

Ailinglaplap Atoll

Aerok Community

Hazard Vulnerability Capacity Mapping Report

WEDNESDAY, July 19, 2022



The contents of this publication are that of Aerok, Ailinglaplap members that participated.

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This project would not have been possible without the leadership and support of the Ailinglaplap local government.

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

Acronyms

HVCM	Hazzard Vulnerability Capacity Mapping
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Context

Background of study

Ailinglaplap Atoll

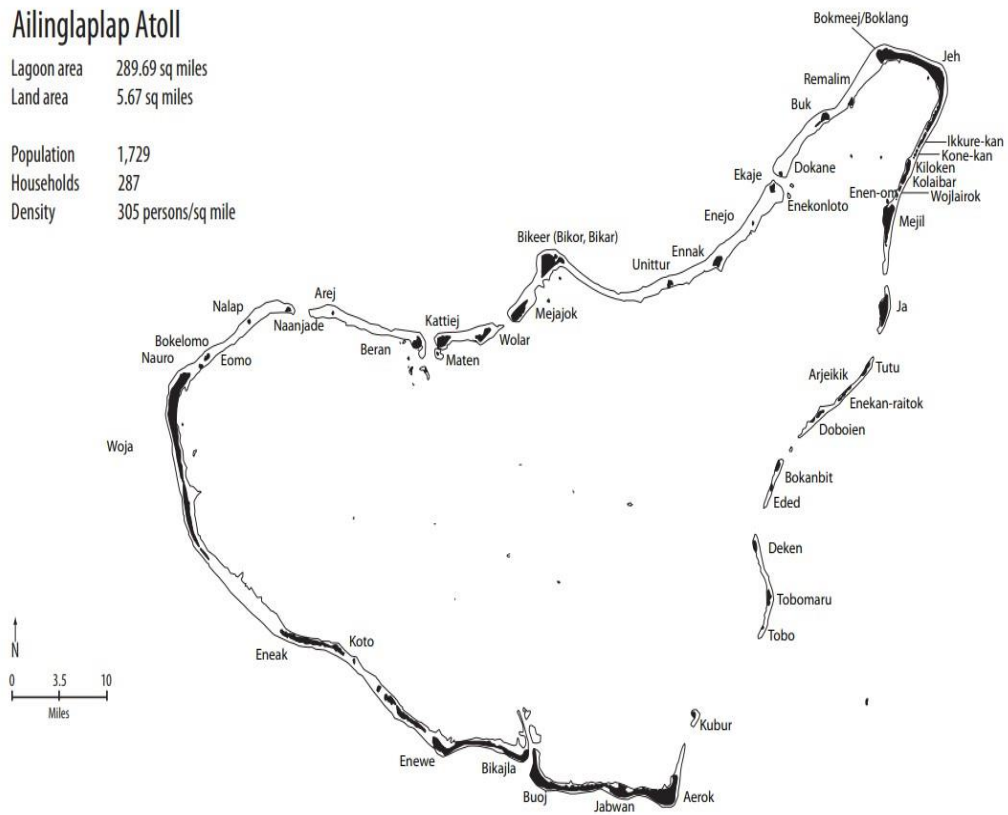
Lagoon area 289.69 sq miles

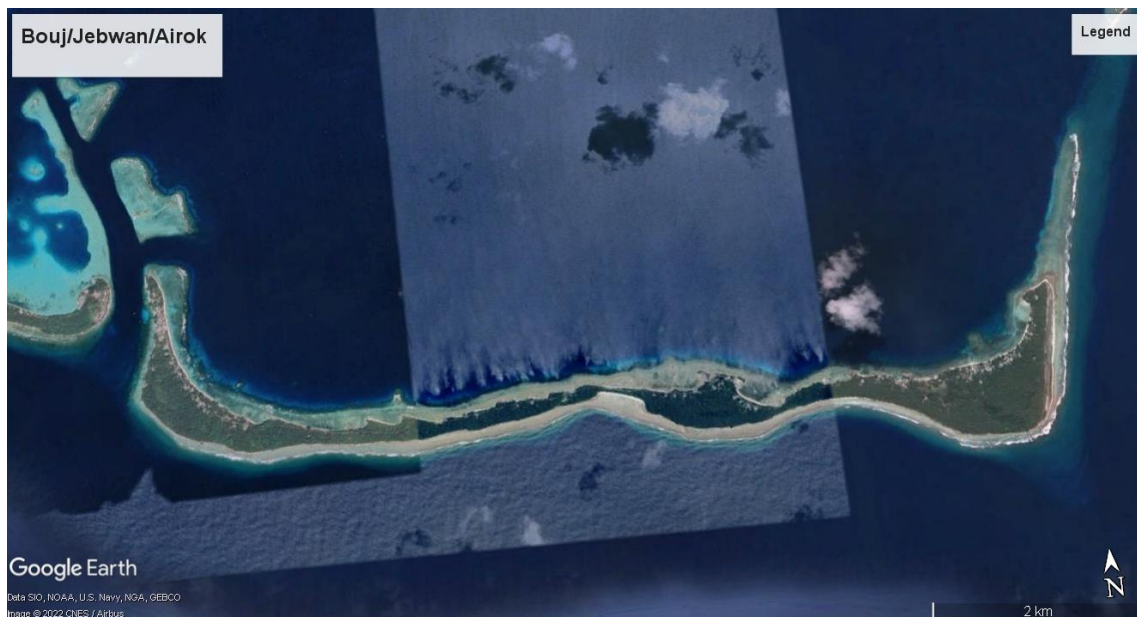
Land area 5.67 sq miles

Population 1,729

Households 287

Density 305 persons/sq mile





The impacts of climate change within Aerok/ Ailinglaplap are severe droughts, coastal erosion, and coastal inundation during king tides. During the drought events people would often get sick with pink eye, diarrhea. With coastal erosion and inundations people face the problem of losing land and their cultural heritages.

This report articulates the results of IOM's Hazard Vulnerability and Capacity Mapping (HVCM) exercises that took place in communities throughout Ailinglaplap Atoll. Each community report highlights the community's profile, key hazard risk concerns and maps. The reports can be used by community members to then plan a full Community Based Disaster Risk Management (CBDRM) Plan.

Targeted Community Aerok

Ailinglaplap is one the largest atolls in the Marshall Islands in the Ralik Chain. Stretching over 229.69 sq miles in the Pacific Ocean. It contains nine communities Jeh, Jah, Woja, Aerok, Mejel, Bouj, Kattiej, Jebwan, and Enewa. Ailinglaplap Atoll is unique because its where most traditional folklore and stories originated from in the Marshall Islands. Ailinglaplap Atoll is also home to a long line of traditional leaders including high chiefs.

Aerok is what most would consider a typical Marshallese community where their Christian faith is the center of their day to day lives and routines. The traditional leadership structure involves the Iroojlaplap (high chief), Iroojdrik (chief), Alap, and rijerbal (landowners). The Ailinglaplap Local government contains of 45 council members, an acting Mayor, and Mayor.

Community Profile Questions

Community Profile Questions	
About how many people live in your community?	150
What are the major occupations of community members? (income and subsistence activities)	-Copra -Handicraft -Fishing
What local resources does your community depend on? Explain why.	<p>Terrestrial</p> <ul style="list-style-type: none"> • we use the land and its resources to make traditional canoes, local medicine, and it provides food. <p>Marine</p> <ul style="list-style-type: none"> • we use the ocean/lagoon and its resources for food, livelihood such as handicraft, sustainable sea transportation.
How are decisions made in your community? Who has the authority?	Government leader, traditional leaders, the local government, and church leaders.
What social groups are active and what purpose do they serve?	There are various women's group that does planting throughout the community.
What natural hazards affect your community?	-Drought -Coastal erosion -Coastal Inundations and flooding during king tides.
What are the main strengths of your community?	1.The Local government and how they take care of the communities. 2.Another strength in the community is the copra and handicraft business.
Are there any new community improvement projects planned?	N/A
Is the community participating in programs to improve natural protective barriers? (Mangrove, Steep slopes, rivers)	N/A

Methodology

Hazard Vulnerability and Capacity Mapping with Early Warning Systems

Introduction

The IOM Community Vulnerability and Capacity Mapping Exercise and Assessment (CVM) Project created the Community Hazard Vulnerability and Capacity Mapping (HVCN) to assist communities and facilitators in conducting HVCN exercises and generating HVCN reports. The objectives and actions taken enable the facilitators to implement in a manner that ensures the communities lead the process. Even though it acknowledges that every community is unique and that modifications to the methodology may be necessary, the three sessions included are considered the bare minimum for conducting the exercise successfully. Facilitators must always be well-prepared, efficient, and mindful of not wasting community members' time, which is both valuable and voluntary. If all community service activities are completed, the HVCN can be completed in six-seven hours. No member is required to attend the entire six-seven hours of the exercise.

Objectives and Process

Under the objective of the National Adaptation Plan, the International Organization of Migration and its partners will conduct HVCN exercises in up to nine different communities across Ailinglaplap Atoll.

The specific objective of the HVCN 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. HVCN 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, HVCN can also help us to better understand the communities we work to address their unique concerns. HVCN 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 on future climate adaptation and disaster risk management plans, pieces of training, and disaster mitigation measures to address the specific concerns of the community.

Where feasible, it is preferable for the activities to be conducted in Marshallese.

The HVCN exercise will generally require three sessions:

1. Sensitization and Community Profile
2. Physical Mapping and Hazard Vulnerability Matrix
3. Summary and Action Plan Generation

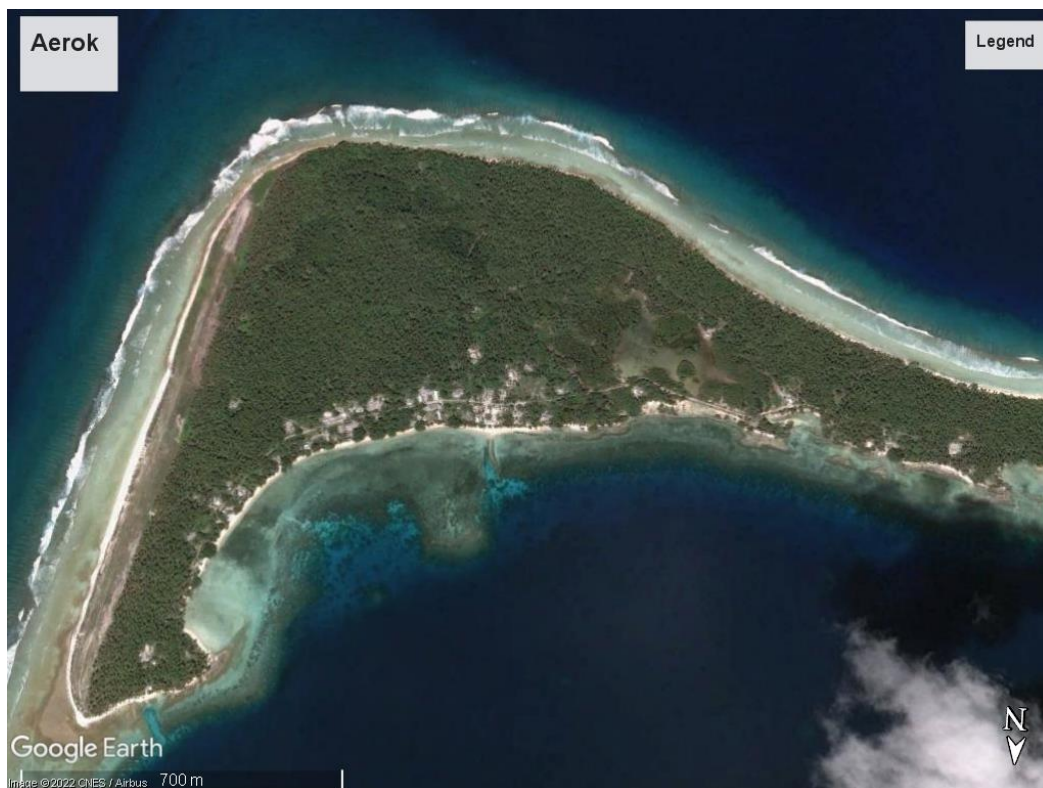
In all sessions, we should emphasize to participants that we are here to learn from them; we need them to teach us about their community. Much of the success or failure of the exercise hinges on input and

active engagement among participants. In all sessions, it is important to ensure the 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 [name of implementing partner] 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. 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 1: [Aerok]



Community Profile Statement

Background

The HVCM exercise was held at the United Church of Christ in Woja Ailinglaplap on Wednesday July 20th 2022. There was a total of 118 participants and 52 were females and 66 were males

In Aerok Ailinglaplap the total population is 150 people. The HVCM was conducted during a youth rally on Woja Ailinglaplap. There were nine communities in total at the rally. Migration is not entirely due to climate change but for better opportunities in the States, Majuro, or Ebeye. If you are not a teacher, principal, local government official, or a church leader then the primary source of revenue or livelihood is copra and handicrafts.

The challenges in which they faced are implementing a project to mitigate drought and typhoon impacts. Their main strengths are working together as a community but they would need help outside the local government to include projects that help them better cope with the climate hazards.

Hazards

1.Drought
2.Typhoons/strong winds
3.coastal erosion
4. Kingtides/coastal inundations/flooding

Impact of Hazards on the Community

The community members from Aerok identified drought, typhoon, coastal erosion, flooding, and king tides as the main disasters that impacts homes and livelihoods.

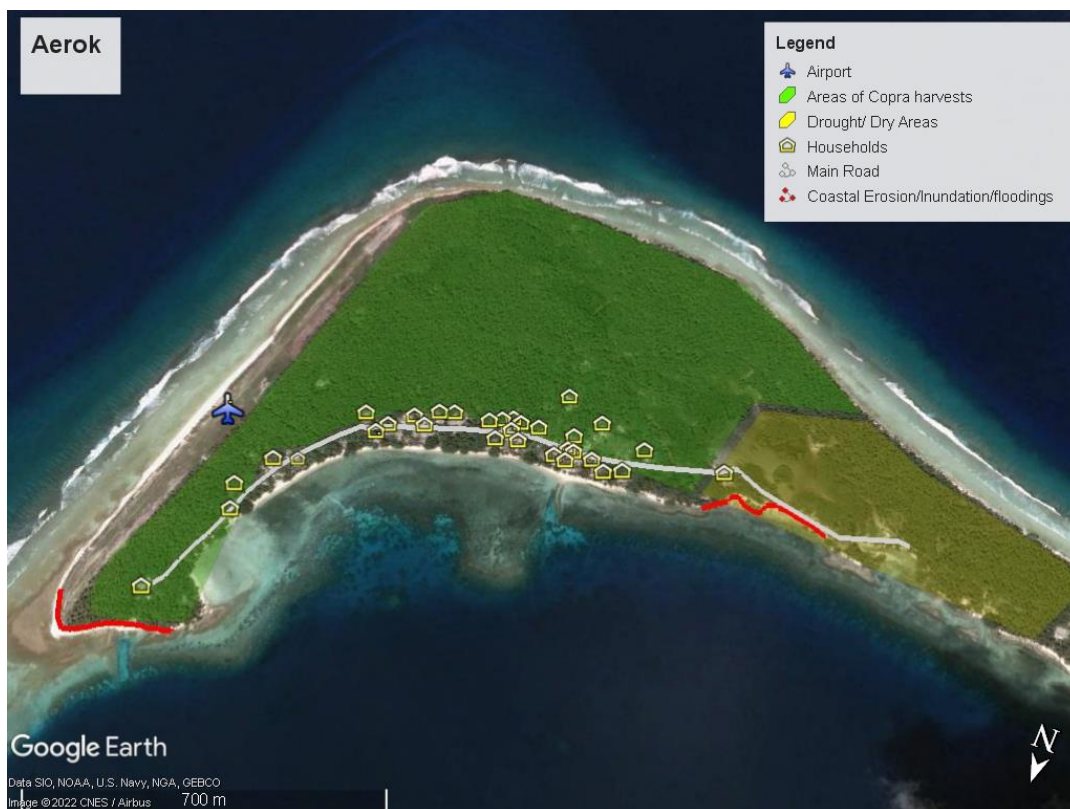
Capacities

The community in Airok have started to do replanting throughout the island. They do this to ensure there are more source of food and source of livelihood by making handicraft. The men in Airok have started to go fishing in large groups to catch fish for the entire community.

Hazard Vulnerability Risk Mapping

The method of mapping hazard vulnerability risk begins by dividing the society into multiple categories, often men and women separately, as well as children. Using flip chart paper, they design a map of their neighborhood, highlighting essential sites and infrastructure facilities such as churches, evacuation centers, and docks. Then, they determine the risk, such as flood-prone and disaster-prone places. The groups then exhibit their maps to one another, debate their similarities and differences, and make any required adjustments. The hand-drawn maps (from all groups) can then be converted to a digital format using Google Earth.

On the map below, you can see which portions of the neighborhood and which residences have been classified as vulnerable to floods or coastal erosion. In addition, they drew inspiration from essential communal locations like the hospital and evacuation points.



Hazard	Impact/Risks	Weaknesses	Adaptive Capacities/Strengths	Short Term	Long Term
Drought	<ul style="list-style-type: none"> -Hunger -Thirst -Sicknesses 	<ul style="list-style-type: none"> -No storage for water -Not enough medicine -Not enough yield from crops -No means to purify water (filter buckets, RO units, etc) 	<ul style="list-style-type: none"> -Community replanting -Community fishing -conservation measures on livestock 	<ul style="list-style-type: none"> -Dig wells -water management trainings - 	<ul style="list-style-type: none"> -farming drought resistant crops -Have more and improved rainwater harvesting systems -Have water purifying stations (water filter buckets, R.O. Units)
Hazzard	Impact/Risks	Weaknesses	Adaptive Capacities/Strengths	Short Term	Long Term
Typhoon	<ul style="list-style-type: none"> -Households destroyed -cancelation of planes/ships -crops destroyed -coastal inundation -floods 	<ul style="list-style-type: none"> -no means of transportation -lack of communication -lack of storm shelters 	<ul style="list-style-type: none"> -Use schools and churches for storm shelters 	<ul style="list-style-type: none"> -Have first aid kits -Emergency go to kits (flashlights, medicine, water and food supplies) 	<ul style="list-style-type: none"> -Seawalls -Emergency Evacuation shelters -Evacuation routes -transportation

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Hazard Vulnerability Matrices

As part of the hazard prioritization process, the Aerok community recognizes drought and typhoon as threats. Participants recognized the community's strengths and weaknesses in respect to its susceptibility to these threats and recommended both long-term and short-term solutions.

Identified Hazards/Risks	Proposed Solution		Who is responsible?		When are tasks to be implemented?
	What has been done or started?	What can be done? Short Term Long Term	(Within Community)	(Outside Community)	
Drought	-There is access to R.O. units -	-Water management trainings -dig more wells -clean wells and provide covers -install better rainwater harvesting systems (catchments, gutters, downpipes) -equip more R.O. units. -have more aquaculture and agricultural projects	-Local government -community members	-Government -IOM -ACWA project/EPA	-Within the next 3 to 5 years

Typhoon	-Using schools and churches for evacuation shelter	-install storm shutters -evacuation plans -build better more equipped evacuation shelters. --have more aquaculture and agricultural projects -build seawalls at most vulnerable areas.	-Local government -community members	-Government -IOM -National Disaster Management Office	- Within the next 3 to 5 years
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Summary Aerok, Ailinglaplap

The top two hazards identified were drought and typhoons. Drought makes the community vulnerable because there is limited storage for water, not enough yield from crops, no means to purify water, and lack of medicine for any illness like pinkeye or diarrhea. The short-term goals for drought are to dig wells and train in water management. The long-term goals are farming drought resistant crops, have more and improved rainwater harvesting systems and have water purifying stations (water filter buckets, R.O. Units). Typhoons are more unpredictable and does cause many problems in the community. Aerok is vulnerable to typhoons because they have no storm shelters, limited communication, and lack of transportation in case a typhoon hits. The short-term goals for typhoons have first aid kits, emergency go to kits (flashlights, medicine, water, and food supplies). The long-term goals are to build seawalls, emergency evacuation shelters, evacuation routes, and better transportation.