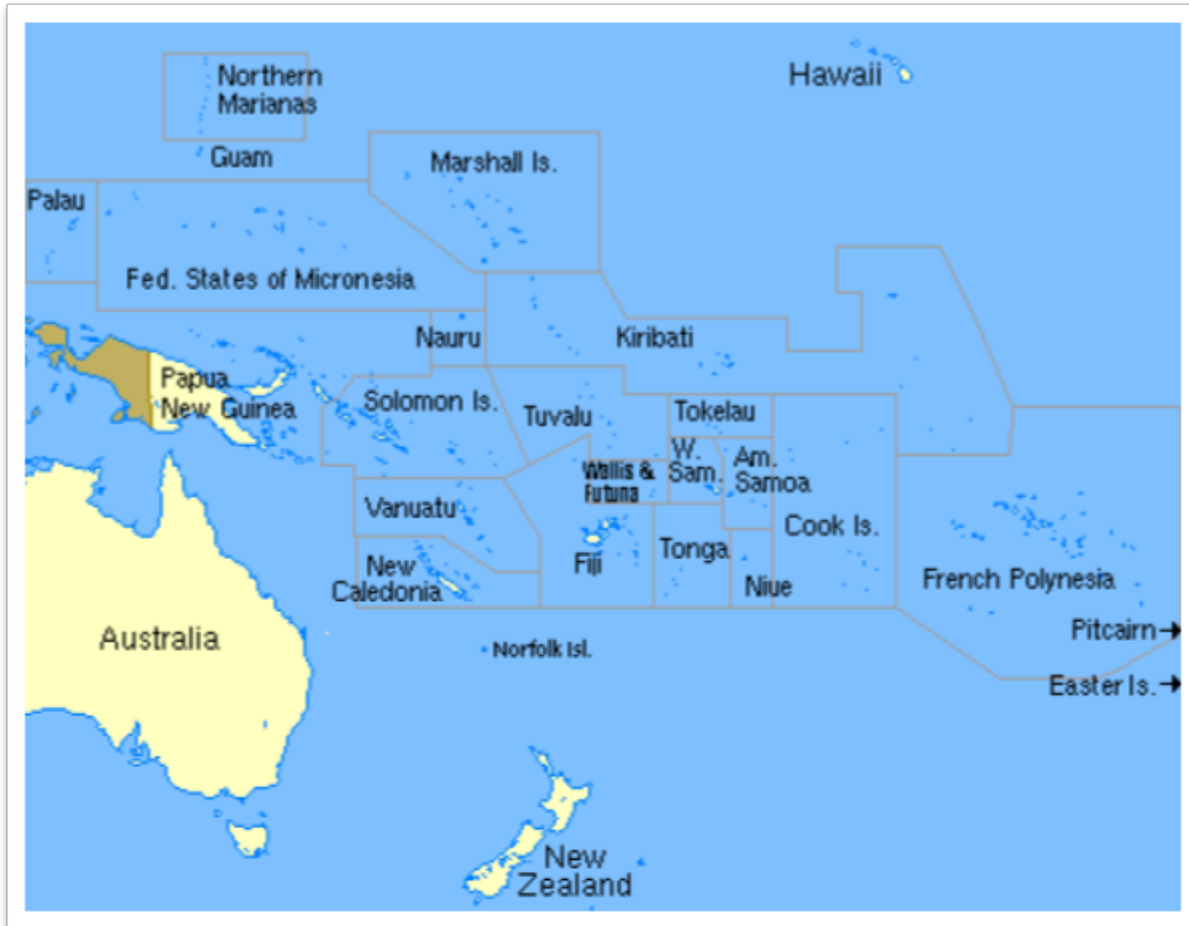
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Context

Background of study

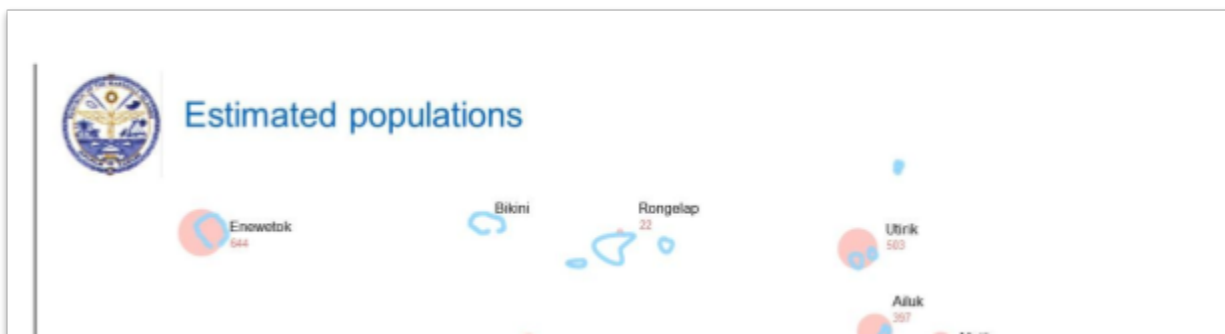
The Republic of the Marshall Islands (RMI) is located in the North Pacific Ocean. The RMI consists of approximately 180 square kilometers of land spread across just under 2,000,000 square kilometers of ocean as seen in Map 1.

The
RMI is



Map 1: Pacific Ocean map

comprised of two parallel island chains of 29 atolls (made up of many islets), and 5 islands. The two island chains are known as Ratak and Ralik chains lie about 200 kilometers apart and extend almost 1300km northwest to southwest. Majuro is the Capital with a population of approximately 27,000, Ebeye on Kwajalein Atoll is the second largest urban center with a population of approximately 15,000 inhabitants. The remaining population of RMI's 54,000 individuals reside in the remote outer islands and atolls as seen in Map 2.



Climate change impacts of notable concern in the North Pacific region include: extreme temperatures, drought, sea level rise, ocean acidification, and heavy rainfall leading to flooding and landslides. Such impacts are threatening fisheries and reef environments, and the communities and livelihoods that depend on them. Some of the low-lying coral atolls in the North Pacific are especially vulnerable to sea level rise, storm surges, coastal inundation and salinization of water lenses. Rising sea levels also exacerbate the pressure on fresh water lenses in these atoll environments and while an overall increase in rainfall is projected, the populations' reliance on water catchments for storage (as opposed to the water lens) will increase. The region has also experienced the cyclical effects of the El Nino/Southern Oscillation (ENSO)-related weather anomalies. Such climate variability is associated with drought; that often leads to: water shortages, crop failures, food shortages, and fires. In the El Niña phase there is an increased risk of secondary hazards, such as landslide.

The most common hazards that have occurred in the RMI in the past 10 years include Drought Disasters in 2013 and 2016, a Drought Emergency in 2017 and a current extra dry season in 2019. In February 2015 wave inundations that destroyed 17 homes in Arno Atoll and caused other damage to infrastructure throughout the country prompting a State of Emergency. In October 2015 Typhoon Nangka passed through the Northern part of the RMI. In January 2019 Tropical Depression TD01W passed through the RMI causing concern, preparatory actions and a State of Emergency. Over the past 10 years there have been numerous small inundations and King-Tides that have caused minor damage across the country.

This report articulates the results of IOM's Hazard Vulnerability and Capacity Mapping (HVCM) exercises that took place in communities throughout the RMI. Each community report highlights the community's profile, key hazard risk concerns, maps, and early warning systems. The reports can be used by community members to then plan a full Community Based Disaster Risk Management (CBDRM) Plan inclusive of an Early Warning Systems (EWS) framework. Appendix 3 has the draft CBDRM methodology that the World Bank project is funding. In addition, the analysis of the EWS survey is currently underway which will provide recommendations to the National Disaster Management Office (NDMO) on an EWS framework.

[Targeted Community: Delap](#)

The project was designed in coordination with World Bank, national leadership, local leadership, and IOM. The project initially targeted a total of 10 communities on Kwajalein Atoll and Majuro Atoll, but will exceed that amount by the close of project. After completing the HVCM in the targeted communities in Kwajalein Atoll, IOM has continued to work with Delap and Namu communities. The first session of the Hazard, Vulnerability and Capacity Mapping (HVCM) and Early Warning System (EWS) exercise in Delap was commenced on June 02, 2019 at Marshall Islands Disabled People Organization Center. A total of 21 community members attended the workshop. A total of 8 Male and 13 Female attended the workshop for Delap Hazard Vulnerability Capacity Mapping and Early Warning System.

Methodology

Hazard Vulnerability and Capacity Mapping with Early Warning Systems

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 and certain variations in the methodology are possible; however, the three sessions included are considered the minimal necessary 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 four 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 hinges on input and active engagement among participants. In all sessions, it is important to ensure participation of diverse groups in the community including people of all ages and genders as well as people who may be marginalized or 'outsiders' in that community such as immigrants, people living with disabilities, or other under-represented groups. It is essential that the community feel ownership of this process with facilitators only providing structure and guidance. As with all community engagement, it is also important to be very clear at the outset as to what the role of IOM's is and not to set realistic 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 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: Delap

Community profile statement

Background

Delap is one of the communities of Majuro, Marshall Islands. Majuro Atoll is located in the Ratak chain and the city of Majuro is the capitol of the Marshall Islands. Delap community is the largest community on Majuro.

The population of Delap is 20,301 according to the census of 2011. A community profile questionnaire (Appendix 3) was conducted with the people of Delap community. The results of the questionnaire emphasize the dependence of community income from paid employment. The questionnaire also investigated how decisions are made in the community. Decisions are made and carried out by traditional leaders, councilman, and mayor with help from community members from time to time.

Primary social concerns expressed by Delap leaders are finding ways to strengthen the livelihood of Delap community members through awareness raising programs and workshops. Delap leaders reported that they are open and happy to take part in other activities, projects and programs that continue to seek ways to bring resources as and improve people's lives.

Geography and Location

Hazard: Through a participatory mapping activity of disaster timelines, community members listed all the disasters that have happened on Delap from the past 100 years. Participants from Delap community also ranked the hazards, choosing the two hazards of greatest concern to their community. Drought and King tide were the greatest concerns.

Effects of Climate Change on hazards: Community members reported that they are affected by climate change. The President of Marshall Islands has declared a state of emergency on Dengue Fever. Mumps, chicken konia, Pink eye, Zika Virus, are also diseases that are associated with climate change and throughout the years, these diseases have also taken a toll on majority of Delap population just as it has taken impact in neighboring communities and throughout Marshall Islands. The community mapping exercise shows that sea-level rise has taken parts of Delap on both the lagoon and ocean sides. During the last drought, many students and workers missed school or work due to severe coughing, pink eye, and diarrhea which negatively impacted their livelihoods.



Delap participants reported that disease has also spread widely as a result of draught, due to lack of resources for medication at the hospital, and limited awareness of drought impacts and mitigation. In addition to this, the community also reported that drought conditions are compounded by lack of home water catchment tanks and limited ground water available for use.

Capacities: The capital city of the Marshall Islands is located in Delap community where most of the important buildings are and in the HVCM exercise, participants identified those buildings as a strength. Important buildings include Majuro’s biggest shopping center, the atoll’s only hospital, energy center, wharf, fishing industry, gas stations, and so on.

Hazard vulnerability risk mapping

The hazard vulnerability risk mapping process is when the community is split into different groups, usually men and women separately, and the young people. They take flip chart paper and draw a map their community and identify key areas or infrastructure, such as churches and evacuation centers, and docks. Then they identify the risk, where it floods and disaster-prone areas. The groups then present to each other and have a discussion on similarities and differences between the maps and make additions as identified. The drawn maps (from all the groups) can then be transferred to a digital format using Google Earth.

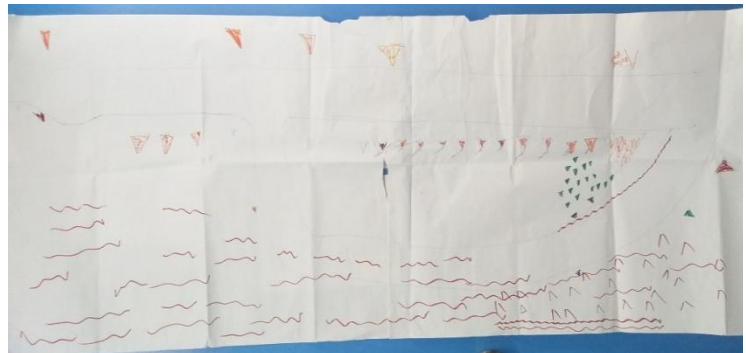


Figure 2 Map drawn by participants

of

On the Delap maps below you can see that the community has identified where there are fire risk either based on locations of previous fires or other local knowledge. They have also located the key community locations like the Irojlaplap (Traditional leaders house), and other evacuation locations.







Figure 3: The Google Earth maps combine information provided by the hand drawn from Delap community members to identify significant places; including the main road, inundated areas and areas at risk of disappearing, and areas that are usually flooded as well as evacuation shelters, homes of people with disabilities, schools, churches and stores.

Hazard vulnerability matrixes

The below matrix is the result of the prioritization process where the community of Delap identified drought, king tide, and fire as their hazards and identified king tide as the greatest concern. Drought and king tide have impacted the lives of the participants and members of their community. Participants identified how drought impacts the wellbeing and livelihoods of their community by negatively impacting hygiene and sanitation, destroying crops, damaging the environment, and causing people to miss work and school. They also identified important resources in the community for addressing drought including their culture, church, and government, as well as some weaknesses in the community which are closely associated with the identified needs. There is a significant need for increased water catchment, water treatment, awareness programs, and emergency kits.

People expressed concerns about the impacts of king tides as well, which also negatively impacts hygiene and sanitation, destroys crops, and damages the environment. Additional impacts of the king tide are the destruction of homes, injuries, salinization, loss of land, and psychological impacts were also noted. Sea walls and other infrastructure were listed as community strengths, as well as communication channels. Money, knowledge of how to prepare or respond, as well as lack of prayer were listed as weaknesses and the needs identified were to elevate both homes and sea walls, stock food, and acquire radios.

Finally, the impacts of fires were explored. Participants listed the health and environmental impacts of fires and fumes and also that power outages have resulted from fires. They listed community mobilization to extinguish fires as strengths and lack of water and firefighting equipment as a weakness, identifying a need for tools and resources.

Hazards	Impacts	Strength	Weaknesses	Needs
MORA (drought)	Sickness Thirsty Destroy crops Dusty environment No water Students skip school Workers skip work No water for laundry, washing dishes, and cleaning the house	National Government Local Government Hospital Schools Offices Church Disaster Office Community Leaders Culture Public water catchment	Not enough water catchment Not enough money Not enough groundwater No medication to ease the spread of disease No Hygiene Kits No emergency kit No transportation to help bring water Lack of information and knowledge of the disaster	Water catchment Water Ground water Awareness Program Emergency kit Transportation Cement water Kit to clean water Medicine

Hazards	Impacts	Strength	Weaknesses	Needs
King tide	Destroy homes Trash everywhere Destroy crops and water catchment Sicknesses People are wounded People worried and sad of not knowing	Sea wall Transportation Radio Police Cellphones Helping each other Hospital Church	Money Seawall Too much spending and playing with money We don't pray We don't know what to do during typhoon	Elevate houses Elevate seawalls Radio Food Donation Water catchment Life jackets Emergency First

	where their other family members are Land grew smaller Salt water infiltration into everything on land from the environment to houses to every available important water everything is salty	School Government		Respond training Emergency Kits
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Hazards	Impacts	Strength	Weaknesses	Needs
Fire	Power plant was shut down for 1 and half day Fumes from the smoke was not good destroyed the environment Sickness	A lot of people to help with the damage Policeman Fire -fighter Fire truck Leaders Churches help Hospital Water	Not enough truck, ground water, water catchment , fire drill, And fire equipment	Tools Additional water catchment Emergency kit Training CPR Fire Truck Train more fire fighters

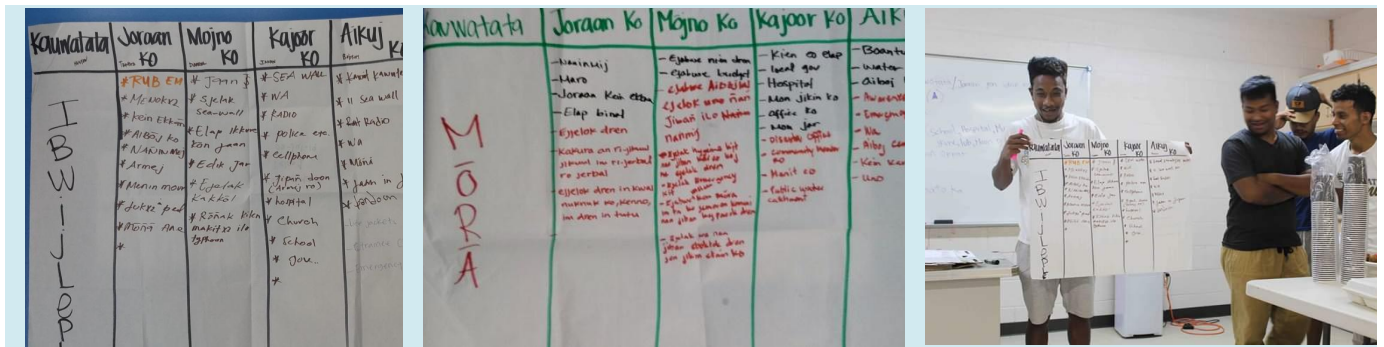


Figure 1.4: Delap Community Members listing the impacts, vulnerability and weaknesses of the identified hazards.

The Delap community created an achievable action plan for addressing drought and King-tides. For each of these hazards they have identified what can be done, who is responsible from within the community, who is responsible from outside the community, if funding is required and how, if technical support is required and how, and who in the community and by when the action will take place. The community was not always able to identify the technical support and funding source. Below is the table with the full community action plan.

Hazard	What can be done?	Community Focal Point	Focal Point from outside community	When can it be done?
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Drought	Water catchment Groundwater	Community Leaders (ALAPS) Councilman	MIRCS National Gov't NDMO IOM	January 2020
King tide	Seawall Food and Water	Community Leaders (ALAPS) Councilman	MIRCS National Gov't NDMO IOM	January 2020

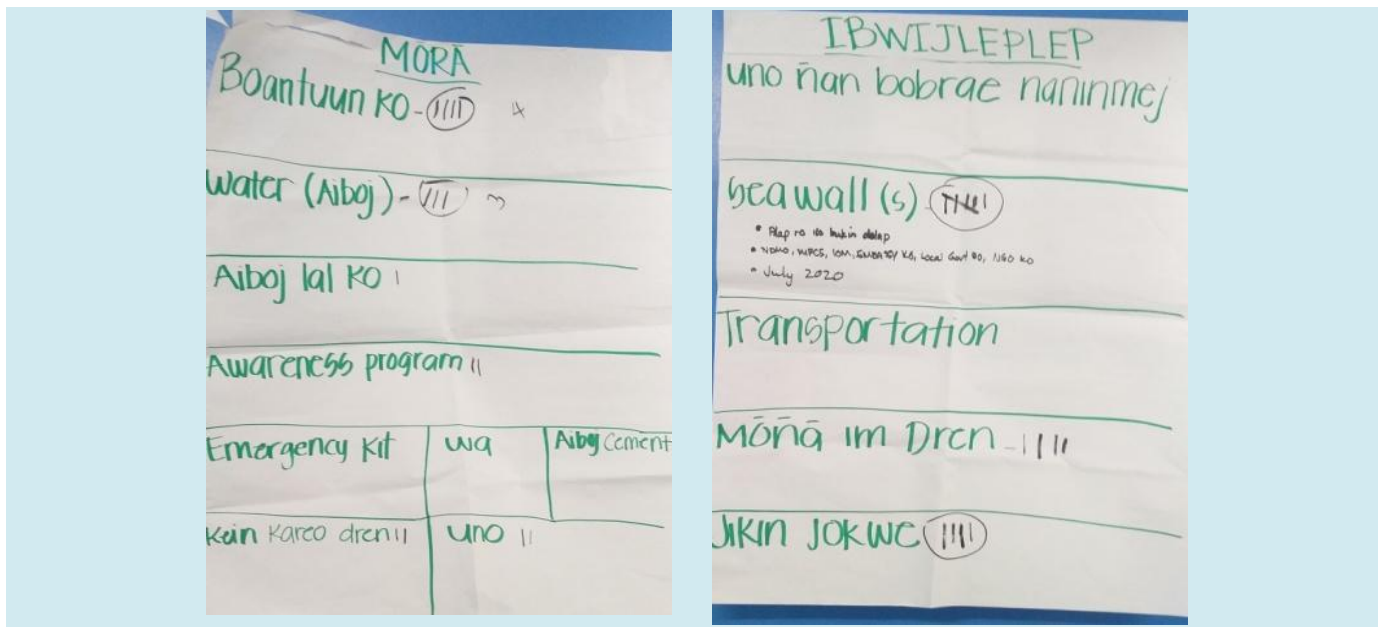


Figure 1.5: Flip charts handwritten by Delap Community- The impacts and needs that can help build or strengthen the community in Delap in times of disaster

Community Early Warning System

When discussing the current EWS at the community level in Delap, the participants decided to draw out the system as they understand it on flip chart paper and the IOM team completed the table in Appendix 1. The community has identified that they heavily depend on word of mouth for early warning, but that also police provide warning and that announcements are also made at churches. The community does not have an alarm system but the community expressed a need for a bell or siren as well as whistles and transportation. When people do receive early warning they prepare by taking shelter, acquiring food, medicine, and emergency kits and they mostly rely on community leaders for that. There was also concern about elderly or disabled people as well as mothers and children receiving early warning.

Summary Delap Community

During the Hazard Vulnerability Capacity Mapping and Early Warning System session, drought and King tide were identified as the two main hazards that community members are most concerned about which pose risks to the health and livelihood of community members.

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 Delap Community was successful and the process has made clear that the community must take ownership of the action plan and that the initiative builds on their existing capacities to address their concerns.

It is anticipated that with the commencement of the CADRE, the communities will be better prepared and improved their capacity to identify appropriate community actions to deal with the hazards.

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.

The option of relocating to higher ground should be considered by high risk households and explored further with local government.

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

Appendix

[1. Early Warning System Profile](#)

Community Early Warning System Mapping

Type of hazard	King tide
How does early warning (EW) information reach the community?	Where does the EW message come from? Anyone who heard or seen on technology (king tide) We hear from around town (king tide) Those who had seen it first (fire)
	Who in the community receives the EW message Those who are closer the ones who are able to receive the message
	How is the EW message sent? Variety of ways The police man but it usually goes to the church for announcement Community members inform each other
How does the EW message get passed to the rest of the community?	Does the community have an alarm system? Apology but we have never had a alarm system
	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 Some Most All Other: only those who have technology
	Does the community have a word-mouth-system? None
	If so , is there a plan for contacting every community member? None
After receiving the EW message, how does your community prepare?	How many hours/days before this hazard would the community receive the EW message? 24 hours 1 week
	What type of preparations do families do for this specific hazard? Food and Drinks Shelters Medicine Lights

	Emergency kits
<p>Does your community early warning system adequately warn all community members?</p>	<p>What type of preparations would community leaders be responsible for?</p> <p>Food and Drinks</p> <p>Shelters</p> <p>Medicine</p> <p>Lights</p> <p>Emergency kits</p>
<p>How could your community's early warning system improve?</p>	<p>Please describe whether or not you believe all community members receive early warnings?</p> <p>Find a way to help the disable before we can evacuate</p> <p>Are there any groups in your community that may not receive early warnings?</p> <p>Elderly, disable, mothers, children</p> <p>Are there special considerations for vulnerable groups, like people with disabilities or the elderly?</p> <p>None but we want to include them</p> <p>Find a way to help the disable before we can evacuate</p> <p>Would equipment like sirens or alarms help? If so which specifically and why?</p> <p>Yes</p> <p>Transportation</p> <p>Bells</p> <p>Whistle</p> <p>Would better early warning coordination and planning help? If so, how do you think this could be achieved?</p> <p>Yes</p> <p>Create a EWS and practice it.</p>

2. Community Poster

Delap Community
Developed July 2019

Action Plan & Early Warning System



ACP-EU Natural Disaster Risk Reduction Program
An initiative of the African, Caribbean and Pacific Group, funded by the European Union and managed by GFDRR



Community Early Warning System Mapping	
Type of hazard	King title
How does early warning (EW) information reach the community?	<p>Where does the EW message come from? A voice who heard or seen on radio/television (king title) We heard from someone (name, king title) Those who had seen it first (the)</p> <p>Where is the community expected to receive EW messages? Those who are closer the ones who are able to receive the message</p> <p>How is the EW message sent? A variety of ways The police men but it usually goes to the church for announcement Community members inform each other</p>
How does the EW message get passed to the rest of the community?	<p>Does the community have an alarm system? Apology, but we have never had an alarm system</p> <p>If so, what type of alarm is it? (if any that apply)</p> <p>If so, how many community members can hear the alarm system? Circle all that apply None All Other: only those who have loudspeakers</p> <p>Does the community have a wind-weather system? None</p> <p>If so, is there a plan for contacting every community member?</p>
After receiving the EW message, how does your community prepare?	<p>How many households have an alarm would the community receive the EW message? 24 hours 1 week</p> <p>What type of preparations do families do for this specific hazard? Food and Drinks Medicine Life jackets Miscellaneous kits</p> <p>What type of preparations would community leaders be responsible for? Food and Drinks Medicine Life jackets Miscellaneous kits</p>
Does your community early warning system adequately warn all community members?	<p>How accessible is/would it be for you to believe all community members receive early warnings? That is way to help the disabled believe so can so accurate</p> <p>Are there any groups in your community that may not receive early warnings? The elderly, disabled, workers, children</p> <p>Are there special considerations for vulnerable groups like people with disabilities or the elderly? None, we are used to handling them That is way to help the disabled believe so can so accurate</p>
How could your community's early warning system improve?	<p>Would community leaders or others help? If so, which specifically and why? Yes Transportation Skills Welfare</p> <p>What other early warning communication/planning info? If so, how do you think this could be achieved? Yes Create a DWS and practice it</p>

Community Vulnerability Mapping

Delap Community, Majuro



Morua Kauparua ko	Herran ko	Kajuro ko	Majuro ko	Aling ko
<p>MORUA</p> <p>Schools Thang Electricity engine Dusty environment No water Students skip school Workers don't show up to work No water for cleaning</p>	<p>National Government Local Government Hospital Schools Offices Church Disaster Office Community Centers Culture Public water treatment</p>	<p>No enough water catchment Not enough capacity Not enough preparation No medication in case the spread of disease has outbreak and spreading No fire fighting kit No transportation Lack of information and knowledge on what to do during a below drought</p>	<p>Water catchment Water Generators Awareness Programs Insurance Kit Emergency kit Fire fighting Manual to clean water Medicine</p>	<p>Water houses Firearm arsenal Radio Food Medicines Water catchment Life jackets Emergency first aid training Insurance kit</p>
<p>King title</p> <p>Disrupt houses Trash everywhere Destroy crops and water catchment Subsidies People are wounded People stopped not used to work Knowing where these families are Council service Subsidy and train them, expecting ending the environmental contamination</p>	<p>Council Inspectors Radio Police Firefighting Hospital Church School Government</p>	<p>Mayor Samwell Two trucks spreading and playing with insects We don't stop We don't know what to do during epidemics</p>	<p>Water houses Firearm arsenal Radio Food Medicines Water catchment Life jackets Emergency first aid training Insurance kit</p>	

Action Plans

Hazard	What do we know about the hazard?	What do we know about the community?	What do we know about the hazard?	What do we know about the community?
Drought	Water catchment (generator)	Community Leaders, Councils	MORUA, National Government, NDMO, RMA	January 2020
King title	Samwell, Food and Water	Community Leaders, Councils	MORUA, National Government, NDMO, RMA	January 2020



3. Community Profile

Community Profile Questions

Delap

About how many people live in your community?	20,301
What are the major occupations of community members? (income and subsistence activities)	People on Delap depend on their jobs for a living. The types of jobs varies base on the level of education. There are those who works has receptionist, retailer, janitor, supplier, lawyers, cashier, teller at the banks, security, etc.
What local resources does your community depend on? Explain why.	Because everyone is busy working there seems to be no time to plan and the soil is not very rich for planting.
How are decisions made in your community? Who has the authority?	Traditional Leaders, Local Government
What social groups are active and what purpose do they serve?	Church group Club ko an kora Youth Male club It varies there are friends that forms clubs since high school and still meet up. For instance classmate of 2004 still meet up and contribute during graduations.
What natural hazards affect your community?	Community members identified King tide, fire, and drought.
What are the social problems your community is facing?	Under age drinking
What are the main strengths of your community?	Family, community leaders, the police and also having all the important building on Delap. For instance the main hospital is here and is easy for us to visit the hospital when needed without worrying about taxi fare.
Are there any new community improvement projects planned?	None
Is the community participating in programs to improve natural protective barriers? (Mangrove, Steep slopes, rivers)	No
What natural disasters have occurred here in the past 100 years?	Drought and King tide
Are there many people of different heritage in the community?	Yes

Social and economic baseline survey:
Jenrok Village, Majuro
[Republic of Marshall Islands]

By Ben Chutaro

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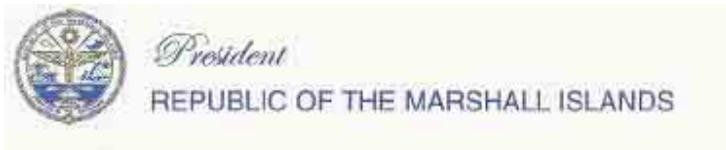
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Foreword

Achieving the objectives of our own sustainable development is one of the greatest challenges facing our Islands today. In pursuit of our own sustainable development, our Government continuously seeks to take responsibility in managing the environment and the social welfare of our people and find solutions to identified problems. Yet, to be able to better serve our people, we need to better understand the root causes of hardships in our Islands.

With this in mind, the recently completed Socio-economic Report of Jenrok is the first survey-study detailing the root causes of poverty, waste management issues, governance and social difficulties in a community in the Marshall Islands. The report is based on a 100% households surveyed rather than sample surveyed households which makes the findings all the more crucial. The Government considers these findings of vital importance to assisting our Islands address these root causes of hardships.

I am pleased that the current report will also be used as guide to undergo a similar survey in the wider context in the Republic of the Marshall Islands (RMI) in the near future to help our Government identify and deal with hardships in our communities.

To this end, I would like to thank all those involved in the preparation of the report, including the Author for his good work, our government and NGO partners, and regional and international partners - namely the International Waters Project (IWP) for the financial as well as planning support provided. Special thanks to the people of Jenrok for the opportunity they gave to carry out the necessary work. Their cooperation, and support with the socio-economic survey activities and their kind assistance have given the Government a way to identifying problems and finding solutions to hardships in our Islands.

Our Government is committed to addressing the priorities of our people as stipulated in our Vision 2018 and will continue to do so. Therefore, I would like to present this document as one of the major steps the RMI undertakes to assist its people address a way forward to an improved life, both social and environmental.

A handwritten signature in black ink, appearing to read "Kessai H. Note", is written over a light yellow background. Below the signature, the text "H.E. Kessai H. Note" and "President" is printed in a small, black, sans-serif font.

H.E. Kessai H. Note
President



Remarks from the Director

Iokwe! As a brief background, the Socio-Economic Study for RMI was commissioned through IWP. IWP is a 6 year Project focusing on waste reduction, promoting community based activities by addressing sustainable development issues of a community. Pilot projects based on these activities were implemented by 14 Pacific Islands and Territories (PICTs) in the region, including the RMI. The pilot site for the Project is based at Jenrok Village.

The IWP was originally being implemented nationally through the RMI Environmental Protection Authority (EPA) and later transferred to the Office of Environmental Planning and Policy Coordination (OEPPC) mid April 2004. Through the IWP, the Socio- Economic Study was commissioned through its predecessor and continued onwards until its recent completion under the direction of OEPPC. The Socio-Economic Report could not have been done without the support and participation of partners, both nationally and regionally.

Therefore, I would like to thank all those who assisted and took part in the Socioeconomic survey; especially the people of Jenrok for their kind cooperation and active participation in helping the survey team gather crucial information to compile this report. Special thanks also to the survey team and Government partners who took the time and effort to assist with research and interviews. Much appreciation and thanks to B.C.I for the great work in not only leading the work of the Socioeconomic study, but the cooperation and respect received by OEPPC through active consultation with our Office including the timely production of the final Report. Special thanks to the Minister in Assistance to the President and the Cabinet of the Republic of the Marshall Islands for the opportunity to present to them the findings of the report. With great respect, I thank the President of the Republic for the final endorsement of this Report.

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Kupijol tata
Ms. Yumi Crisostomo, MLS
Director for OEPPC

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Abbreviations and Acronyms

ADB	Asian Development Bank
CMI	College of the Marshall Islands
CPH	Census Population and Households
CWCC	Community Waste Coordinating Committee
D.U.D.	Darit, Uliga and Delap Villages
EPA	Environmental Protection Authority
EPPSO	Economic Policy, Planning and Statistics Office
GDP	Gross Domestic Product
GRMI	Government of the Marshall Islands
HIES	Household Income and Expenditure Survey
IWP	International Waters Program
MALGOV	Majuro Atoll Local Government
MEC	Marshalls Energy Company
MIVA	Marshall Islands Visitors Authority
MOE	Ministry of Education
MOH	Ministry of Health
MWSC	Majuro Water & Sewer Company
NGO	Non-government Organization
NTF	National Task Force
OEPPC	Office of Environmental Planning and Policy Coordination
RMI	Republic of the Marshall Islands
SOE	State Owned Enterprises
SPREP	South Pacific Environmental Program
UN	United Nations
UNICEF	United Nations Children's Fund
US	United States (America)
WHO	World Health Organization
WUTMI Y	Women United Together in the Marshall Islands
YYIH	Youth to Youth in Health

1 Executive Summary

1.1 Profile of Jenrok Village

Jenrok Village is part of Darit, Uliga and Delap (D.U.D.) district of Majuro Atoll, the capital of the Republic of the Marshall Islands (RMI). Jenrok is located between Rita and Delap Villages. The total land area of Jenrok Village is .0251 square miles with residential homes occupying 95% of the land.

There are 5 separate *weto's* or land parcels, which are owned by four separate traditional landowners or *Alaps* who directly report to one *Iroij* (Chief). A councilman also represents the Jenrok on Majuro Atoll Local Government Council who is elected every 4 year.

There are a total of 215 households identified in Jenrok. The survey team was able to survey 195 households which accounts for a total of 90%. The average household size is 9.47 people.

1.2 Population and Migration

It appears that Jenrok has the highest population density in the RMI: 87,952 persons per square mile. The estimated population of Jenrok Village is 1,847 persons with a very young population profile. 65% of this youthful population under the age of 25. Jenrok represents 8% of Majuro's total population and 3% of the total population in the RMI.

81% of Jenrok's population comes from mostly Mili and Arno atolls. Also during the 12 months of 2003, 190 people migrated to the United States under the free immigration provisions of the US/RMI Compact Agreement.

1.3 House Structures and Amenities

Most of the homes are built with imported timber and concrete with roofs made out of corrugated tin. Most of the homes are of basic design with an average 2.2 rooms. Majority of the homes surveyed appeared to be in very poor condition. About half the households have common household appliances, such as fans, refrigerators, kerosene stoves and radios, but it is not indicative of affluence. Many still continue to cook outdoors using fire pits and wash clothes in basins.

Many of the homes are not hooked up to public utilities: electricity, water, sewer and telephone. Jenrok has the lowest coverage as percentage of subscribers to public utilities on all of Majuro Atoll.

There are only 121 households with 56% are hooked up to electricity. Of that 56%, about two-thirds of the households are 90 days behind on their bill payment. Although, the coverage is very low, many of the households without electricity often tap their neighbor's electrical meter for power.

Water coverage is even lower. Less than half of the households are hooked up to the city water. About two-thirds of the households are 90 days behind on their bills. Therefore there is a heavy

reliance on well and water caught from rain using the roof to catch the rainwater. About 59% of the homes have some form of water storage tank ranging in size, but the average size of the tank is 750 gallons. Also it is not uncommon to see 55-gallon fuel drums being used for water storage.

About 75% of the households have toilets, but 67% are connected to underground septic system, which are not design to be drained but rather the waste seeps into the ground table. Only 5 households in the survey were hooked up to the city sewer system.

1.4 Economic Well-being

There is evidence to support that most families in Jenrok cannot meet their daily basic needs. The increased demands of large households have put considerable stress on those working. The number of persons per households could swell to 20 persons at any given time and especially during the summer months when inter island travel is high ¹. The average number of persons working per household is 1.8 persons. The survey showed an average wage of \$2.57 an hour. The current minimum wage allowed by law is \$2.00 an hour.

To help pay for their basic needs and other obligations, many families are increasingly taking out loans.² About 53% of the households in Jenrok have a loan or credit account with one of the stores or banks on Majuro. 65% pay their credit accounts or loans by using the allotment system.³

Debt to Income ratios in Jenrok is estimated to be around 38%. The average monthly debt repayment per household is \$315.00. The number of loan defaults from Jenrok residents as reported by the Bank of Marshall Islands is one of the highest in the RMI.

The unemployment rate is estimated to be at 47% (national average 31.1% ⁴). Unemployment is particularly high, especially among males between 20-35. Unemployment among youth is staggeringly high at 79%.

The creation of jobs would help improve economic well-being of the people of Jenrok, but the future job market looks bleak. Nearly three quarters of the 50 companies surveyed in the capital have no plans for new hires. Many of the companies doubt the new Compact will improve the economy in the long-term.

The survey showed that women are now the breadwinners for many of the households in Jenrok. Approximately 64% of the Jenrok workforce is comprised of women. Most women work in the fish processing plants and food service industry earning mostly minimum wages.

¹ Many households play host to their outer island families throughout the year

² Loans taken out with Bank of Marshall Islands and Bank of Guam pay on average 18-21% APR and amortized for no more than two years. Average loans taken is \$3,500.00

³ Allotment system started with the government in the late 1980's as a way to guarantee payments to creditors from their employees. Now it is a widely accepted system accepted by both government and private employers.

⁴ Based on the 1999 Census

1.5 Quality of Life

People in Jenrok do not have access to clean and drinkable water. About half of the homes are hooked up to city water or less than three percent of the total coverage in Majuro. Therefore many have to rely on community wells and rainwater stored in tanks. All of the wells tested by the RMI Environmental Protection Authority (EPA) were severely contaminated. Due to the lack of membranes at EPA lab to test the quality of water in the storage tanks, tanks were inspected visually. The inspection by the EPA team, although not conclusive, showed the appearance of highly contaminated drinking water in the storage tanks. Lastly, EPA coastal water quality tests revealed that Jenrok Village has the highest E.coli counts on all shorelines of Majuro Atoll.

This high level of contamination might explain the high incidences of water-borne diseases such as typhoid and diarrhoea in Jenrok. Fortunately, there have been no reported cases of cholera. However, Jenrok is at risk for cholera outbreaks, especially since the RMI often experiences frequent droughts.

The lack of properly managed solid waste disposal in Jenrok has led to an unhealthy, dirty and unsightly environment in Jenrok. The Majuro Atoll Local Government (MALGOV) is responsible for the pick of garbage on Majuro Atoll. Often trash is not picked up in a timely and orderly manner and often trash bins overflow with garbage. There are only three bins designated for Jenrok and all are located on the lagoon side of the community making it very difficult for people on the Oceanside to dispose their garbage. The survey revealed that the community feels that there are not enough trash bins in Jenrok.

Due to the infrequency of trash pick up, there is an increased risk of the spread of diseases, especially diseases that can be easily spread by rats. The consultant noticed during the survey a large number of big rats in and around the garbage bins. Most people throw their food scraps into the bins.

Also the overcrowded living conditions in Jenrok have led to unhealthy and unsafe environments. Many complain of the lack of space to extend their homes. Also many complain of the lack of space for recreational facilities such as basketball courts.

1.6 Poor Social Development in Jenrok

Many women in Jenrok are experiencing hardships that are increasingly being more economic in nature, especially since almost 70% of the Jenrok laborforce are now women.

One indication of the hardships women face is the number of adoptions in Jenrok. Jenrok appears to have the highest number of adoptions in the RMI. There were a total of 19 adoptions in 2003 as revealed in the survey. Court documents also revealed that there were a total of 97 legal adoptions in 2003.⁵ Most of the adoptions were to perspective parents from the United States.⁶ However, data on adoptions in the RMI must be viewed with some caution due to the nature of disclosure and reporting. The Central Adoption Agency created in 2003 is an attempt to address this issue. But there is some anecdotal evidence that illegal adoptions still continue and much appears to be coming out of Jenrok.

Compounding these hardships is the deteriorating health and violence experienced by many

women in Jenrok. The survey revealed that they are more women with diabetes than men. Also the survey revealed that many women from Jenrok were involved in some form of domestic violence, including rape and assaults. Also court records show that Jenrok has one of the highest numbers of violence related cases on Majuro.

But the most vulnerable and the most affected by poor social development in Jenrok are children and youth. The survey and interviews clearly show many children and youths are not receiving a proper education. Although not part of the survey, the Jenrok nurses did observe while conducting the household survey that people were suffering from malnutrition, especially young children.⁷ Also the consultant review data collected by the Jenrok nurses over the years revealed that children are suffering from some form of nutrition deficiency.

The survey revealed a high number of young children not attending school. As children grow older, the number not attending school increases exponentially after 8th grade. Students applying for high school must take the high entrance exam with a passing grade of 43%.⁸ Of new applicants from Jenrok that took last month's exam less than a third managed to pass. However, passing the exam does not guarantee you a space at the public high school because there is limited space available. In the case of the Marshall Islands High School, there are only 600 available spaces. The average number of high school applications per year is around 1,600 students. Those who cannot get into public high school apply at the private schools. The Jenrok survey showed only 12 were attending private schools. This suggests that many youths in Jenrok are not attending high school.

The consultant was not able to obtain statistics from the Ministry of Education that would show the number of youths not attending school and therefore unable to cross check the findings of the survey. Therefore, there was a heavy reliance on past documentation on school attendance.

Once in high school, many continue to drop out rates because of poor grades. By the time the freshman class graduates four years later only fifty percent make it to the next level. The consultant spoke to several volunteers from Dartmouth College and World Teach and they say many of their students don't have the basics in math, science and English. The volunteers believe their students are at least four grades behind. Students not performing well in high schools suggest that they are not receiving a proper education in the primary school system, especially public schools.

Also a contributing factor to high drop out rates in high school is the number of teenage pregnancies. The survey revealed that many in Jenrok do not use contraception regularly. Sadly another cause of dropping out of school was suicides and there were 10 incidence of this at the public high school alone in 2003. The survey showed 57 attempted and 20 completed suicide cases. If these figures are correct, then Jenrok has the highest suicide rates in the entire Marshall

⁵ The survey did not ask whether the adoptions were legal. There are reported cases by the new government adoption agency of large number of illegal adoptions in the RMI to US adopting parents.

⁶ The US/RMI Compact provisions allow free access of RMI citizens to the US. Many adopting agencies in the US would pay for the birth mother to come to the US and give birth making it lot less difficult for the adoptive parents to adopt a child that is not from the US.

⁷ The RMI Public Health System employs a system called "Zonal Nurses" because there are no street addresses in all of the islands. Public Health Nurses are assigned a to a certain community or zone. Doctors would alert the nurses of their patients for follow-ups and health problems diagnosed. Nurses in turn alert public health officials of potential health problems in the community.

⁸ Figures represent 2003 & 2002

Islands. The Bureau of Health Planning & Statistics did show an alarming increase of suicides in 2003 of 65% over the previous year. Surprisingly, the bureau did not list any attempted and committed suicides in Jenrok for 2003.

There could be several reasons for this huge discrepancy. One is the method of reporting and coordination between the police and the Ministry of Health. There appears to be no formal reporting mechanisms between the Police and the Ministry of Health, and therefore are not often reported.

The other reason, families in Jenrok do not report the suicide to the authorities. The survey revealed that funerals are a major financial burden on the families in Jenrok. It was discovered that many families in Jenrok will bury their dead that same day or next to avoid the huge expense. There is no incentive to report either. Many of the people in Jenrok that committed suicide often are young and had no prior employment and therefore would not have social security benefits.

National statistics have shown a steady increase in crimes, especially the rise of violent crimes. The surveys revealed almost all of the respondents complained about the frequent fights and that there is nothing for young people to do.

Several members of the survey team are trained counselors and during the course of conducting the household survey, they noticed that many people showed signs of depression and anxiety. This is not surprising given the lack of jobs, crowded living conditions, polluted environments, run down homes, poor access to social services, no recreational facilities and so forth. Alcohol abuse has always been a problem in the Marshall Islands and the problem has dramatically increased in recent years. Jenrok's poor socio-economic situation lends to alcohol abuse, especially by young people. Many in the survey believed alcohol is the main contributing factor to the high crime and suicide incidences. Many want to ban the sale of alcohol in their community and create recreational facilities to keep youths from drinking alcohol. Currently, there are no basketball courts or public recreational facilities in Jenrok.

1.7 Vulnerability Issues

Historically Jenrok has experienced frequent high wave action, especially during winter months when the easterly winds are at its strongest. In November 1979, 80 % of the homes were destroyed by waves. Coastal erosion on the Oceanside of Jenrok is clearly visible. Currently, half of the village cemetery has been completely eroded and now many of the graves are completely exposed.

There are no building codes in the RMI or environmental impact assessments (EIAs) when people build seawalls. The construction of many of the houses in Jenrok would not meet building codes if there were one. Almost all of the homes lack a fire extinguisher and a smoke detecting device. Most of the homes are built too close to one another, which poses a serious fire hazard. In the event of a fire, it would be difficult for a fire truck to reach most of the homes given the close quarters. Also all of the fire hydrants are located on the lagoon side of Jenrok, which would make it extremely difficult to reach homes on the Oceanside. Also all appear inoperable due to excessive rust damage.

1.8 Proposed Dumpsite in Jenrok

Jenrok was identified as the next possible long-term dumpsite for Majuro Atoll. Currently there are several proposals pending, but the Cabinet and the Mayor of Majuro have yet to endorse any of them.

The different government agencies have asked Japan, Taiwan and the Asian Development Bank (ADB) to help develop a solid waste plan and to provide funding for new capital equipment. All of the donors have responded to the RMI's request, but all appear to be approaching the request on different tracks and are at the risk of duplicating efforts. However, it will take at least several years for the donors and the government to mobilize a plan of action for organizing the new dumpsite in Jenrok.

1.9 IWP Pilot Project in Jenrok

The IWP pilot project in Jenrok have given people an opportunity to clean up their community and possibly earn some income that could be used towards improving their living conditions.

The proposed dumpsite is a large capital project covering parts of Uliga, all of Jenrok and Utirikan, and parts of the high school. The main reason for the site is to create a barrier against strong waves, create space for homes and public land to build a school and recreational facilities. In order to proceed with this new dumpsite it would require extensive preparation that could take a year or more.

The main implication to the IWP pilot project is if people feel it would be easier to use the new dump than use the collection points. However, it is very unlikely the new dumpsite will have adverse affects to the project. The approach to the new dumpsite is unlike what the government has done in the past, where all types of solid waste was put directly into dump without any type of sorting. Now there is realization that using dumpsites alone is not the best approach to managing solid waste on Majuro. There is simply not enough land or reefs that are suitable for a dumpsite. There is an understanding that in order to extend the life of the dumpsite, it would be necessary to recycle, compost and incinerate waste to decrease what goes into the site. Holding the project is the 10 to 15 million dollars required to build the new site.

However, the main implication of the new dumpsite is the threat of contamination of the water lenses in Jenrok. Other implications for the IWP Pilot Project in Jenrok are the level of community involvement and participation. The recycling pilot program appears to be going through teething problems mainly due to poor execution and low awareness within Jenrok. The survey showed 90% of the community did not use the recycling collection stations.

The consultant recommends the following:

- Get the message out to community more frequently. A recent visit by the IWP Community Communications Specialist working with the IWP National Coordinator called for a long-term awareness program for in Jenrok.
- Increase the number of collection points, especially adding more on the ocean side of Jenrok.

- Improve the design both in presentation and in construction. Most of the collection stations lack a professional appearance. The prints on the boards have completely faded making it difficult for people to read the disposal instructions. The signs should also be in Marshallese for those who do not speak English. Lastly, the materials used for the collections stations cannot withstand the harsh elements in Jenrok. The National Task Force (NTF) & Community Waste Coordinating Committee (CWCC) might consider building the collection points out of concrete.
- Pick up collection appears to be infrequent. This is mainly due to lack of equipment. A truck has been purchased for the project and one of the uses is for collection, but this implies additional cost to the project. A no cost solution would be to involve the private sector in the project. A local company has started collecting aluminum cans in Majuro and is exporting them to Hong Kong for recycling. The manager of the company has offered to collect aluminum cans in Jenrok at no cost to the project.
- Revisit the current incentive system in Jenrok and the role of the CWCC. Jenrok faces many social problems, one of the biggest being rampant alcohol abuse by teens. Nearly 95% in the survey complained about the lack of playgrounds or community programs to address and combat the alcohol problem in Jenrok. Many in the survey suggested constructing playgrounds and a basketball court. Almost all felt it would help reduce social problems in Jenrok. This could be a real good incentive for people and proceeds could go towards this initiative.

1.10 Establishing Monitoring Activities in Jenrok

To monitor the progress of the IWP activities in Jenrok it is necessary to establish a set of indicators. The consultant is currently working with the IWP National Coordinator in developing some of these indicators. A more comprehensive set of indicators should be developed once the Jenrok Solid Waste Stream Analysis is completed.

During the course of conducting the Jenrok Socio-Economic Survey, the consultant ran into numerous difficulties in obtaining basic and key statistics from the various government ministries and agencies. The institutions that could provide the necessary data simply lack the technical capabilities and manpower. For example, MALGOV does not maintain any type of data on solid waste.

Therefore the indicators should be simple and easy to administer by the IWP National Coordinator. The initial set of indicators that were recommended include the following:

- Track the volume of material being collected at the collection points and track the volume of waste being delivered to the landfill and compare and contrast the difference of waste volume in order to gauge progress;
- Track Revenues generated from recycling;
- Develop a simple survey for Jenrok that asks the community a set of straightforward questions on how the project is affecting their lives;
- Collect monthly test results of wells, water, coastal shores of Jenrok from EPA; and
- Collect monthly survey results from the Jenrok Nurses on diseases found in Jenrok, in particular water-borne related diseases and diseases spread by rats.

2 Background

The RMI EPA with the assistance of the IWP commissioned this Socio-Economic Baseline Survey of Jenrok Village. The oversight of the project later transferred to Office of Environmental Planning & Policy Coordination (OEPPC), Office of the President. The purpose of this survey is to assess the viability of low cost/no cost alternatives to solid waste programs that can be implemented at the community level with the aim of minimizing waste streams within the Jenrok community.

2.1 Terms of Reference

2.1.1 Introduction

The IWP is implementing the Strategic Action Program (SAP) for the International Waters of the Pacific Small Islands Developing States. Activities in the Marshall Islands, which is one 14 Pacific Islands countries participating in the Project, is focused on piloting activities to address waste management concerns at the community level. Jenrok community has been selected to host these activities.

One of the first steps in the process of establishing pilot activities for community based waste at Jenrok will be a socio-economic baseline assessment. To achieve this, the following activities are to be carried out under the direction of the Consultant and in close cooperation with OEPPC, IWP national staff, the Solid Waste Group, the CWCC, South Pacific Regional Environmental Programme (SPREP) PCU, and other stakeholders.

2.1.2 Aims and Objectives of the Baseline Phase

The objectives of this phase of the project are:

- to describe the social baseline situation in Jenrok Village;
- to describe the economic baseline situation in Jenrok Village;
- to design a Monitoring Plan for key social and economic indicators for Jenrok Village and;
- to produce a Baseline Report.

The aim of the baseline program includes:

- to review published and unpublished social and economic information for Jenrok Village and/or similar communities on Majuro;
- to profile the social structure and arrangements at the Jenrok Community including a description of the social obligations and systems of governance;
- to profile economic situation at the Jenrok Community by describing the components and relative significance, of economic factors (including income sources and amounts and principle expense items);
- to include a capacity building component into the baseline work to ensure that village volunteers and national staff are capable of conducting future monitoring in relation to social and economic components of the Jenrok Community; and
- draft a simple Monitoring Plan, including identification of permanent indicators; which

over time, may be monitored to demonstrate the impact of the Project at Jenrok. The Monitoring Plan will also make best efforts to describe a role for Jenrok Community members in its execution.

2.1.3 Outputs

Outputs from the baseline activities will be one Baseline Phase Socio-Economic Report that will include the following sections:

- A review of current information on the social and economic factors in communities on Majuro Atoll;
- A profile of the social structure and arrangements at the Jenrok Community;
- An economic profile for the Jenrok Community; and
- A Monitoring Plan for several key social and economic indicators at the Jenrok Community – including a description of possible roles in implementing the Plan.

2.1.4 Schedule of Events

Conducting the socio-economic survey took approximately 34 days to complete starting on January 16th running through to May 4th, 2004. The consultant submitted to the NTF the draft report on May 18th, 2004 for review and comment.

3 The Research Process

3.1 Designing the Survey

In January 2004, the consultant visited the IWP National Coordinator at the RMI EPA to begin the process of developing survey tools for Jenrok. The process involved wide consultation with key stakeholders of Jenrok, namely IWP Jenrok Steering Committee, government ministries, authorities and NGO's to identify the issues and pertinent reports and literature that would assist in designing the surveys for Jenrok.

There are many reports on the Marshall Islands, especially reports from the ADB and the various United Nations (UN) programs. Some of the data are fairly recent and gave a good insight on the socio economic conditions of the RMI. But many were limited in scope, in particular, in reference to the Jenrok community. Additionally, the statistical capabilities, therefore limited data, of the government and some of the more organized non governmental organisations (NGOs) do not necessarily offer the specific answers to the questions sought. The consultant had difficulties obtaining specific statistics from various ministries. Often data was not as forthcoming and timely. Therefore, there was a heavy reliance on interviews, surveys and observations of the conditions of the Jenrok community.

A series of surveys were developed, a household questionnaire, a labor force questionnaire, and a retail price survey. Three supplemental questionnaires were also developed, which focused on women, youth and men from Jenrok, that were conducted in a group setting. Lastly, the consultant also conducted five separate walkthrough of Jenrok.

3.2 Household Questionnaire Survey

This survey was administered with the assistance from the Economic, Planning, Policy, and Statistics Office (EPPSO) under the Office of the President. The number of households identified was 215, but only 195 were surveyed or 90% of the households. The number of households to be

covered was calculated by using satellite imagery of Majuro Atoll focusing on the Jenrok community area.

The survey was based on 100% of the households, which encompasses the five main *wetos* (land parcels) in Jenrok, rather than on a sample of households across the village.

3.3 Defining Households

The definition of household characteristics in Jenrok was not straightforward nor was it clear. Some households were clearly defined as individual households. But often the case was most households were in clusters or groupings. Care was needed to define what was an individual family or separate family unit.

For example, it is not uncommon in Jenrok to have 27 persons per household. They are part of the extended family, which included families of the sons and daughters with their children and the parents. Since land is very limited in Jenrok, often the main house grew to include subsidiary rooms or small dwelling that shared the cost of electricity, water and had common use cooking, bath, toilet, and water storage facilities.

On the other hand, some dwellings shared the same characteristics as the above, but the occupants were clearly from different families. The cluster of dwellings had about 50 people living in them and collectively they shared the cost of electricity, water and had common use cooking, bath, toilets and water storage facilities.

Therefore, it was difficult to design a household definition at the outset, but rather had to adjust the definition when on site to better reflect the household characteristics.

3.4 Supplementary Questionnaires for Women, Youth and Men

Three separate questionnaires were developed and completed by the men, women and the youth of Jenrok through a series of meetings of each group. Questions were asked about social conditions of Jenrok and to what extent each group was affected by those conditions.

3.5 Fact Sheet

The local consultant compiled a fact sheet of the pertinent data required for the survey, especially statistical data from health and education. This information was supplemented by information obtained through the local consultant's own observations on the conditions of Jenrok. The process involved five separate walkthrough of Jenrok through interviews, observation of sites and events and picture taking.

3.6 Selection and Training of Researchers

The local consultant selected surveyors that were either from the Jenrok community or professionals that were regularly performing service delivery in the community. The local consultant selected surveyors from Women United Together Marshall Islands (WUTMI)⁹ Youth

to Youth in Health¹⁰, Jenrok designated nurses from the Ministry of Health, two staff from EPPSO and EPA. All attended a training course at EPPSO on how to carry out the research required. The training was provided by the local consultant and supervised by the EPPSO director, Mr. Carl Hacker. All of the selected surveyors had previous experience in conducting household surveys in the Marshall Islands.

As part of the training, the group reviewed the questionnaires to ensure that everyone knew and agreed on the questions asked and that surveyors had a clear understanding of the questions and how to record the questions. Also, the local consultant conducted several training sessions with people from Jenrok.

3.7 Carrying out the Research

The Jenrok Survey Team conducted their household surveys from March 24 to March 26, 2004. The team was separated into pairs of five groups. The group would then meet once for lunch and once after the end of the day to compare their findings and compare notes as to reduce the likelihood that completed questionnaires would be lost or inaccurately completed and the local consultant to collect the questionnaires and check them for accuracy.

3.8 Data Analysis

In mid April, the local consultant began the process of analyzing the data collected by the Jenrok Survey Team. The figures in the tables and graphs in this report should be treated with some caution. While we can be reasonably confident about the accuracy of the data provided by the ministries and the survey, one should bear in mind that some of the data represents estimates. Therefore in these cases, what is important is the relative order of data responses rather than precise data.

3.9 The Report

The information collected and analyzed provides a picture of the conditions of the Jenrok Community in terms of their socio-economic status as compared to the rest of the country. It provides information on household composition, employment, their income and possessions, status of health and education and the way people dispose of waste.

This information is intended to be use by the IWP of the South Pacific and the RMI as a reference on the conditions of the Jenrok Community as a whole. Since, two of the major NGOs in the Marshall Islands assisted in the survey, the information contained in this report will help them understand and better assist them in identifying women and children at risk in the Jenrok Community.

4 Results

4.1 Population

Table 1 shows the population of Jenrok. The largest portion of the population is under the age of 15 years old and more than 65% is under 25 years old.

Table 1.	<i>Jenrok Population.</i>						
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	0-15	16-25	26-35	36-50	51 plus	Total	Majuro	Outer Is.
Male	317	284	117	125	75	918	-	-
Female	328	288	133	129	51	929	-	-
Total	645	572	250	254	126	1,847	343	1,505
% Total	35%	31%	13%	3%	107%	100%	19%	81%

4.2 Migration

The survey showed there were 190 people who immigrated to the United States in the last 12 months from Jenrok. There continues to be a large influx of outer-island migrants into Jenrok. Majority of the outer islanders living in Jenrok come from Mili and Arno Atolls. The current traditional chief of Jenrok Village is also one of the major traditional chiefs of Mili and Arno Atolls. It is not uncommon for people from Mili and Arno to ask 20 55-gallon fuel drum used as a water tank permission from the chief to live in Jenrok since they might not know anyone else on Majuro. In some aspects, it strengthens the bond of the chief with their constituents in Mili and Arno.

The survey did not look into the number of people that came from the outer islands and for what purpose their visits to their relatives in Jenrok. It would be difficult to quantify. But it is not uncommon for families in Jenrok to host relatives visiting from the outer islands, especially during the summer months when peak travel between the atolls is at its highest. Many of the main churches on Majuro conduct their church activities during the summer months, many from the outer islands come in for these conferences. It is also an opportunity to seek services not readily available in the outer islands.

From anecdotal evidence many of the households in Jenrok often host two to three outer island families at a time. Even some household reported that they would host different outer island families throughout the year.

Although, outer islanders bring in local foods and some cash earned from copra, many do not have the incomes to sustain themselves in the urban centers for any length of time and most often depend on their urban relatives to help support them.

The average household size of the immediate family members based on the Jenrok Household Survey is around 9.5 persons per household. But when including visiting relatives from the outer islands, the average household size could substantially increase to 16 or more persons per household.

9 Women United Together in the Marshall Islands, NGO dealing in women issues, especially abuse

10 YTYIH, NGO dealing in youth issues, especially suicide prevention programs for youths.

4.3 House Facilities and Structure



55-gallon fuel drum used as a water tank

Many of the homes in Jenrok are poorly constructed and in need of serious repair, especially the homes built from wood and plywood. Majuro Water and Sewer Company (MWSC) reported there were 211 watermetered customers in Jenrok, but 102 customers were recently disconnected due to non-payment. Of the 109 remaining customers, two-thirds are 60 days behind in paying the bills. Only about half of the households in Jenrok have access to city water.

MWSC also reported that only 5 households are hooked up to the main sewer line. The sewer line does not cover all parts of Jenrok. Majority of homes or 67% have their own septic tanks.

Marshall Energy Company (MEC) reported there were 178 electric-metered customers in Jenrok, but 58 customers were recently disconnected due to non-payment. Of the 121 remaining customers, more than two thirds are 60 days behind in their bill payment. About 56% have access to meter electricity.


Most of the water tanks in Jenrok are made of elite plastic or fiberglass and the average tank size is 750 gallon. However, many households use steel 55-gallon fuel drums to store water. Many use well water to wash and bath and about 10% use their own well water for drinking¹¹.



Typical House in Jenrok

MWSC also reported that only 5 households are hooked up to the main sewer line. The sewer line does not cover all parts of Jenrok. Majority of homes or 67% have their own septic tanks.

Table 2. Household Characteristics.		
		%
Est. number of Houses	215	
Total Houses Surveyed	194	91%
Wood Construction	99	51%
Concrete Construction	95	49%
Electricity– Metered	122	56%
Water – Metered	109	51%
Water – Storage Tanks	127	59%
Average tank size	750	Gallons
Homes with Toilets	161	75%
Homes hooked to Sewer Line	5	02%
Septic Tanks	144	67%
Average Household Size	9.5	
Average number of rooms per house	2.2	
Average number of people per bedroom	5.3	



4.4 Household Purchases

Not surprisingly 100% of the households buy rice. After rice every household had different priorities in the types of food bought, but food items in Table 3 were mentioned consistently.	Table 3. Top 5 Purchases in Jenrok.
	Rice
	Flour
	Chicken Leg-Qtr
	Ramen
	Canned Meats

4.5 Land Tenure

About 80% of the people of Jenrok do not have land rights and 98% do not have a formal lease. If this is the case, many cannot apply for a development bank loan where a mortgage deed is required to secure the loan.

Table 4 – Jenrok Land Tenure			
	Yes	No	Other
Households with Land Rights	44	150	0
%	20%	80%	
Households with a Lease	5	189	0
%	02%	98%	
Difficulty Obtaining Permission to from Landowners	28	158	8
%	14%	81%	04%

¹¹ Three to four households usually share a well, which collectively have dug, so they are not community wells in the traditional sense. But many share regardless of who owns the wells.

4.6 Sources of Income

84% of the households surveyed received their cash from salaries & wages earned in the workplace. 3% of the households get their cash from pension benefits. Another 3% get their income from lease payments. The balance is self-employed income, mainly in handicraft and homemaking activities.



4.7 Employment

The Majuro laborforce based on the 1999 Census is 7,196 of which 4,980 are employed. Jenrok's estimated laborforce is 659 or 9% of total laborforce. Total unemployment in Majuro is 2,216 with an unemployment rate of 30.8% slightly below the national average of 30.9%. Jenrok estimated unemployment rate is 47%. The vast majority of Jenrok's laborforce work in the service and construction sectors earning just above minimum wages. Those working in the fisheries sectors, in particular the fish base earn \$1.50 an hour \$0.50 below the minimum wage allowed by law.¹²

Estimated Jenrok Laborforce	659	%
Estimated Employed	351	53%
Estimated Unemployment	308	47%
Estimated Male Unemployment	?	75%
National Unemployment Average 1999 Census		31%
Average number of workers per households	1.81	
Employed in Government	28	08%
Employed in Private Sector	323	92%
Employed in Service Sector		75%
Total Women Employed	226	64%
Average Hourly Wage	\$2.57	

4.8 Future Employment Prospects

Nearly three quarters of the 50 companies surveyed in Majuro do not plan to hire more people despite the economic provisions of the new compact treaty being extended with the United States. Many in the business community, especially the services sector, feel that the economy will not improve citing the costly business environment and government slowness in mobilizing policies that would help improve the business environment.

However, the construction sector is anticipating new infrastructure funding for education and health in the tune of \$15 million a year for the next 20 years, which they say will boost employment and all expect to hire once projects are put out to bid. But, business sentiment is tempered partly due the poor performance of the economy in the last decade.

	No	Yes
Companies planning to hire	36	14
%	72%	25%

4.9 Finances

More than half of the households have debts with a debt to income ratios more than a third of income. Nearly a quarter of the households have store credit accounts. Two quarters of the households pay their debts by allotments deducted from their paychecks.

Number of Households with Loans	114
% Households	53%
Number of Households with Store Credit	48
% of Households with Credit	23%
Average Monthly	\$315.47
Number with Allotments	75
% Allotments	65%
Debt to Income Ratio Average ¹³	38%

Purpose of Loan		% of total Loans
Basic Needs	22	19%
Funerals	19	17%
House Improvements	18	16%
Education	17	15%
Birthday Parties	12	11%
Build House	8	07%
Christmas	4	03%
Travel	4	03%
Appliances	3	02%
Other	7	06%

4.10 School Attendance

Overall there are more boys than girls attending school in Jenrok. By the time many reach high school, enrollment drops. By the time of graduation, approximately half graduates.

	Boys	Girls	Total	%
Primary	168	136	304	42%
Middle School	83	86	169	23%
High School	130	127	257	35%
CMI & USP	N/A	N/A	N/A	N/A
Total	381	349	730	
%	52%	47%		

4.11 Non-Attendance

There were 136 students not attending school 2003. This does not include those who are registered to go to school. There were 43 students or 9% not attending primary school. There were 93 students or 36% not attending high school. The number attending school is roughly the same between girls and boys. The main cause for not attending school was expulsion due to poor grades.

4.12 High School Entrance Exam Results

There were 353 students that took the Marshall Islands High School entrance exam. However, it is difficult to know who was from Jenrok. It is also possible that many students from Jenrok did not take the test or applied to the one of the private schools. Based on previous years, it is

estimated there were 63 students who took the exam. It is unknown how many were actually accepted. The cut off score for the 2004 high school exam was lowered to 36% from 43%.

4.13 Number of Admissions at Majuro Hospital

During the period between January 2003 and December 2003, 254 people received some form of medical treatment at the Majuro Hospital. Nearly half of the admissions to the hospital from Jenrok were baby deliveries. Diabetes and respiratory related diseases followed as the next largest category.

There are 2 designated nurses assigned to the Jenrok community and both nurses see an average of 120 patients per month. They mostly follow up on prenatal and family planning cases, but also deal with other medical issues when the doctors bring it to their attention.

Table 10 - Admission by types at Majuro Hospital from Jenrok Village	
Amebiasis, unspecified	1
Pulmonary Tuberculosis, unspecified	1
Other (Tuberculosis of intestines, peritoneum, and mesenteric glands)	1
Varicella without mention of complication	2
Postmeasles pneumonia	1
Measles without mention of complication	2
Unspecified viral infection	1
Cervix uteri, unspecified	2
Malignant neoplasm of prostate	1
Diabetes Mellitus without mention of complication	7
Diabetes with renal manifestations	3

Diabetes with peripheral circulatory disorders	4
Diabetes with peripheral circulatory disorders	1
Diabetes with unspecified complication	1
Hypoglycemia, unspecified	1
Iron deficiency anemia, unspecified	1
Meningitis due to unspecified bacterium	1
Abscess of eyelid	1
Acute Rheumatic heart disease, unspecified	5
Unspecified hypertension	2
Acute, but ill-defined, cerebrovascular disease	1
Acute URI NOS	10
Chronic tonsillitis	10
Broncho Pneumonia, organism unspecified	7
Pneumonia, organism unspecified	1
Unspecified chronic bronchitis	2
Diseases of lips	7
Dyspepsia and other specified disorders of function of stomach	7
Acute appendicitis without mention of peritonitis	2
Other and unspecified non-infectious gastroenteritis and colitis	13
Intestinal or peritoneal adhesions with obstruction	1
Diverticulosis of colon	1
Abscess of anal and rectal regions	1
Hemorrhage of rectum & Anus	1
Calculus of gallbladder with other cholecystitis	1
Acute cholecystitis	1
Hemorrhage of gastrointestinal track, unspecified	1
Chronic renal failure	1
Other specified disorders of kidney and ureter	1
Cystitis, unspecified	1
Urinary Tract Infection, site not specified	2
Inflammatory disease of breast	1
Unspecified inflammatory disease of female pelvic organs and tissues	4
Cervicitis and endocervicitis	1
Unspecified non-inflammatory disorder of ovary, fallopian tube & broad ligament	3
Other disorders of menstruation and other abnormal bleeding from female genital tract	6
Threatened abortion	2
Mild hyperemesis gravidarum	1
Threatened premature labor	4
Delivery in a complete normal case	56
Cesarean delivery, without mention of indication	7
Finger (Cellulitis and abscess)	1
Toe (Cellulitis and abscess)	1
Neck (Other cellulitis and abscess)	1
Leg, except foot (Other cellulitis and abscess)	2
Pyoderma	1
Osteoarthritis, unspecified whether generalized or localized	1
Articular cartilage disorder	1
Pain in joint, pelvic region and thigh	1
Myalgia and myositis, unspecified	2
Convulsions	1
Chest pain, unspecified	1
Ascites	2
Motor Vehicle traffic accident of unspecified nature	1
Other fall from one level to another	2
Other and unspecified fall	1
Accidents cause by machinery	1
Accident caused by cutting and piercing instruments	2
Foundling (Health supervision of infant or child)	1
Single liveborn, born in hospital	54
Colostomy (Artificial opening status)	1
Aftercare involving removal of fracture plate or other internal fixation device	2
Total	254

12 The fish plant sought and received an exemption to the minimum wage law by Cabinet Women going house to house selling Donuts

13 Ratio is an estimate and based on the average monthly income of \$2.57an hour x two persons working per household divided by the average monthly household debt of \$325.47.

4.14 Diabetes

Jenrok women were found to have a higher incidence of diabetes than men and most are middle aged.

	Men	Women
Reported Cases	50	68
%	42%	58%

4.15 Water Quality

The quality of water from both wells and water tanks is poor. Most of the well water is not suitable for drinking. Water stored in tanks also appear to be contaminated. Also, the coastal waters of Jenrok show the highest counts of coliform in all of Majuro Atoll. People continue to swim and bath in the lagoon waters, especially youths during the hot afternoons.

Site	pH	Turbidity	Conductivity	TDS	Salinity	Chloride	Nitrates
Well #1	8.1	1.89	2007	1042	1.1	520	>10
Well #2	7.7	.42	2030	1161	1.2	405	>10
Well #3	8.1	4.29	1995	1002	1.0	400	>10
Well #4	7.7	27.8	10330	5065	5.8	700	>10
Well #5	8.0	1.9	9260	5020	5.2	590	>10
Well #6	8.3	.3	1424	706	.7	280	>10
Well #7	8.2	.5	4900	2570	2.6	310	>10
Well #8	7.9	1.5	7870	4220	4.3	470	>10
Well #9	8.3	1.3	1505	748	.8	265	>10
Well#10	8.2	.7	227	1146	1.2	490	9
Well#11	8.1	2.4	2020	1014	1.	355	>10

The World Health Organization (WHO) standard for potable water from wells fit for drinking is <250mg/L TDS. None of the wells tested met this WHO standard.

	Hrs.	Temp	Salinity	Coliforms	
				Total	E.Coli
Jenrok I – May	24	90	35	1880	3606
Jenrok I – June	24	38	35	10200	4600
Jenrok II - May	24	90	35	5360	1200
Jenrok II - June	24	30	35	1092	852
Jenrok III - May	24	88	35	1360	324
Jenrok III – June	24	29	35	724	653

The Survey Team and EPA were not able to test the water storage tanks in Jenrok due to the lack of membranes for the water testing equipment at EPA. However, the team conducted a visual survey of the water tanks and found debris and decomposing organic matter such as leaves, which gives an indication of contamination. Many of the tanks had some appearance of contamination. Putting chlorine tablets in the water tanks would easily rid the contamination.

4.16 Other Illnesses

There was a high incidence of diseases that could be attributed to contaminated water with the majority being diarrhoea cases.

Diarrhea	Typhoid	Amebic Dysentery
59 Households	20 Households	17 Households

4.17 Contraception

The survey showed 58 women using contraception. The survey did not ask what type of contraception was used, but many of the women respondents say they often use Norplant.

The figures in Table 15 do not indicate the number of women using contraception. Family planning indicated that more than half of the visits were prenatal visits. They also indicated that conception use is on the rise, but this cannot be verified.

Table 15 -
Family Planning Visit by Age Group for Jenrok

	10-14	15-19	20-24	25-29	30-34	35-39	40-44	Total
Dec-03	0	6	14	12	5	1	2	40
Nov-03	0	9	10	6	5	6	0	36
Oct-03	0	9	24	4	6	1	1	45
Sep-03	0	6	13	15	9	0	3	46
Aug-03	0	1	21	19	3	0	2	46
Jul-03	0	8	30	16	5	2	0	61
Jun-03	0	11	21	16	4	1	1	54
May-03	0	10	17	13	2	0	0	42
Apr-03	0	6	34	17	10	0	0	67
Mar-03	0	8	20	14	4	3	2	51
Feb-03	1	8	24	13	5	2	0	52
Jan-03	0	6	15	13	7	2	0	43
	1	88	243	158	65	18	11	583
	0%	15%	42%	27%	11%	3%	2%	

4.18 Depression and Mental Health

The household survey did not address the mental health of the people of Jenrok. There was a consensus among the survey team that many of the people in Jenrok suffered from some form of depression and anxiety. Several members of the survey team are trained counselors and were able to observe people and determine if members of each household showed signs of depression.

4.19 Suicide Incidence

Suicide incidences as shown in Table 16 are astonishingly high and could be one of the highest rates of suicide in the Marshall Islands. The Bureau of Health Planning & Statistics, Ministry of Health reported a 65% increase in attempted and completed suicides throughout 2003 for the entire Marshall Islands.

Most of the suicide incidences in Jenrok and, for that matter, the rest of the Marshall Islands are between the ages of 15-29.

	Number	%	Alcohol Related
Attempted	57	74%	46 cases
Completed	20	26%	20 cases
Total	77		66 cases

4.20 Violence

Information recently obtained from Women United Together Marshall Islands (WUTMI) shows high prevalence of violence against women in the Marshall Islands.

The Jenrok survey showed 53 cases of violence with the vast majority being assaults mostly against women.

Assault	34	64%
Spousal	8	15%
Child	7	13%
Sexual	4	07%
Total Cases	53	100%

According to WUTMI, 84% of the assaults involve alcohol and less than 16% are reported to the police and less than 1% seeks medical attention or counseling. Many of the women reported repeated assaults of more than 10 times a year.

Court records also show that Jenrok has one of the highest numbers of assault convictions on Majuro, most of the cases involving violent crimes involving alcohol.

Many of the households report rampant fights in the Jenrok area and again many blame alcohol. The survey team observed a brawl on the main street of Jenrok during the afternoon rush hour traffic as shown in the photo on the right. The result of the fight was one guy with head injuries and a taxi with broken lights and windshield when one of the teen threw rocks.



4.21 Alcohol Abuse

Nearly all of the households complained about the rampant alcohol problem in Jenrok. Many blame the high incidence of suicide and violence on alcohol. Many also feel that alcohol is widely available in the community and many feel that alcohol should not be sold in Jenrok. The average cost of a pint of Vodka in Jenrok cost \$3.99.

	Yes	No
Alcohol a Problem in Jenrok	186	8
%	96%	04%
Alcohol Widely Accessible in Jenrok	185	9
%	95%	05%

Many of the respondents felt that there is not enough for youths to do and the lack of sporting facilities and activities in Jenrok gives youths a reason to drink alcohol.

4.22 Adoptions

Over the last three years there has been a surge in adoptions in the Marshall Islands, especially from adopting parents from the United States. No one really knows how many adoptions have taken place. In response, the Nitijela¹⁴ passed a law banning adoptions done through agents and lawyers, but now they must go through the newly formed government adoption agency that monitors and regulates adoptions. The agency is new and does not have current figures for adoptions, but court documents reveal that 97 adoptions were processed legally in 2003. There were 19 adoptions from Jenrok representing 20% of the total adoptions in the RMI. If these figures are correct, then Jenrok has the highest number of adoptions in the Marshall Islands. 47% of those who gave up their children for adoption cite economic hardships.

Total Adoptions from Jenrok	19	
Economic	9	47%
Better Education	4	21%
Unable to Care	3	16%
Other	3	16%

4.23 Social and Traditional Obligations

The traditional customs and obligations continue to play a major role in people lives in the Marshall Islands and the community of Jenrok. Many of the households felt that church obligations were causing hardship to their families followed by funerals. 11% of the respondents say they were unable to meet basic needs.

	Number of Households	%
Church	61	31%
Funerals	31	16%
Birthday Parties (Kemems)	26	13%
Meeting Basic Needs	22	11%
Traditional ¹⁵	20	10%
Paying for Education	6	03%
Health Care	1	Less 1%
Don't Know	2	01%
Other	25	13%
Total	194	

14 National Parliament

15 Traditional obligations are tributes to the Iroj or traditional chief of Jenrok and senior landowners of the Jenrok. Marshallese called it “aujik” or tribute.

4.24 Burial Practices

60% of the households say it is difficult to find a place to bury the dead and increasingly many now bury the dead next to their homes.

Wooden Caskets	112	57%
Steel Caskets	66	34%
Cremate	2	02%
Other	14	07%
Difficulty Finding a Place to Bury	117	60%



4 graves next to house (notice the two baby graves)

4.25 Solid Waste

The majority of the households surveyed say solid waste is a problem in Jenrok. 98% of the households use the trash bins, but 79% of them feel there are not enough bins in Jenrok. 55% of the households say MALGOV is the main government authority responsible for solid waste management in Jenrok.

Based on observations, many are indifferent towards the solid waste problem in Jenrok. There is a prevailing feeling among the community that the municipal government is responsible for managing the waste problem in Jenrok, especially since many pay taxes for solid waste management services.



Truck used as a trash bin

Table 22 – Recycling in Jenrok	Yes	No
Use of IWP Recycling Stations	21	173
%	10%	90%
Use MALGOV trash bins to Dispose of household garbage	192	3
%	21%	79%

Table 23 – Jenrok Bins		
Number of times bins are picked up		%
Once a Week	0	0%
Twice a Week	39	21%
3 Times a Week	21	10%
Once every 2 Weeks	49	25%
Once a Month	49	25%
Don't Know	36	19%
Responsible for Solid Waste in Jenrok		%
MALGOV	108	55%
Landowners	45	23%
Individuals	38	19%
EPA/GRMI/Other	3	1%



IWP Jenrok Recycling Station

4.26 High Wave Action

In 1979, Jenrok saw several week worth of very high wave action that destroyed 80% of the homes in Jenrok, not an uncommon recurring event. In the last four years, Jenrok has experienced consistent high wave action. Many of the residents living on the ocean side now say the high waves are occurring more frequently.

4.27 Coastal Erosion

There is clear evidence of coastal erosion in Jenrok were especially on the ocean side. Several homes are in danger of being destroyed and the Jenrok cemetery is already partially destroyed.

17% or 37 of the total households located on the ocean side of Jenrok were exposed to the harsh elements of the ocean side and strong waves. All of these homes show visible signs of damage.

All of the homes are particularly vulnerable during the winter months when the winds and waves are strongest. It is common now to have waves wash up on the road bringing with garbage that was thrown onto the ocean side.

It is difficult to know whether the erosion is caused by sea-level rise or because the of the connecting causeways that were built by U.S. Navy during the Second World War or the combination of both.



Trash washed up by high wave action



Trash washed up on road



Incoming waves under house (bathroom already collansed)



Damaged graves due to erosion



House at low tide



Cemetery at low tide

5 Views of Youth

On March 19, 2004 the local consultant conducted a youth focus group at the Youth to Youth in Health (YTYIH) Center. Key persons present were Omita Jorlang, Health Services Coordinator YTYIH, and Emi Chutaro, Advisor/volunteer YTYIH, Marin Lang, Jenrok Nurse Supervisor. There were a total of 15 youths present during the focus group and 7 were from Jenrok.

The group discussed a wide range of topics from alcohol abuse to education and health. Many of the youths had a clear understanding of the issues discussed, but in some cases were reluctant to talk openly about them, especially abuse.

The majority of the group felt that abuse in Jenrok has lead to high incidences of suicide, drunken youths, fights and stealing. The group says increasingly girls are drinking and many are getting pregnant. Also the group says many don't use contraception and their knowledge of family planning methods is limited because the subject is taboo in their homes.

The group felt that many youths in Jenrok have nothing to do and don't have jobs and therefore drink alcohol to pass the time. Also many believe that a number of the youths suffer from depression.

The group also believes government does not pay enough attention to youth issues in the Marshall Islands. The group believes the way to combat the problem is to build sporting facilities and supporting NGO's programs in Jenrok. Creating youth activities will help keep youths from engaging in risky activities.



Kid playing in Street and jumping on Taxis



Kids cooling off in lagoon in the afternoon



Youth Focus Group

6 Views of Women

On March 27, 2004 the consultant and with the assistance of Agnes Jeibke a counselor from Women United Together Marshall Islands organized a group of women from Jenrok to discuss issues affecting them in their community.

The women in the group were concerned about increased crime in Jenrok and the lack of opportunities, in particular lack of jobs. Many believe the future does not look good, despite the new Compact. Many say they have lost faith in the public service, in particular the police.

The discussions within the group confirm that women are now the main bread winners for their families in Jenrok. Most say their husbands are unemployed and can't find work. Many say in order to earn income many women in Jenrok are engaging more in making handicrafts and as a last resort work at the fish base, which many say they didn't like the pay and the long hours. They acknowledge the economic difficulties have led to frustration and tension within their families.

Many felt that alcohol abuse is the biggest problem in Jenrok. They felt that alcohol use is the root cause of spousal abuse, child abuse, sexual assault, suicides and gang fights. Many believe the sale of alcohol in Jenrok should be completely banned. Many fear their husbands and sons will drink alcohol and commit suicide. Several of the women in the group had sons that committed suicide and it involved alcohol use.

Aside from creating job opportunities for people in Jenrok, all of the women say there is a need for creating more living space and areas designated for recreational facilities to keep the youths out of trouble and drinking.

7 Views of Men

On March 20, 2004 the local consultant conducted the men's focus group at Mr. Maun's house in Jenrok where about 12 men were present between the ages of 17 to 38. The group discussed their roles in the community and their family responsibilities.

- Majority of the men complain about the lack of jobs.
- Majority of the men say do not care for the children, but help out with chores.
- Majority of the men say Jenrok needs sporting facilities such as basketball courts to help get kids off the roads.
- Most feel that MALGOV should take an active role in Jenrok from law enforcement, solid waste collection and sports facilities.
- Most acknowledge that there is an alcohol problem in Jenrok, but say there are opportunities for men, the problem will continue and probably worsen.
- Some of the men say the development bank must give micro loans to people in Jenrok to improve their homes, especially the purchasing of larger water catchments.

8 Discussion of Findings & Results

8.1 Discussion of Findings

Clearly people from Jenrok are experiencing hardship and declining living standards. Many in the community cannot meet their daily basic needs. The majority of Jenrok residents are migrants from the outer-islands who have no traditional land rights on the land they live on. Therefore they have no rights to cultivate the land or adjacent waters. Many often crowd into small, dilapidated homes, which are dangerously close to one another posing a serious fire hazard. About 2,000 people live in an area of not more than .021 square miles making it the most densely populated urban area in the entire Marshall Islands.

Most households do not have access to many of the basic services, despite that these services are widely available to Majuro residents. More than half of the households are without access to clean and potable water. Although most homes have some kind of household appliance(s), it does not however give you an indication that the household is well off, especially since many of the homes have disconnected power due to non-payment of utility bills. Solid waste continues to be a growing problem despite new trash bins being introduced several years ago. Many in Jenrok feel that the municipal government collects the garbage bins infrequently on average every two weeks. Many in Jenrok also feel it is the municipal government responsibility to take care of solid waste in Jenrok.

Unemployment is high and Jenrok appears to have the highest unemployment rate in the Marshall Islands, especially with men ages between 19 and 35. Most job seekers from Jenrok bring with them poor human skills effectively excluding their participation in a very contracted and competitive labor market exacerbated by the growing dependence on skill foreign workers.

The result of high unemployment is idleness, especially among young men. There are no recreational facilities in Jenrok, except for one pool hall and a make shift basketball court at the edge of the village serving thousands of youths. Depression appears to be common and alcohol abuse is clearly widespread.

Recent studies show that distressed neighborhoods have an effect and above that of individual or family socio-economic status. Jenrok displays all the characteristics of a deeply distressed neighborhood. The long-term affects on individual well-being in Jenrok are not known since there are no current efforts to track it by the Marshall Islands government.

There are very little documented cases of suicides in Jenrok, but anecdotal evidence suggests that suicide is high and not all suicide incidences are reported to the appropriate officials. Spousal abuse is not as clearly documented, but many in Jenrok have reported its prevalence in the community, especially those committed by the husbands. Also child abuse appears to be just as widespread in terms of physical pain, 36 and verbal abuse. It is difficult to document child abuse since many in the community interpret differently what constitutes child abuse.

Many women from Jenrok are facing hardships. Today, hundreds of women need to find work to support their families and in many cases work at very low wage jobs in the service and fisheries sectors. This has forced many mothers to leave their children unattended or child rearing left to a close family member to care for their children. For some unknown reason, men from Jenrok do not take part in the daily care of their children. Often this task falls onto the grandparents, especially grandmothers or other female members of the extended family.

There appears to be a lot of adoptions coming out of Jenrok Village. As a consequence many mothers are working and don't have time to care for newborns, opt to give up their newborns for adoption. Adoption is a normal and common cultural practice, but the influx of prospective American adoptive parents has changed the adoption culture and dynamics. Today, many Marshallese mothers see adoption as a way of reducing the economic burden of supporting a family especially one that is already too large.

Jenrok has the second highest number of hospital visits on Majuro and with half of those visits for baby deliveries followed by diabetes. Many of the households surveyed indicate a large number of old age women and men with diabetes. Those grandmothers or women with diabetic complications find themselves too weak to care for their children. It is not uncommon to find large hoards of kids roaming around the neighborhoods playing unsupervised with many playing in the open roads, especially on the ocean side.

Preliminary data obtained from the Ministry of Education shows a high number of school aged children not attending school. The large number of children and youth not attending school is very troubling both at the primary and secondary level. The education of children shapes their own personal development and life chances, as well as the economic and social prospects of the community. Completion rates for high school and college indicate the extent to which students have attained a basic education and are prepared for full participation in the workforce and contribute to advancing economic and social development of the community. By contrast, the indicator of youth not enrolled in school shows the extent to which youth are at risk of limiting their future prospects at a critical stage in their lives. The high unemployment rate in Jenrok is a reflection of this trend and limited skills therefore limits the future employment prospects of the community.

Although, the quality of education, especially at the primary level is the main indicator on how one does well later in high school, the degree of malnourishment may be a determining factor. Many children in Jenrok appear to be suffering from some form of nutrition deficiency.

8.2 Emergence of Poverty in the Marshall Islands and Jenrok

There are few opportunities available to the people of Jenrok, not only in terms of jobs, but also access to key essential services, that are directly linked to the declining living standards in Jenrok. The continuing deteriorating socio-economic conditions of the Marshall Islands is also leading to increased poverty among its population.

Contributing to this negative development are unresponsive government policies, a weak private sector, the lack of a production and export base (capable of earning foreign exchange). The high rate of unemployment (expected to increase made worse by a younger population entering the labor force in the coming years), the continued incidence of disease, (particularly lifestyle diseases of which the health system mostly focuses on curative rather than preventative services), and the low level of education output (has lead to an unskilled workforce) has resulted in a weak and stagnate economy.

In the past, traditional practices provided a safety net to the extended family. Today rather than providing a safety net, it has become a burden. In a recent ADB poverty report¹⁶, many families blame large extended families with only one or two wage earners providing most of their basic needs. This has caused serious tension among family members, especially in the urban centers, especially Jenrok.

8.3 Defining Poverty

Poverty has different meanings and definitions, especially poverty perceptions in the Pacific and in the Marshall Islands. Probably the best way to describe poverty in the Marshall Islands is the inadequate access to basic social services and job opportunities.

The rural outer-islands face a different kind of poverty and are much more acute in some areas. Although the cash economy has gained significant importance over the years, outer-islanders continue to rely on its land and marine resources to sustain their families. The subsistence sector remains the main economic component in the outer island communities. Often, outer-islanders lack adequate education and health services, but most acutely the lack a cost-effective transportation and trip frequency, which underpin social and economic development in their communities. As a consequence, this has encouraged many in the outer islands to migrate to the urban centers seeking better social services and jobs; this is the case in Jenrok.

In the urban centers, it is the lack of economic and employment opportunities. The low quality of life indicators are inadequate garbage collection, low access to clean water and sanitation, the lack of youth facilities, such as basketball courts and playgrounds for children (In Jenrok’s case, they don’t exist).

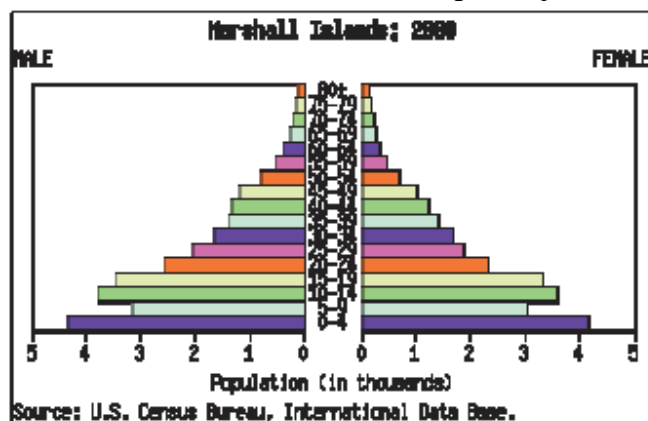
8.4 Rapid Population Growth

Undermining economic well-being is rapid population growth in the Marshall Islands. Although the fertility rates have dropped in recent years, it is still one of the highest in the world.

The population of the Marshall Islands is estimated at 50,840 based on the 1999 CPH, with a young population profile. The annual growth rate is estimated at 1.5%, with a fertility rate of 5.71.¹⁷ The median age is 17.8 years with about 55% of the population composed of 15 years and younger. The mortality rate has improved slightly from the 1988 CPH of 59.6 years for male and 62.6 years for females, to 1999 CPH of 65.7 and 69.4, respectively. Jenrok’s population profile is not much different.

Without the free access for Marshallese into the United States under the immigration provisions the Compact Treaty, population figures and urban densities would be far higher. The Household survey reveals that 190 people or 10% of Jenrok’s population left Jenrok for the United States within the last year.

About two thirds of the Marshall Islands population in 1973 lived in the two urban centers of Majuro and Ebeye. Today, more than two thirds live in the urban centers with a much higher population than in



1973. Majuro Atoll has a population of 23,676 people, followed by Kwajelien Atoll with 10,902. It is estimated that in 2003 population for Majuro to be at 27,379 and Ebeye to be at 12,607.

The remainder of the population is dispersed over a large area of ocean in the rural outer-islands. The geographic isolation of these atolls has posed a significant barrier for an efficient inter-island transport system, key if needed social and economic development is going to take. The issue of access is a key problem for all of the outerisland in all aspects: education, food and clothing, fuel, energy, potable water, sanitation, etc. Out of 29 inhabited atolls and islands, only 4 have a source of electricity and two have high schools.

8.5 Rapid Urbanization

Growth in the urban centers has led to serious overcrowding conditions where population densities are already one of the highest in the world such as the case in Jenrok. There are no space for home expansions and no recreational areas for youths

Exacerbating the problem is the continuing migration of outer-islanders to the crowded urban centers, where land is fast becoming scarce. Most acute are the D.U.D. areas of Majuro and Ebeye. It is estimated by some that by 2023, the year the second compact expires, that at least 85% of the Marshall Islands population will either live on Majuro or Ebeye.

It is not surprising that migration is increasing every year from the outer-islands. People from the outer-islands are searching for better jobs, better access to education and health services. This has compounded overcrowding in the urban centers coupled with rapid population growth. These trends are unlikely to change unless substantive incentives are promoted and improvement to basic services in the outer-islands is done. The future sustainability of outer-island communities will now be in question if this trend of migration continues at its present rate. The cost of providing these services to the outer islands will undoubtedly rise exponentially due to low populations in the outer-islands.

These trends have serious consequences for Jenrok where it no longer can accommodate more people.

Today basic social services are stretched to the limit. It is not uncommon to have over crowded classrooms, especially at the secondary level. Hospitals are inundated with people with lifestyle diseases and therefore scarce financial resources are diverted from preventative health care programs in the Ministry of Health.

As a consequence of rapid population growth and urbanization, these communities are now producing large amounts of solid waste that the national and local governments are having difficulty controlling.

These circumstances have led to a poor and inefficient health and education system. The overcrowding condition in the urban areas, especially in Jenrok, poses significant challenges to all strata of society in addressing and providing adequate and safe housing, efficient solid waste management, sufficient capacity of the education and health systems to handle continuing influxes of people from the outer-islands compounded by rapid population growths.

¹⁶ Participatory Poverty Assessment – ADB November 2002

¹⁷ Without this out migration to the US, annual growth is 3.71% per annum.

8.6 Majority of the people of Jenrok lacks the skills to compete in the Job Market

Almost 80% of the people surveyed in Jenrok lack a high school education. Currently, due to our poor education system the majority of the Marshallese bring poor human skills to the job market, especially those arriving from the outer-islands. This has forced individuals in this segment of the community to compete with one another for a small set of low skilled jobs. Those individuals who have chosen to compete in the high-skilled job market are artificially expanded. At the same time, most Marshallese are not empowered to compete in the high-skilled job market, while the supply in the high-skill is artificially contracted. As a consequence, given demand conditions, the wages for low-skilled jobs is artificially depressed and wages for highskilled jobs are artificially expanded.

Every year more than one thousand new job seekers will be added to the labor market making it a challenging task to create job opportunities.¹⁸ The pressure to create new jobs is particularly acute due to persistent increases in the population of working age. If new jobs are not created in the near future, the current unemployment rate will surely rise.

The lack of skilled Marshallese in the workforce is an indication that the education and vocational systems are not training enough Marshallese with the necessary skills to fill the jobs that are in high demand, especially semi to highly skilled jobs, which are acutely short in the private sector. Education in the Marshall Islands can be characterized as very poor and very inadequate. The main characteristics of the education environment are as follows:

- Not enough classrooms – ST Radio on Majuro is 35.1 to 40.1 both at the elementary and high school levels;
- Not enough qualified teachers. About 50% of elementary teachers have only High School Diploma. Less than 5% have an undergraduate degree and less than 1% have a master's degree;
- Lack of Materials & Supplies; and
- Lack of Community Involvement.

Of those who graduate from elementary school, only 39.8% went to high school.¹⁹ Of those accepted into High School, about 30.5% eventually dropped out. Of those who graduated, about less than 15% go onto tertiary education.

Factors influencing high school enrollment include space availability and the score on the high school entrance exam. The Marshall Islands High School entrance exam has a cut-off score of 43% in 2003. Between 1997 and 2001, the average test 18 EPPSO – 2002 Statistical Yearbook Jenrok Socio-Economic Survey 2004 41 scores were below 30%. Test score between 2001 and 2003 improved slightly raising the average to 36%.

The questions on the exams are of a style and simplicity and obtaining a score of 100% is obtainable. The fact is that the average scores for the country remains in the range of 30-40 percent. Many students average less than 40% correct answers over the whole test, reflecting poorly on the skill development in the elementary schools.²⁰

¹⁸ EPPSO – 2002 Statistical Year Book

¹⁹ EPPSO – 2002 Statistical Year Book

The Ministry of Education statistics shows a disturbing trend in test scores. While students from private schools, on average, do better than public schools, students from the two population centers are not strictly comparable due to family background. Those parents who can afford to enroll their children already indicate that they have different home experiences than many in the public schools. This suggests that your social-economic status corresponds to how well a student does on the high school entrance exam.

At the college level, specifically the College of the Marshall Islands, about 30% of those accepted. 30% were enrolled in developmental math and English in 2003. The year before, the ratio was the other way around at an astonishing 70%. This may be attributed to the following:

- Improved learning outcomes from the high schools;
- Improved assessment of academic skills prior to course selection and enrollment; and
- CMI recently also introduced much stricter selection criteria, thus reducing the number of students entering CMI.

For the most part, statistics on education are limited and incomplete thus not giving an accurate picture of the education situation. The current education statistical records do not lead to any conclusive outcomes that indicate which factors are more influential.

Overall, the Ministry of Education has taken steps to improve the standard of education, in particular at the elementary level. But the Ministry faces some difficult challenges ahead, compounded by the increasing number of children entering school and rapidly deteriorating school facilities. Although, the Ministry of Education is getting substantial increases in the second compact funding, they are receiving less from the General Fund or domestic revenues. The net affect is the same level of budget allocation as in previous years. It would be difficult for the Ministry of Education to improve the standards of education, especially at the elementary level, if the budget allocations are not increased in the coming years. The probable results would be that the education output would continue to be low.

There is an acute shortage of skilled labor. As mentioned before, the majority of the Marshallese labor pool brings very poor skills and many work in low skilled jobs. In most cases, those who have substantive skills work for the public sector, which in the end deprives the private sector of desperately needed skilled labor. As a consequence, many in the private sector have to depend on foreign labor. Anecdotal evidence suggests that there is strong demand for those with specialized skills, such as accountancy, electricians, plumbers, welders to name a few. The demand for these types of skills is acute for the construction sector, but something that is shared by all sectors. To compensate for the lack of specialized skills in the local labor market, the private sector has had to resort to hiring foreigners to fill this need.²¹ The increased dependence on foreign labor exacerbates the currently high unemployment conditions in the Marshall Islands. The result of poor education is high unemployment and therefore it is not surprising that the unemployment rate is high in the Marshall Islands.

²⁰ Ministry of Education 2003 – Annual Performance Report FY-2002-2003

8.7 Incomes and Health

The majority of the cash incomes in Jenrok are earned from low wage and low skilled jobs. Many in the community do not possess the skills necessary to enter the semi and high skilled workforce. The result is many have limited income-generating prospects.

As confirmed in the Household survey, the majority of the community is employed in the low skilled service and construction sectors. The survey indicated that the average wage in Jenrok is \$2.57 an hour, just above the national minimum wage. The household survey also shows that nearly 92% are employed in the private sector, while 75% are employed in the service sector. Of those employed in the service sector 64% are women. Even if the construction sector picks up in the future, many of the men in Jenrok would be engaged in menial work as laborers and earning between \$2.00 to \$3.00 dollars an hour. Therefore, household incomes in Jenrok would not increase dramatically.

At the same time, the prices for basic food items are increasing sharply relative to wages. The inflation rate in the RMI is twice that of the United States. Between 1994- 2001 inflation was 4.45%. It appears about two-thirds of income is spent on basic needs, which includes food items.

Due to low income in Jenrok, many increasingly rely on cheap imported foods based on refined rice, flour and foods that are high in fat, sugar and salt. The household survey asked what the top 5 food purchases in Table 3 are and not surprisingly rice was the most purchased food item in Jenrok. This is so unlike traditional Marshallese diets, which are high in complex carbohydrates from bananas, pandanus, breadfruit, and arrowroot found in the outer islands communities

The high incidences of non-communicable diseases appear to be linked to changes in diets and eating habits. These include diabetes, cardio-vascular disease, gout, cancer, slow infant growth and diseases due to inadequate vitamins and minerals in the diet. Data from the Bureau of Health Planning and Statistics show that diabetes and diabetes-related deaths are the number one cause of death from 1996-2000 with the age groups for those found at highest risk for diabetes getting younger.²² The Household Survey revealed that many in Jenrok have diabetes and the majority being women.

The rate of malnutrition among children in Jenrok appears to be high. The Household Survey did not address child nutrition. But anecdotal suggests children from Jenrok suffer from some form of nutrition deficiency. A national nutrition survey in 2000 found that two-thirds of school age children suffered from malnutrition. Around 17% of children under age five were regarded as underweight. Malnutrition is reportedly a major cause of illness and death among children as reported by the Ministry of Health.

The nature of malnutrition is mainly associated with the heavy incidence of cheap imported junk food. This is particularly an issue among disadvantaged and lower income urban families like Jenrok community who have reduced capacity to produce their own food. In fact, while many children do get enough to eat, others are fed junk food. The result is that there are simultaneously health issues of both under and overnutrition.²³

²¹ Philippine workers now account nearly 12% (estimate) in the total workforce

²² Ministry of Health Annual Report FY 2002

²³ ADB 2002 – Discussion Paper, Assessment of Hardship and Poverty

It is widely accepted that children that are malnourished lead to stunted growth, and in turn could lead to learning disabilities. In many large extended families, children do not receive the individual care they need, and some teenage and young mothers do not know how to raise children properly.²⁴ This may explain why there are such a large number of school age children with very low tests scores from Jenrok.

8.8 Future Economic Outlook

The Marshall Islands lies on the fringe of the largest and fastest growing economies in the world, the United States and Asia and strategically located in the center of the Pacific yet the Marshall Island continues to struggle to provide cost effective and efficient services to its people.

Compounding this is limited natural resources that could be exploited on a sustainable basis. Distance and isolation from key markets limits the Marshall Islands ability to develop a vibrant and self-reliant economy. Although, the Marshall Islands do have a potentially rich marine base, it is nevertheless acutely short on skilled labor and a weak domestic private sector affecting its ability to be a leading force in the economy.

The economy is highly distinctive, in which US Compact and foreign aid continue to influence economic and social development in the Marshall Islands. The first distinctive feature of the economy is the large size of the public sector which accounts for 29% of GDP. Second is the large size of construction and service sectors of which is 50.3% of GDP. Third is the lack of a production and export base, agriculture, fisheries, and small-scale manufacturing, which accounts for less than 14% of GDP.

The relative large size of the public, construction, and service sectors and the insignificance of tradable activities are not by accident. The level of tradable output is a consequence of non-trade/public sector boom with the income effects of a large volume of external and donor funds, especially from the Compact.

In its present economic environment, the Marshall Islands will be subject to world trade shocks and continued dependency on foreign aid, especially US Compact/Aid. The structure of the economy will probably remain the same. Unless the Marshall Islands is able to increase its production base and earn substantial foreign exchange, the Marshall Islands will not develop into a diversified and self-sustaining economy, therefore affecting future income prospects in Jenrok.

8.9 Governance in Jenrok

Marshallese are a homogenous society and is of matrilineal descent where land rights, clans (*jowi*), and lineage (*bwij*) are passed on by the mother. Most families form a close-knit community; and occupy a series of land (*weto*), which is shared by the entire clan. The society is structured into a two-class system of people: the royalty (*iroij*) and the commoner (*kajur*), which is subdivided into landlords (*alap*) and workers (*dri-jerbal*). The land is the foundation of Marshallese identity and society. In pre-Japanese mandate, ownership rights to the land were held exclusively by the *iroij* (high chief)²⁵.

²⁴ ADB 2002- Priorities of the People, Hardship in the Marshall Islands

²⁵ Under Section 10 of the Constitution, the Iroij no longer has absolute authority over land and cannot arbitrarily expel any family from the land. Use of land now requires the consent of the Iroij, Alap and Dri-Jerbal.

In 1979, the Marshall Islands declared independence from the United States and are a democracy based on a mixture of the Westminster and US political models. The constitution provides for a parliamentary system with independent legislative, executive and judiciary branches. Legislative power is vested in the 33-member Nitijela (Senate). In addition, the Council of Iroij or traditional legislature acts as a consultative body, which may request reconsideration of any bill from the Senate affecting customary law or any traditional practices or land tenure, but has no veto powers over legislation.

Each atoll and island is formed into 24 separate municipalities with powers to set their own laws that are not contrary to the national constitution. The municipalities Jenrok Socio-Economic Survey 2004 45 have different local constitutions to varying degrees, but all have an elected mayor with a legislative council that includes the traditional chiefs representing a district.

Although, constitutionally a democracy, the traditional system remains strong. Traditional High Chiefs and to a lesser extent the Alaps continue to wield considerable influence within Marshallese society, particularly those affecting land tenure matters. In reality, a parallel system of governance is widely practiced, particularly at the local level.

The governance of Jenrok lies mainly with the traditional landowners. They have greater influence on how the community is governed than the MALGOV and Government of Marshall Islands (GRMI). Although there is an elected councilman for Jenrok, his influence is checked by the landowners, especially the Chief. Without the support of the landowners, it is very unlikely for the councilman to get elected. Although, the Mayor and Senators of Majuro have greater influence than the councilman, often they have to seek support from the traditional landowners in order to push any measure forward.

The constitution gives a broad range of powers to the government, but rarely are those powers exercised, such as declaring imminent domain for the benefit of the public.

8.10 Implications of the Proposed Dumpsite in Jenrok

Jenrok was identified as the next possible long-term dumpsite for Majuro Atoll. Currently there are several proposals pending, but the Cabinet and the Mayor of Majuro have yet to endorse any of them.

Although, there is a strong desire by the public to solve the solid waste problem in Majuro, it is very difficult for anyone to agree on how to go about solving the problem. The management of solid waste on Majuro has had a long history of problems. In the past Ministry of Public Works, RMIEPA and MALGOV often feuded over control and blamed each other when things went wrong. The lack of cooperation between the government agencies has led to a poorly managed solid waste program.

There have been attempts in the past to coordinate efforts between the key stakeholders in solving the solid waste issue. The Solid Waste Group comprised of the different government agencies and including the private sector was established for this purpose. The group has since fizzled mainly due to differences and lack of support from the government.

Also there were attempts to put the management of solid waste into a single state owned enterprise (SOE) with a board of directors comprised of the Ministry of Public Works, MALGOV, EPA and representatives from the private sector. The proposal was strongly supported by the Majuro Chamber of Commerce. A bill was later introduced in Parliament to create the Marshall Islands Solid Waste Authority, but the bill faced opposition and was put on hold indefinitely.

The government has asked its donors, namely Japan and the ADB to help develop a solid waste plan and to provide funding for new capital equipment. All of the donors have responded to the RMI's request, but all appear to be on different tracks and are at risk of duplicating their efforts.

Japan has stated it would be willing to fund the construction of the new dumpsite along with all the necessary equipment, but it is only tentative at the moment. The Ministry of Public Works has submitted a solid waste proposal to the ADB, which is currently under review. If the ADB approves the proposal, it would take several years to get the project started. In the end it will take at least several years for the donors and the government to mobilize a plan of action to get the new dumpsite going. Therefore, there are no immediate implications to the IWP pilot project in Jenrok at least in the short-term.

8.11 Implications of Water Quality in Jenrok

There is an urgent need to improve water access and water quality in Jenrok. The high incidence of diarrhoea, typhoid and amebic dysentery in Jenrok is an indication that people do not have access to clean and drinkable water. Fortunately, there have been no reported cases of cholera. However, Jenrok is at risk especially since the frequent occurrence of droughts in the RMI and the poor access to clean water. The situation in Jenrok could be worsened if there is an extended El Nino.

The survey revealed that about half of the homes are hooked up to city water. There are 215 households in Jenrok and 211 of them are subscribers to city water, meaning 98% of homes have access. But out of the 211 subscribers 102 homes were disconnected because of non-payment of their bills. The other 109 subscribers more than two thirds are 90 days behind in their water bill payment and are currently under threat of being disconnected. If disconnected, the majority of the homes in Jenrok would be without access to city water.

Water access is widely available to people in Majuro and the lack of access to water is not a matter of lack of water infrastructure in Jenrok. But the fact that the majority of people in Jenrok cannot pay their water bill is a clear indication that people are facing severe economic hardships.

Because of the lack of access to city water, many in Jenrok rely on rainwater for drinking. About 59% of the homes have some form of water storage tank even the 55- gallon fuel drums. But during the severe drought months, people have been known to use well water for drinking. If well water is being used for drinking, there is a sure chance that people will get sick because there is clear evidence that the well water in Jenrok is highly contaminated.

The wells tested by EPA revealed high levels of nitrates suggesting decomposing matter is present in the water lenses. None of the wells met WHO standards for safe water drinking. Even the test of the coastal shores of Jenrok both on the ocean and lagoon sides revealed the highest level of ecoli counts on all of Majuro. About 75% of the households have toilets and 67% of them are connected to a septic system, which seeps into the ground table. The survey revealed that only

5 households are hooked up to the city sewer system. This could explain why there is a high level of decomposing matter in the water lenses.

Increasing access to clean drinking water will improve the health of people in Jenrok. To do that, it requires all homes to be hooked up to city water. Risk of water diseases increases during extended droughts and the best prevention is to have adequate water storage tanks for every home in Jenrok. This is clearly beyond the financial means of many of the people in Jenrok, especially given their poor socio-economic status. Therefore, there is an urgent need for government intervention in preventing possible health crises in Jenrok.

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Appendix 1

Sample household survey

Statement of Confidentiality

This survey is being conducted to establish a baseline database for Jenrok Village. The findings of this survey is to determine the socio-economic status of the community of Jenrok and could be used as a future template for future surveys, which then could be used to measure changes of the status of the community.

This questionnaire has been prepared under the supervision of Economic Policy, Planning and Statistics Office (EPPSO) in conformity with the **Statistics Act 1986**, which protects the **CONFIDENTIALITY** of its contents. No individual or household will be identified in this report.

Date of Interview: _____ Age of person interviewed: _____ Sex: MALE/FEMALE
 Weto: TUR/JENROK/TETELABUK/LOMAKA/TEITE Survey # _____

DEMOGRAPHICS

1. Household Composition

Sex	Relationship	Age	Majuro	Outer- Is
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			
Male/Female	Papa/Mama/Niju/Jima/Bubu/Nuku			

TOTAL _____

2. Has anyone in your household moved to the United States in the last year? YES/NO

3. If YES, how many left? _____

EMPLOYMENT

4. Does anyone work in your family?

	Age	Occupation	Place of Work	Level of Ed.	Average Hourly
Male/Female					
Male/Female					
Male/Female					
Male/Female					
Male/Female					

5. Is anyone in your family engage in self-employment activities? YES/NO

If yes, what type of activity? _____

6. What are the most common household tasks you do during the day or evening?

Cooking	Washing Cloths	Washing Dishes
---------	----------------	----------------

Yard Work	House Cleaning	Other Specify
-----------	----------------	---------------

HOUSEHOLD CHARACTERISTICS & AMENITIES

7. Household Description

Type of House	No. of Rooms	Metered Power	Metered Water	Toilet	Bath	H2O Tank (Size?)
Concrete/Wood		YES/NO	YES/NO	YES/NO	YES/NO	

8. If YES for toilet. Is your toilet hooked up to a septic tank? YES/NO/DON'T KNOW

9. Where do you get drinking and washing water from?

Rank 1-5	Drinking	Washing
Neighbor's Tank		
Community Well		
City Water – Meter		
City Water – Neighbor		
Other Specify		

10. Where do most of you sleep?

	Bedroom	Living Room	Outside	Other
How Many				

11. Do you regularly use the following?

Kerosene Stoves	YES/NO
Kerosene Lamps	YES/NO
Cook in open fires	YES/NO
Solar Panels for Lighting	YES/NO
Other Specify	

12. Do you have the following appliance(s) in your household?

Lights	Refrigerator	Freezer	Wash Machine	Sewing Machine
TV	Video	Water-pump	Electric Fan	Air conditioner
Radio AM	Stereo	CB Radio		

HOUSEHOLD FOOD PURCHASES

13. Where do you purchase your foodstuffs? Rank them 1-5 or N/A

Family Fishing	
Family Garden	
Fish Market	
Supermarket	
Jenrok Stores	

14. Please list the top 5 foodstuff purchased in the last week.

HOUSEHOLD FINANCES

15. Do you or anyone in your household have a loan (s)? YES/NO

16. What is your average monthly payment? \$ _____

17. What was the purpose of the loan?

Build House
House Improvements
Purchase Household Appliances
Pay for KEMEMS
Pay for Funerals
Purchase Food and other basic necessities
Pay for Education
Pay for Health
Other Specify

18. Do you have a credit account with any of the stores? YES/NO

19. How do you pay your debts?

By cash at the end of Pay Period	
By allotment	
Other Specify	

HEALTH & VIOLENCE

20. Does anyone in your family have diabetes and how many? YES/NO

#Male: _____ #Female: _____

21. Does anyone from your household suffer from frequent diarrhea and how many?

22. Has anyone from your household contracted typhoid and how many? _____

23. Has anyone from your household contracted amebic dysentery and how many? _____

24. Has anyone in your family or anyone in Jenrok experienced violence? YES/NO

Type of Violence	Family Members	Others - Jenrok
Assault & Battery		
Sexual Assault		
Spousal Assault		
Child Abuse		

25. Do you know of anyone in your Jenrok who have attempted or committed suicide in the last year?

	Number of Incidences	Alcohol Related
Attempted Suicide		YES/NO
Completed Suicide		YES/NO

26. Do you think alcohol abuse is a problem in the Jenrok Community? YES/NO

27. Is alcohol easily accessible to people, especially to youths? YES/NO

28. Does anyone in your household practice family planning and how many? YES/NO

ADOPTIONS

29. Has anyone in your household given up their child for adoption to foreign parents, in particular American adoptive parents? YES/NO

30. How was the adoption initiated?

Approached by prospective adoptive parents
Approached by an attorney representing the adoptive parents
Approached by an agent for the adoptive parents
Approached by the new government adoption agency
Approached by a close relative
Family initiated the adoption
Other Specify

31. Was the mother at the time of adoption married or had a steady boyfriend? YES/NO

32. How old was the mother at the time of adoption? Age ____

33. Did the family or husband encourage the adoption? YES/NO

34. If yes, what were the reasons for giving up the child for adoption?

Economic	
Better Education for Child	
Unable to care for the child	
Other Specify	

35. Does the birth mother have regular contact with the child? YES/NO

EDUCATION

36. How many from your household are of school age?

	Attending	Not-Attending	
Elementary (Ages 5-12)			PRIVATE/PUBLIC
Middle School (Ages 12-15)			PRIVATE/PUBLIC
High School (Ages 15-19)			PRIVATE/PUBLIC
College (Ages 19-above)			PRIVATE/PUBLIC

37. If child or youth not attending school, what are the reasons for not attending?

Lack of classroom space	
Late Registration	
Unable to pay for education (fees, books, supplies, cloths)	
Illness	
Disability	
Expelled from school	
Other Specify	

38. How many from your household have completed the following?

Elementary	
High School	
Vocational Institute	
College	
Other Specify	

SOLID WASTE ISSUES

39. How do you dispose of your household waste?

Put in Pit	Burn Garbage	MALGOV Trash Bin
Throw it in the Ocean	Take to dump	Composting

40. Do you recycle your cans? YES/NO

41. If YES, do you weigh them for cash? YES/NO

42. Are there enough garbage bins in your area? YES/NO

43. Are the garbage bins close to your house? YES/NO

44. How many times does MALGOV pick up the bins?

Once a day	Twice a week	Three times a week
Once every two weeks	Once a month	Don't know

45. Who do you think is responsible for solid waste in Jenrok?

GRMI	MALGOV	EPA	Iroj
Alap	Individuals	Businesses	Other Specify

LAND TENURE

46. Do you have land rights on the weto where your house is situated? YES/NO

47. If no, do you have a lease? YES/NO

48. If YES, how much do you pay a year? \$_____

49. Do you have difficulties obtaining permission from landowners to do extensions to your house or hookup to public utilities? YES/NO

SOCIAL AND TRADITIONAL

50. Which of the following have the greatest impact of your family's financial situation?

	Rank 1-5
Traditional Obligations	
Church Obligations	
KEMEMS	
Family Funerals	
Other Specify	

51. If a death occurs in your family, do you

Bury in a wooden coffin
Bury in a steal coffin
Bury using traditional mats & cloths
Cremate
Other Specify

52. Do you find it difficult to find a place for burial? YES/NO

53. What do you think is the biggest problem in Jenrok? _____

54. How would you improve the problem? _____

Appendix 2

SAMPLE LABORFORCE SURVEY

STATEMENT OF CONFIDENTIALITY

This survey is being conducted to establish a baseline database for Jenrok Village. The findings of this survey is to determine the socio-economic status of the community of Jenrok and could be used as a future template for future surveys, which then could be used to measure changes of the status of the community.

This questionnaire has been prepared under the supervision of Economic Policy, Planning and Statistics Office (EPPSO) in conformity with the **Statistics Act 1986**, which protects the **CONFIDENTIALITY** of its contents. No individual will be identified in this report.

Date of Survey _____ Company Surveyed _____

1. How many employees does your firm employ? _____
2. How many of those employees are from Jenrok Village? _____
3. How many of these employees are from Jenrok are women? _____
4. What is the average hourly wage earned? _____
5. What is the age range of your employees?
6. How many job applications or job seekers did you get last month? _____
7. Do you have a high turnover of workers? YES/NO
8. If YES, what are the main causes?

Always late
Always Sick
Drunk/Hung over
Unable to perform required work
Stealing
Quit job
Other
9. What is your assessment of the economy?

Economy is booming
Economy is stagnate and will continue to deteriorate
Economy is stagnate, but set to improve next year
Not sure of the future economic prospects
Other
10. If the economy improves, do you plan to hire more workers? YES/NO

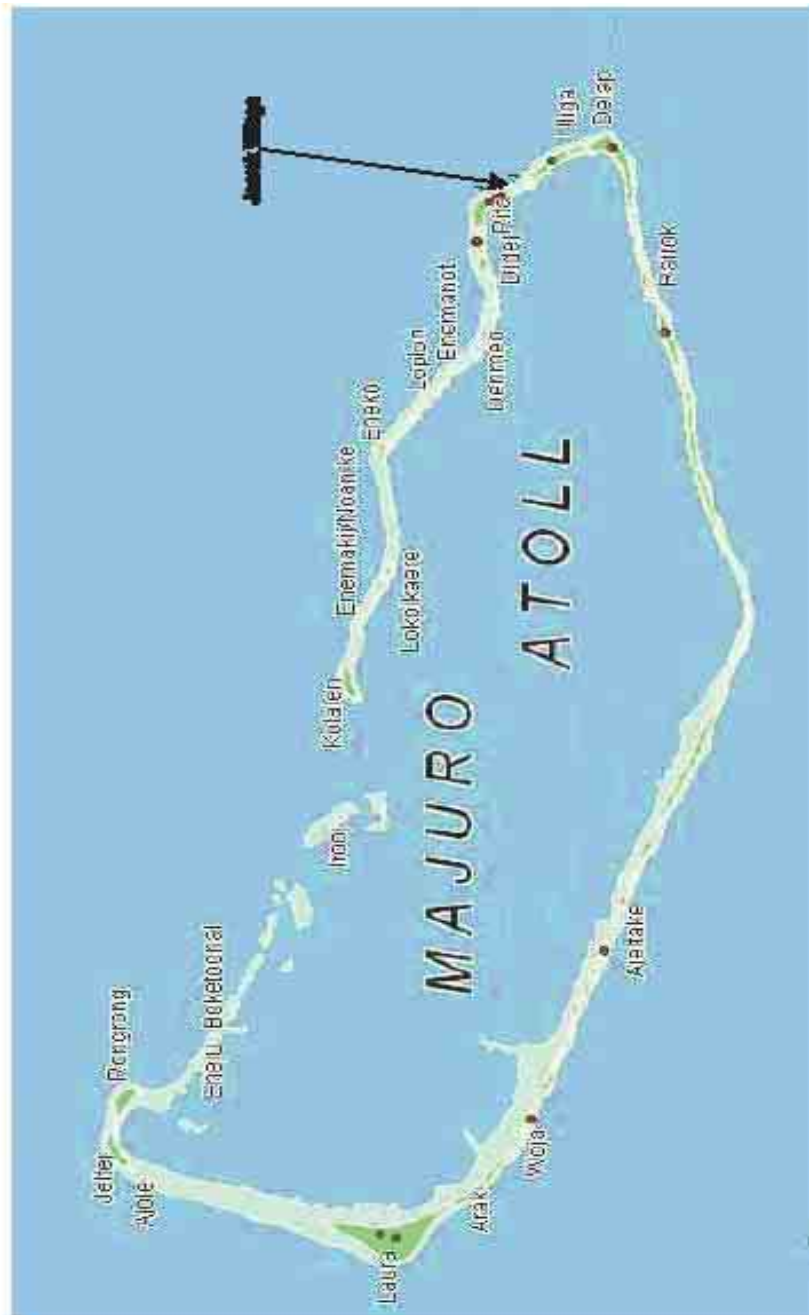
Appendix 3

Map of the Marshall Islands (courtesy of ADB)



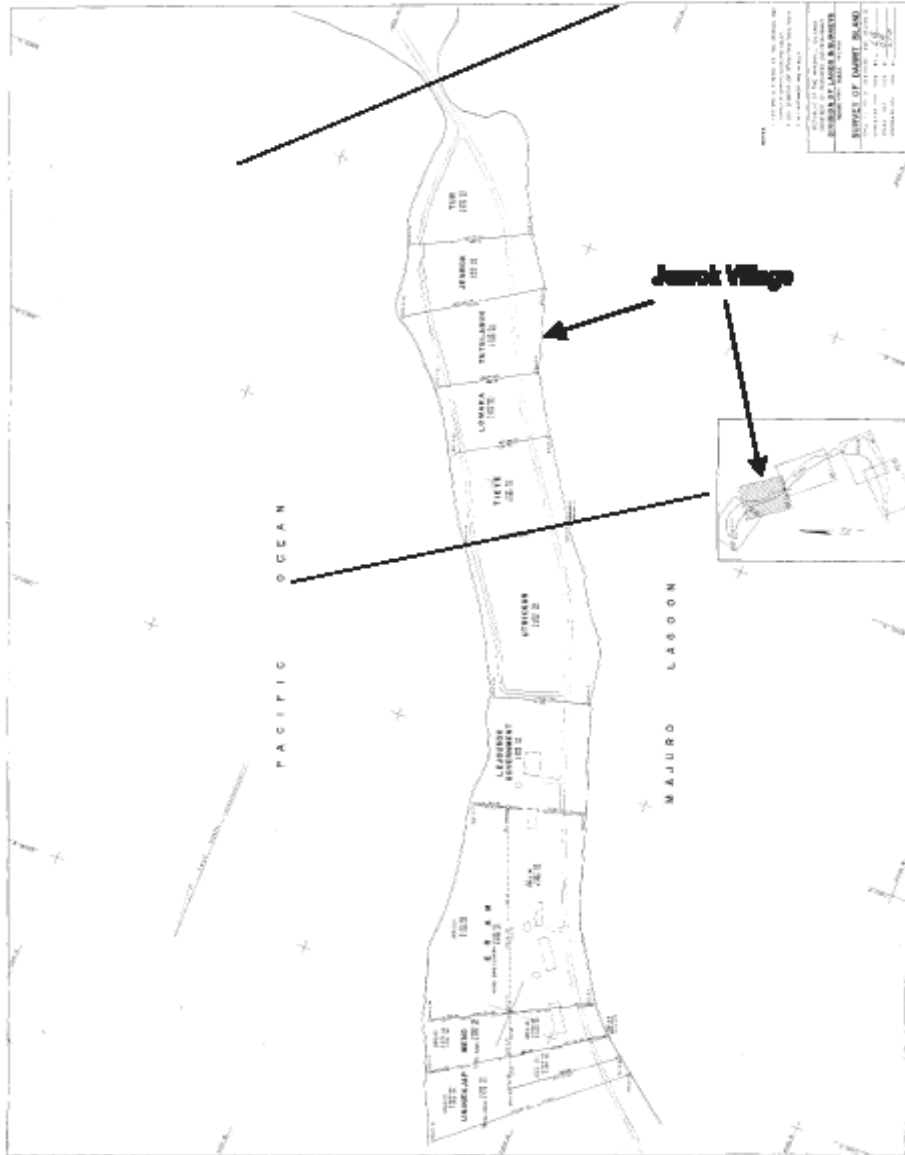
Appendix 4

Map of Majuro Atoll (courtesy of EPPSO)



Appendix 5

Jenrok Survey (courtesy of Ministry of Internal Affairs)



Appendix 6

Jenrok 1973 Photo (Courtesy of MIVA)



Appendix 7

Jenrok 2002 Photo (Courtesy of MIVA)



Appendix 8

Jenrok Sattelite 2004 Photo (Courtesy of MEC)



Republic of the Marshall Islands
Household Rapid Vulnerability Assessment
Majuro Atoll -Preliminary Report



June 18, 2020



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Forward

Iakwe kom aolep,

On behalf of the Office of the Chief Secretary and the National Disaster Committee (NDC) I am pleased to present to you the RMI Majuro Rapid Vulnerability Assessment (RVA) Preliminary Report June 2020. The RVA was implemented and written as a baseline for understanding the vulnerabilities of households to the COVID-19 pandemic in the Republic of the Marshall Islands.

The RVA provides an evidence base for progress regarding the RMI preparedness and response to COVID-19 and will be utilized by the National Emergency Operations Centre's Cluster to target interventions and for NDC to make sound decisions.

This RVA Preliminary Report is one of a series of RVA reports that will be published by the NDC. Its contents are meant to provide an overall picture of the challenges faced by households in our communities and to provide a snapshot of the current situation for partners. Additional analysis on data will continue to be done as required per Cluster as required.

Together we have the capability to prepare our communities and reduce the risk of COVID-19 spread in the RMI.

Sincerely,



Kino Kabua

Chief Secretary

Acknowledgements

The rapid assessment was designed and implemented under the leadership of the National Emergency Operations Center (NEOC), in partnership with the Water Sanitation and Hygiene (WASH) Cluster and the Gender & Protection Cluster. Funding for the implementation came from the International Organization for Migration (IOM) through a USAID project.

The rapid assessment would not have been possible without the technical assistance members of the NEOC and clusters including the Environmental Protection Authority (EPA), Majuro Water and Sewer Company (MWSC), Economic Policy Planning and Statistics Office (EPPSO), Ministry of Culture and Internal Affairs (MOCIA) and IOM. The rapid assessment team was led by IOM staff Ann Chong Gum and Luminda Jack, IOM Enumerator Team Leaders Ramos Momotaro, Tyler Uwaine, and Harry Herming, and enumerators Tamozu Abo, Eugene Doctor, Embi Rubon, Ricky Isaac, GL Luther, Kiyoko Address, Marliza John, Marlin Alik, Mita Bone, Helina Phillip, Don Hansen, Labaru Saimon, and Aisek JR. Aisek.

Report editors include IOM Head of Sub Office Angela Saunders and Karina de Brum of MOCIA.

Acronyms

EPA	Environmental Protection Authority
EPPSO	Economic Policy and Planning Statistics Office
IOM	International Organization for Migration
NEOC	National Emergency Operations Center
MOCIA	Ministry of Culture and Internal Affairs
MWSC	Majuro Water and Sewer Company
WASH	Water, Sanitation, and Hygiene (Cluster)

Part 1: Methodology

Objective: to conduct a rapid assessment of all households in Majuro on COVID-19 vulnerability utilizing a GPS enabled online assessment tool. The assessment looked at the thematic areas of water, sanitation, and hygiene (WASH), economic impact, protection, communications, transportation, and food security. The assessment results provide a snapshot of the vulnerability at a household level. A more detailed assessment utilizing the GPS coordinates of the identified “most vulnerable” households will follow to further priority interventions by sector as required.

Partners: the rapid assessment is being implemented by the NEOC through partnership of WASH cluster and Gender & Protection Cluster, as well as technical assistance from EPPSO.

Enumerators: in support of the NEOC, IOM hired 16 enumerators on hourly contracts and with 2 IOM staff supporting. The enumerators were organized in 5 teams of 3 or 4 with a team leader. The enumerators participated in 2 days of training and were sworn in by Community Judge Leban.

Assessment tool: the assessment tool is an app, Trimble, for smart phones or tablets. The assessment tool required internet and GPS access. IOM provided each assessment team with a wifi box for internet access. The assessment included consent of participants, details of which were coordinated with EPPSO’s best practices. The assessment questions are provided in **Annex 1**.

Transportation: IOM hired 5 local taxi’s to ensure quick and efficient transportation to sites across Majuro on a daily basis. Lunch for enumerators was provided by the NDMO.

Analysis: The WASH Cluster, EPPSO, and Gender & Protection Cluster have analysed the results and presented to the NEOC.

Communication/announcement: IOM and NEOC provided community announcements to ensure that community members are aware of the rapid assessment and prepared to participate.

Methodology

The methodology of implementation is that assessment teams followed the zones of Majuro provided by EPPSO, with each team taking a zone starting from Rita travel to Laura. The teams worked house to house either as individuals or in pairs to conduct the assessment which took 15-20 minutes per household. The teams provided a background on the purpose of the assessment, if consent was given they would proceed with the interview. After completion of the assessment the teams used tape to mark the door with the team number to signify the household as having completed the assessment. The teams also provided the home with a handout “Preparing the Your Home for COVID-19” and a contact sheet of where to get information on COVID-19 in the Marshall Islands.

Limitations

Key challenges for the implementation of the survey include dogs that prevented entry onto the land, no one at human during working hours and bad weather. To address the problems the teams returned to areas where homes were missed during weekends to gather information. At the time of writing this preliminary report not all homes in Majuro had been assessed. A small team will continue to schedule meetings with the households that were missed and a supplemental report will be written.

Definitions

Running water: is when you have a tap (including from a kitchen sink, from tank) that you can wash your hands with – i.e. the water has to run out of the faucet, not being sitting or stagnant. This means, if a household only has barrels or are using buckets and cups to wash their hands this does not count as a tap in the kitchen or from a tap on a tank.

Dependent: a person who cannot take care of themselves and is dependent on another for care – for example a baby who needs to be fed or an elderly person who cannot get to the shower on their own, or family members who are not employed and dependent on another family member for care.

Household: a household refers to a group of people, and not to physical structure they live in. Generally speaking, for survey purposes, a household is a group of people who pool their money together and cook and eat together. Often a household is very similar to a family, but the people comprising a household don't have to be related.

Dwelling: means any building or structure, whether permanent or temporary, which is wholly or partly used for human habitation; so a dwelling usually refers to the physical structure in which a person/s resides. This type of structure may vary considerably, and includes:

- Single structure units; or
- Block of apartment units; or
- Small dwelling unit attached to a shop.

Employment: retirees do not classify as employed

Most Vulnerable Households: the most vulnerable households are those that fit a 5 or more of the below criteria.

- a) 10 or more people in a household members
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent
- e) 2 or less means of communication
- f) 5 or less days of food available
- g) No access to vehicle in lockdown

Part 3: Results

This part of the report will provide analysis in two sections. Section 1 – Key Demographics contains basic answers per question in total and by Zone. Section 2 – Vulnerability Analysis contains cross tabulated information to identify most vulnerable homes. A total of 2774 households were included, with 68 households declining to participate and 2706 participating.

The results were analysed both as totals, and per sections atoll. Majuro Atoll was divided into 4 “zones” for this survey. 1) Rita to Uligia 2) Small Island to Bridge 3) Bridge to Rairok 4) Ajeltake to RongRong (including Jelster)

Section 1 – Key demographics

Section 1.1 Household size and dependents

The average household size in Majuro is 7.05 as shown in Table 1 below. The number of dependents is defined as those in the home that are not working and would not be able to support themselves if the person(s) employed were not there. The total number of households with 5 or more dependents is 1,001 or 38% of all homes surveyed.

	Rita to Uliga	Small Island to Bridge	Bridge to Rairok	Ajeltake to Rongrong	Overall Average
Average Household size	7.161	7.799	7.005	6.256	7.05525

Table 1 Household size

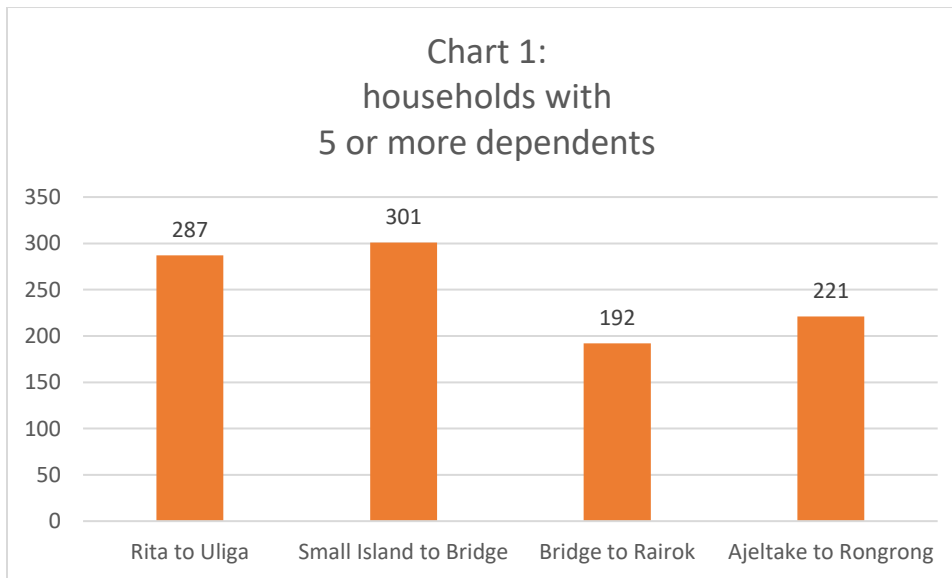


Chart 1 Number of households with 5 or more dependents

The total number of households with 5 or more dependents is 1,001.

Section 1.2 WASH

Below are the WASH results for the total number of households that have no access to running water and no access to a toilet. The enumerators explained the definition of running water to households to ensure that households understood “running water” was *not* equivalent to access to city water.

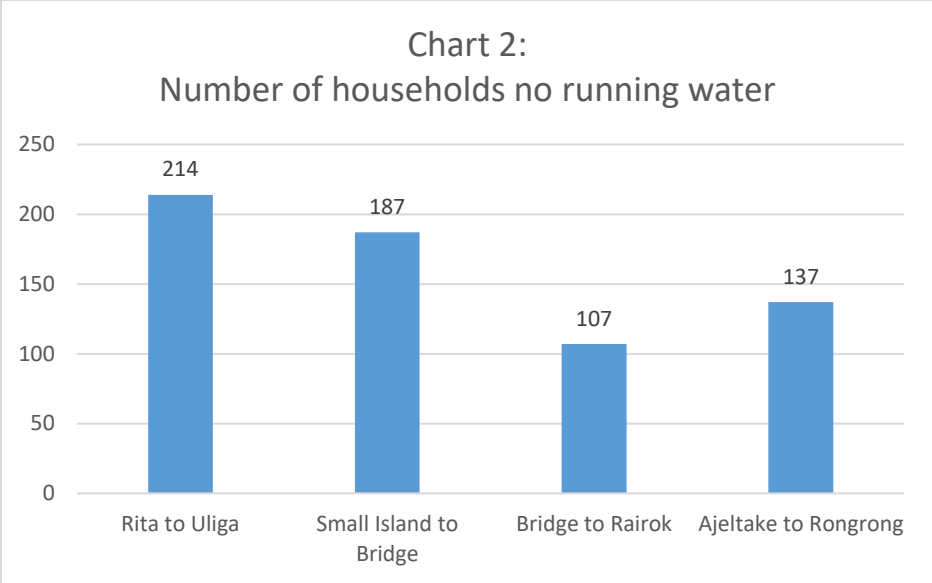


Chart 2 Number of households with no running water

The total number of households with no access to running water is 647.

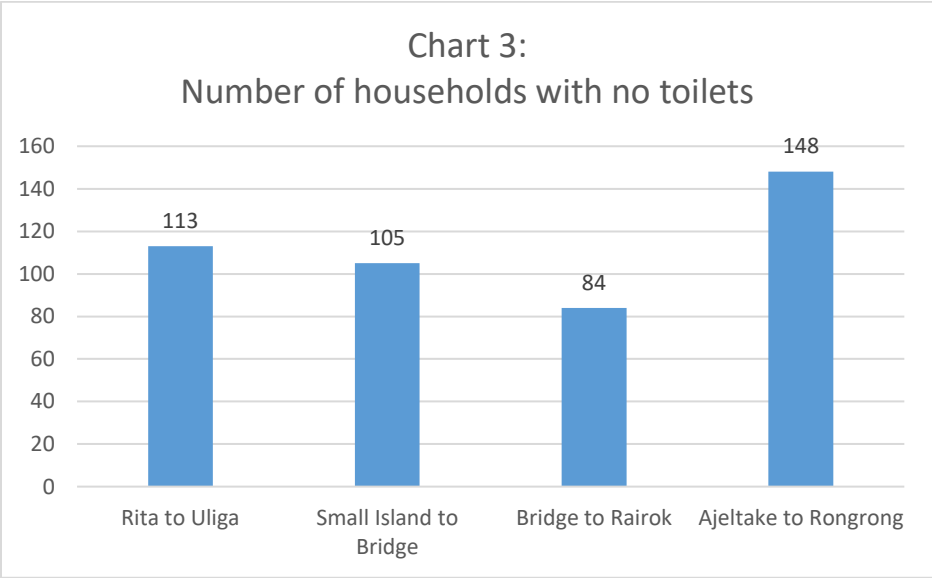


Chart 3 Number of households with no toilets

The total number of households with no access to a toilet is 450.

Section 1.3 Employment

While some homes had no one employed, others had 5 or more. The average employment rate by household is 1.61.

The below results articulate the total number of households that have someone who has either lost their job due to COVID-19, had a family member seen the reduction of hours due to COVID-19 or has a family member caught off the island and is no longer able to work. The total number of households impacted by COVID-19 is 147.

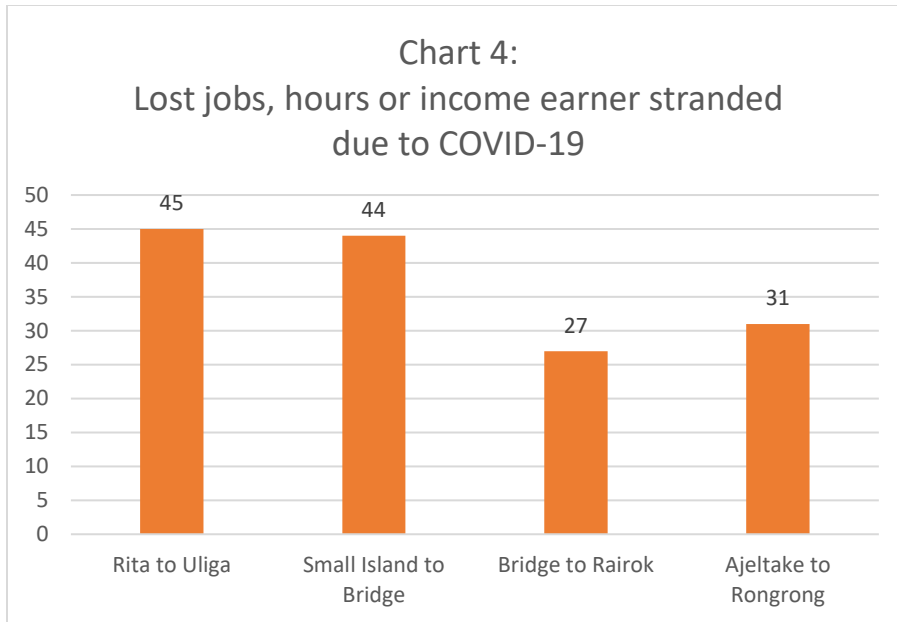


Chart 4 Households experiencing lost jobs, hours or income earner stranded due to COVID-19

The total number of households that indicated negative financial impacted due to COVID-19 is 147.

Section 1.4 Communications

There were 5 questions asked on the available types of communications at a household level: AM/FM radio, cell phones, landline phone, landline internet, and 4G (sim card). Of the 2607 households that completed the assessment, there were varying degrees of access to communication types. The most used communications means is a cell phone and the least accessed is landline phones. AM/FM radios, especially the state-owned station V7AB is one of the main means of communications for emergency messaging (in addition to mass text), but only 43% of homes have a working radio AM/FM radio.

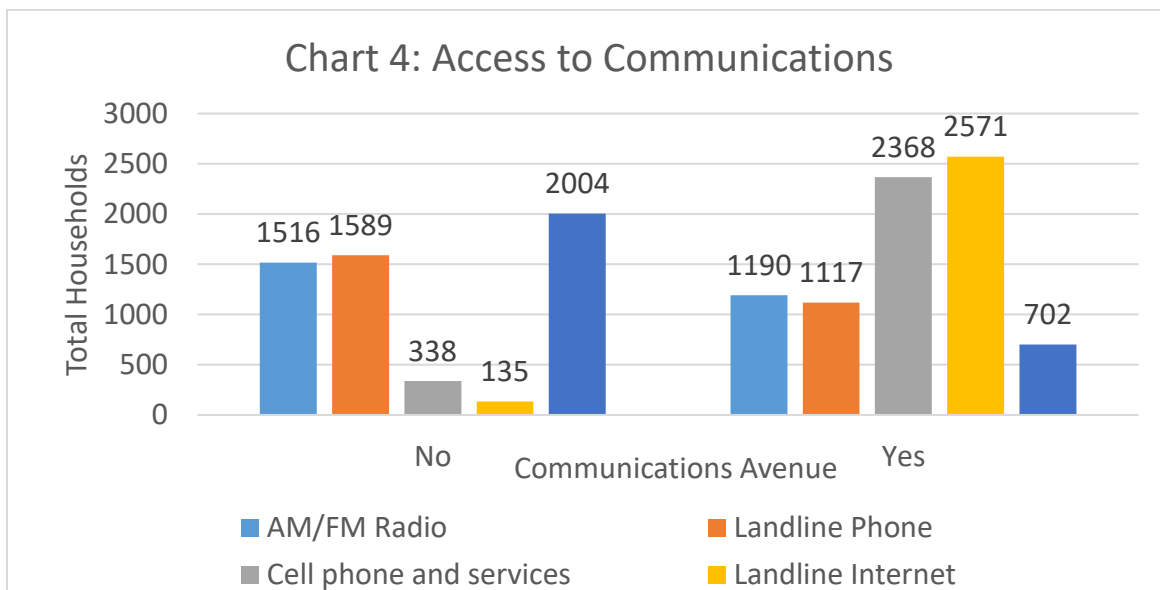


Chart 4 Access to Communications

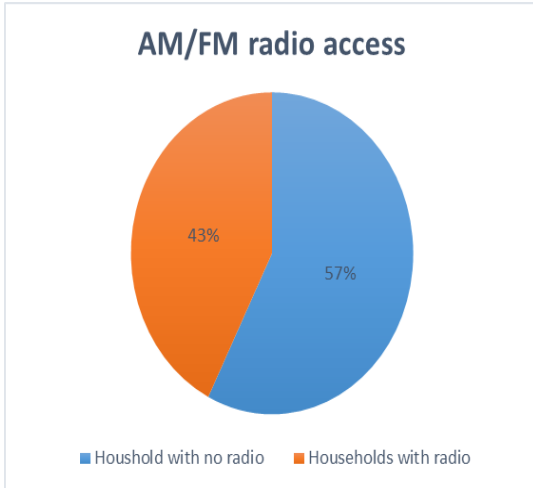


Figure 1 Access to AM/FM Radio

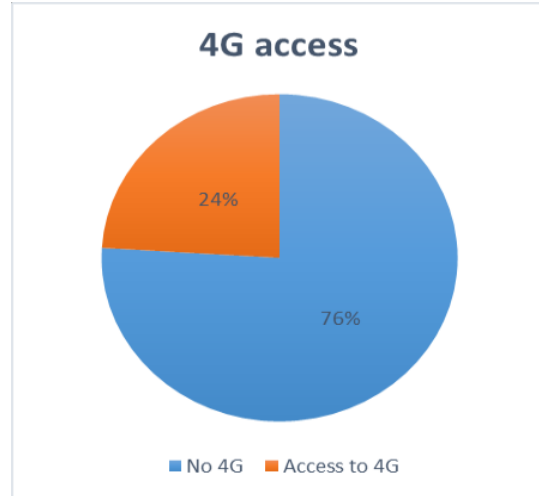


Figure 2 Access to 4G

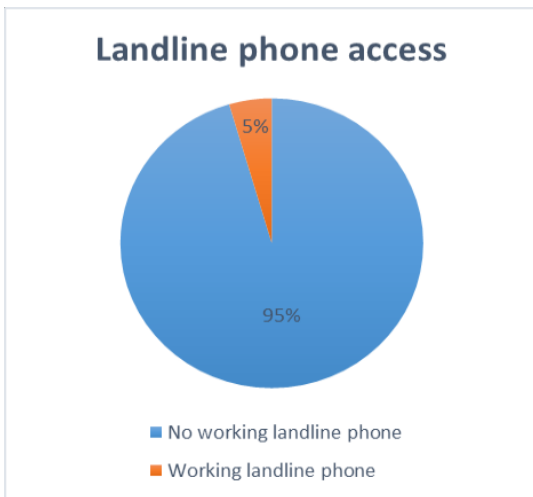


Figure 3 Access to landline phone

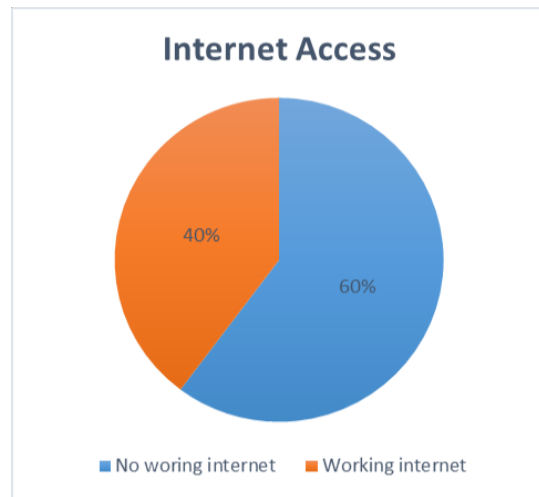


Figure 4 Access to Internet (landline)

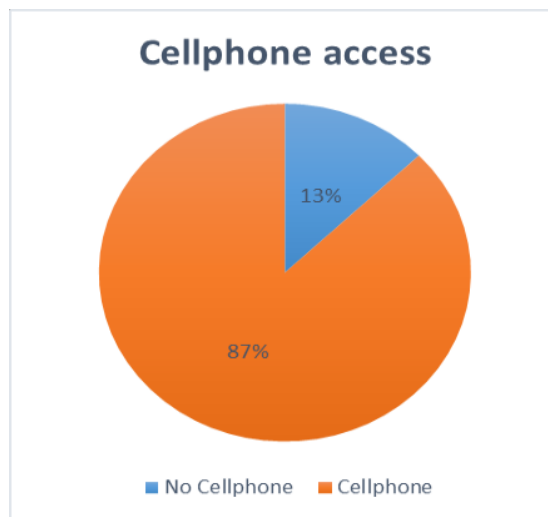


Figure 5 Access to cellphone

Section 1.5 Food Security

When asked about food security and the number of days of food available in the home it was a challenge for the home to estimate. Households noted that they usually buy food supplies on a 2 week cycle with pay checks. Households noted that they had started stockpiling food supplies, mostly rice, for COVID-19 preparedness, after discussing with enumerators what the questions on was trying to assess, which was the average number of days of food stocks available.

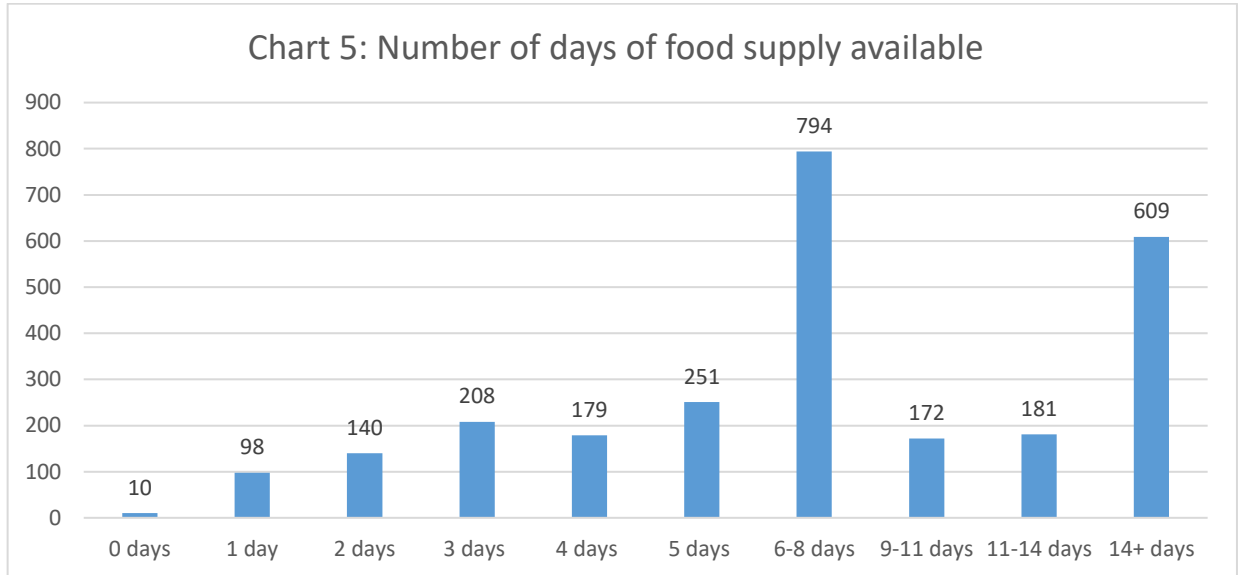


Chart 5 Number of days of food supply available

The most common number of days that a household has food available for is 6-8 days. 66% of households have 6+ days of food supply available.

Section 1.6 Transportation

Access to transportation during an outbreak of COVID-19 is essential for households to access essential services (where lockdown will be enforced). 82% of households projected no access to vehicle during lockdown. During non-lockdown times 66% of households have access to transportation. Below is a chart of household projected access to transportation.

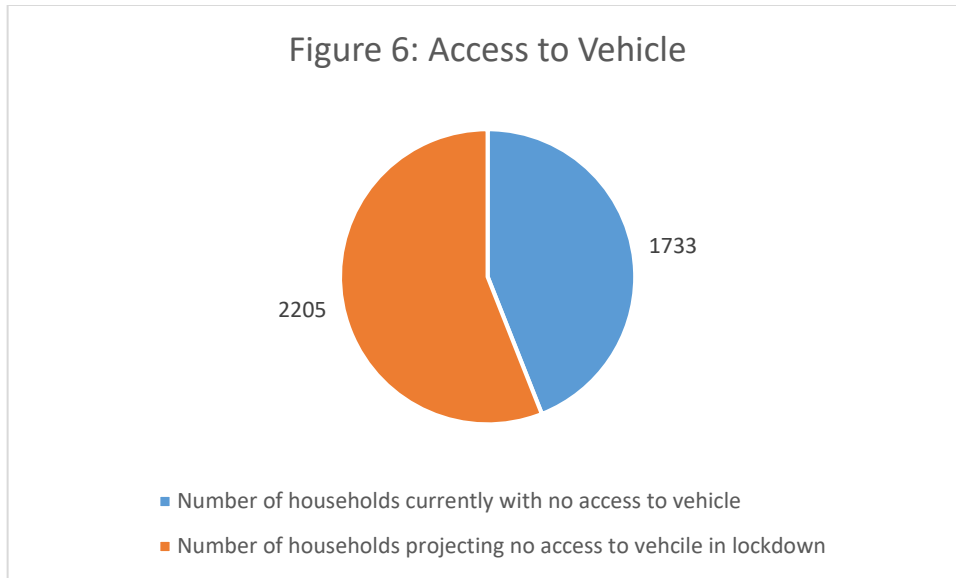


Figure 6 Access to Vehicles

The total number of households who currently have no access to vehicles is 1,733. The total number of households projecting no access to reliable transportation during lockdown is 2,205.

Section 1.7 Health

One question on the rapid assessment asked questions about the health of household members at the request of the Ministry of Health and Human Services (MOHHS) to identify COVID-19 vulnerable populations. Households were asked if there was a member of the home that has been diagnosed with cancer, with a total of 64 households reporting yes. Additional information was gathered but is kept confidential and shared only with appropriate health professionals. Queries about overall health and the prevalence of NDCS (non-communicable diseases) were not asked because the MOHHS was already operating under impression of NDCs and poor health conditions being a widespread concern.

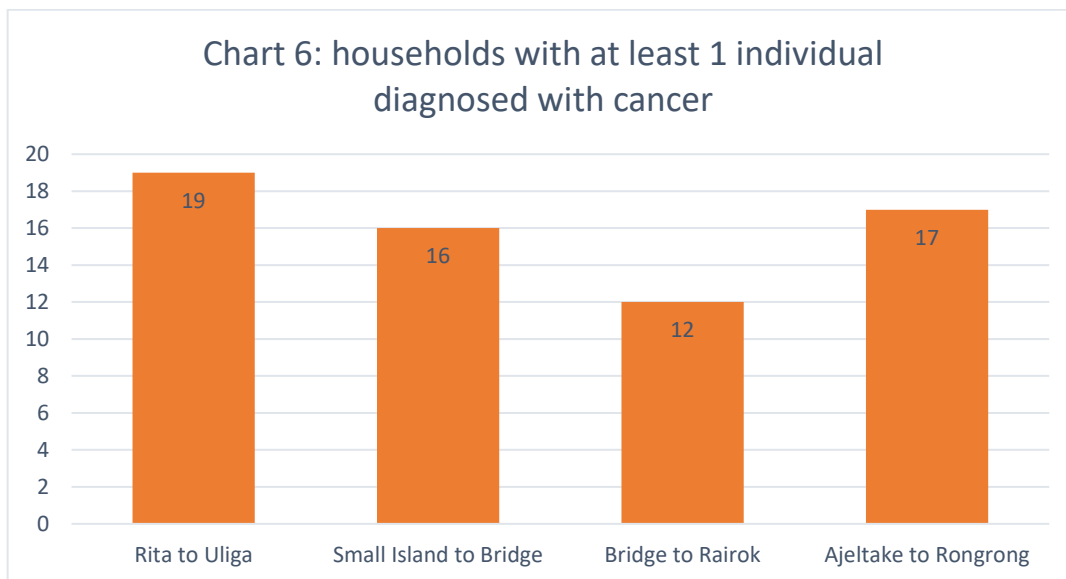


Chart 6 Number of households with at least 1 individual diagnosed with cancer

The total number of households identifying at least 1 individual diagnosed with cancer is 64.

Section 2 – Vulnerability Analysis

A further series of questions were asked to determine how many households met several criteria (to assess vulnerability levels). Across 7 Vulnerability Assessments, the highest number vulnerable households was at Assessment 4 while the least was at Assessment 1. #7 was not shown because it did not have significant variance from #6.

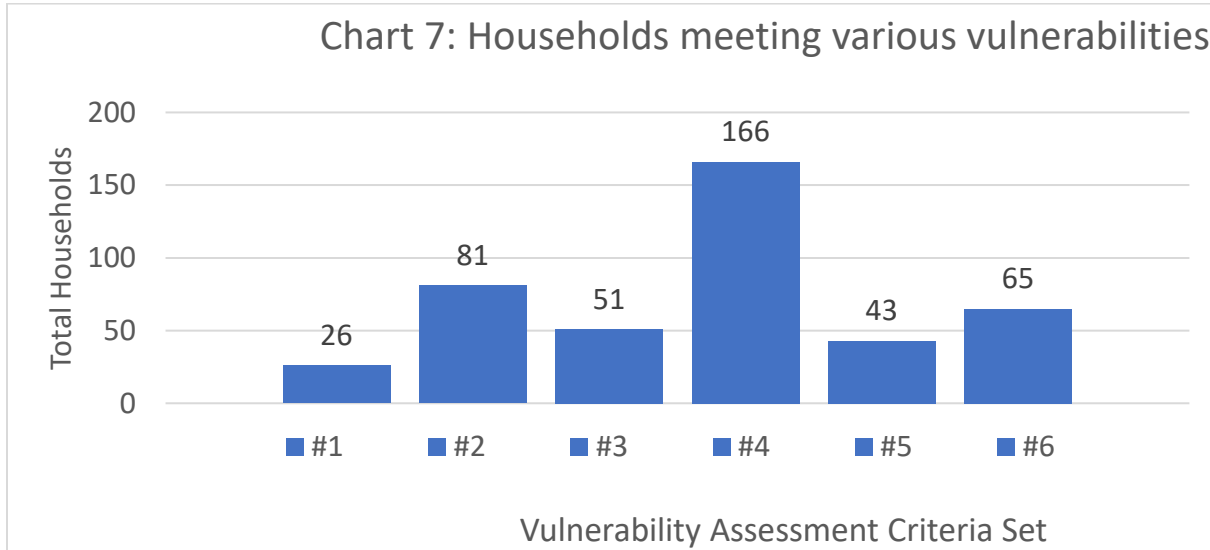


Chart 7 Number of households meeting the 7 Vulnerability Assessments

2.1 Vulnerability Assessment #1

Vulnerability Assessment #1 – “all criteria met. This is the most restrictive Assessment that was run. The total number of households is 26.

- a) 10 or more people in the household
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent
- e) 2 or less means of communication
- f) 5 or less days of food available
- g) No access to vehicle in lockdown

2.2 Vulnerability Assessment #2

Vulnerability Assessment #2 – excluding criteria ‘a’. The total number of households is 81.

- a) 10 or more people in the household**
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent
- e) 2 or less means of communication
- f) 5 or less days of food available

- g) No access to vehicle in lockdown

2.3 Vulnerability Assessment #3

Vulnerability Assessment #3 – excluding criteria ‘d’. The total number of households is 51.

- a) 10 or more people in the household
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent**
- e) 2 or less means of communication
- f) 5 or less days of food available
- g) No access to vehicle in lockdown

2.4 Vulnerability Assessment #4

Vulnerability Assessment #4 – excluding criteria ‘a’ or ‘d’. The total number of households is 166. This is the highest frequency of vulnerability in this assessment.

- a) 10 or more people in the household**
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent**
- e) 2 or less means of communication
- f) 5 or less days of food available
- g) No access to vehicle in lockdown

2.5 Vulnerability Assessment #5

Vulnerability Assessment #5 – excluding criteria ‘e’. The total number of households is 43.

- a) 10 or more people in the household
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent
- e) 2 or less means of communication**
- f) 5 or less days of food available
- g) No access to vehicle in lockdown

2.6 Vulnerability Assessment #6

Vulnerability assessment #6 – excluding criteria ‘f’. The total number of households is 65.

- a) 10 or more people in the household
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent
- e) 2 or less means of communication
- f) 5 or less days of food available**
- g) No access to vehicle in lockdown

2.7 Vulnerability Assessment #7

Vulnerability assessment #7 – excluding criteria 'g'. When criteria g is excluded from the above scenarios there is little to no change.

- a) 10 or more people in the household
- b) 2 or less persons employed
- c) No access to running water
- d) 5 or more people dependent
- e) 2 or less means of communication
- f) 5 or less days of food available
- g) **No access to vehicle in lockdown**

Section 3 – Observations

On May 25, 2020 the enumerators held a debrief session with design team members to share observations during the rapid assessment. Key observations related to the rapid assessment questions that were captured include:

- There are a lot of homes that need their catchments to be repaired or have broken faucets. Many households are sharing the same catchment.
- Many people are sharing a toilet with one or more households, and that many of these need to be bucket flushed and aren't working properly
- Often times, households living in a group will share food with a majority of them estimating to run out in 2 days if they share with extended family
- Some people are listening to V7AB (AM/FM radio) but online through radio stations, and in their cars or when they are in taxis.
- Some people have cell phones, but they don't have access to NTA services all the time and will use them for connection to internet only.

Other observations, concerns and questions that were raised.

- Enumerators ensured not to raise expectations on what goods would be delivered. People did demonstrate survey fatigue and would ask "is something actually going to happen this time". A few people did not want to be surveyed because they said that nothing happened after the dengue fever survey.
- There were questions on what the government plan is to care for the homeless and those with mental health issues.
- Enumerators were asked if there is any financial aid for those who are stuck in the mainland?
- A lot of respondents agree with the decision of the government to close the borders (land and seaport).
- There was a request/questions on why other health issues were not included in the questionnaire.
- There were questions on visa renewal and overstay status for migrant populations.
- There were questions on who is monitoring the yachts and do they (yatchies) really understand the protocols.
- People wanted to know if they would get masks and gloves.
- Suggestions for future survey to include more specific information on persons with disabilities.

Part 4: Recommendations

The key recommendations below are to be more prepared for and prevent the possible outbreak of COVID-19 in Majuro.

- 1) Procure and distributed household WASH kits to the most vulnerable households to address WASH needs.
- 2) Conduct follow up detailed assessment for vulnerable homes with no running water to make repairs necessary for adequate handwashing.
- 3) Procure and distribute dignity kits to women and girls living in vulnerable households.
- 4) Gender & Protection Cluster to conduct further data analysis and prepare follow up detailed assessment for targeted vulnerable households.
- 5) Procure and distribute AM/FM radios to vulnerable households to ensure information dissemination in lockdown.
- 6) Allow taxi's to operate as an essential service during lockdown and provide subsidies to taxi drivers to ensure that taxis are available for residents to reach essential services such as NTA, grocery stores and MEC.
- 7) Consider allowing free internet and phone during lockdown to ensue effective communications and free hotlines for essential services.
- 8) Ministry of Health and Human Services to follow up with households that have been diagnosed with cancer to prepare an individual plan for care during COVID-19.
- 9) Prepare food basket for vulnerable homes to be distributed after two weeks of Condition 2&1.

Part 5: Conclusion

The rapid assessment has been conducted and analysed to provide a snapshot of household level needs for residents of Majuro in a COVID-19 context. This includes basic household demographics, WASH, economic impacts, communications, food supplies, transportation, and medical. Based on the results 9 key recommendations are provided for immediate action regarding COVID-19 preparedness.

Annex 1: Rapid Assessment Form

Consent Form

1. Yes
2. No

General Information

1. Name of person Doing the activity (Surveyor name)
2. Name of owner of the house (Household name)

Beneficiary Information:

1. Number of people in the household (Number of people in the house)
2. Number of boys below the age of 5 (Boys below 5 years old)
3. Number of girls below the age of 5 (Girls below 5 years old)

Household information

1. How many people in the home are currently employed? 1, 2, 3, 4, 5, 5+ (Currently employed people)
2. Availability of running water? (Running water available)
3. Availability of toilet? (Toilet facility available)
4. Has anyone in your home lost their job or seen reduced hours due to COVID-19? Yes or no (Lost job)
5. How many people in your home are completely or almost completely dependent on a full time caregiver? 1, 2, 3, 4, 5, 5+ (Dependent on caregiver)
6. Yes or no questions
 - a. Do you have a working AM/FM radio? Yes or no (Working FM.AM radio)
 - b. Do you have a working land line phone in your home? Yes or no (Working landline phone)
 - c. Do you have a working cell phone and service in your home? Yes or no (Working cellphone)
 - d. Do you have working land line internet access in your home? Yes or no (Working internet access)
 - e. Do you have working 4G access in your home? Yes or no (Working 4G access)
7. How long will your current food stocks in your home last (if you don't buy anything new) (choose one). 1 day, 2 days, 3 days, 4 days, 5 days, 6-8 days, 9-11 days, 11-14 days, 14+ days (Current food stocks)
8. Do you have access to your own vehicle for transportation? Yes or No (Access to own vehicle)

- a. If yes, do you envision affording to operate your vehicle if you lose your job due to COVID-19? **Yes or no** (Vehicle operation after losing job)

9. Health questions

- 10. 1. Have you been diagnosed to have Cancer? (Diagnosed with cancer)
- 11. 2. Are you on medications? (On medication)
- 12. 3. If yes, what is the name? (What medication)
- 13. 4. Contact information; telephone, email, social media name. (Telephone, Email, Social media ID)