

2023

# NATIONAL ADAPTATION PLAN COMMUNITY ENGAGEMENT SUMMARY REPORT

Ailinglaplap Atoll



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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

Ailinglaplap Atoll is one the largest atolls in the Republic of the Marshall Islands (RMI) 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. The population is 821 based on the preliminary 2021 census with a median age of 21 years and an even gender breakdown. Ailinglaplap Atoll is unique because it's where most traditional folklore and stories originated from in the RMI. It is also home to a long line of traditional leaders. Community profiles collected during the consultations can be found in Annex 1-7. Prior to travel to the community, the team collected and learned as much as possible about the community, this information can be found in Annexes 8-10. Ailinglaplap Atoll is considered a rural community.

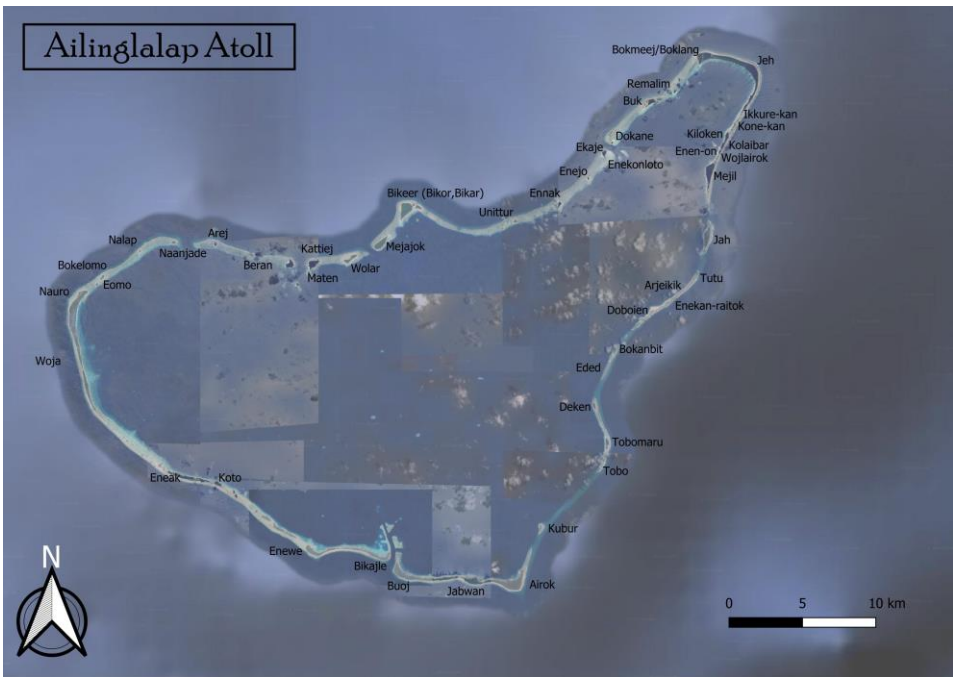


Figure 1: Map of Ailinglaplap Atoll (IOM)

## THE CONSULTATION PROCESS

Due to the size of Ailinglaplap Atoll, the community engagement process needed split into three separate visits. The first visit occurred in June 2022 and was to Woja, Ailinglaplap for the United Church of Christ Youth Rally. The two subsequent visits occurred in March and April of 2023 and were to Airok, Ailinglaplap and surrounding communities.

The first thing to take place during the community consultations is the introduction meeting where information is provided to the community on the purpose of visit and what the NAP is and how it is going to support the community in the future. This is a vital step in setting the scene for the methodologies to follow. These consultations involved seven methods: community profiles; Hazard Vulnerability Capacity Mapping (HVCM) exercises in Airok, Jabwan, Buo, and Enewe; a Day in the Life (DIL) activity where participants were about their observations of environmental change, social impacts and how they anticipate daily activities to be affected in the future (Woja, Airok, Jabwan, Buo, and Enewe); focus group discussions; semi-structured interviews with community members from targeted groups (farmers and fishers, women and youth) (Airok, Jabwan, Buo, and Enewe); a baseline survey to capture views on current and future adaptation (various locations); and Youth and Arts Engagement (youth).

Method	Female	Male	Undisclosed	Youth	Middle aged	Elderly	Undisclosed
Baseline survey	10	14	0	n/a	n/a	n/a	n/a
Day in Life	17	29	0	10	32	4	0
HVCM	49	79	0	n/a	n/a	n/a	n/a
Focus groups	31	33	0	13	-	-	51
Interviews	0	0	11	2	1	2	6
Youth and Arts Engagement							
<b>TOTAL</b>	<b>107</b>	<b>155</b>	<b>10</b>	<b>25</b>	<b>33</b>	<b>5</b>	<b>40</b>

Figure 2: Participant demographics by research method

## GUIDING VALUES FOR ADAPTATION

When asked about their daily activities (DIL) participants demonstrated strong values related to having access to natural resources to support livelihoods and recreation participants), spending time with family and friends: and being able to practice their religion and attend church activities in their community.

These values are relevant to adaptation in that they demonstrate the community’s aspirations to continue living in Ailinglaplap Atoll and strong reliance on place-based natural resources. Whilst a few participants (n=3) shared thoughts about leaving Ailinglaplap Atoll in the event of amplifying climate impacts, most participants expressed a preference and a commitment to staying in Ailinglaplap Atoll (n=30, based on the day in life activity data).

*“If we were to move there would be more difficulties, in my opinion, since one would not own land and live freely.” (SSI71 Ailinglaplap)*



*This is where our ancestors lived and where they're buried. This is our home that's been blessed by those before us. We will die here. (SSI75 Ailinglaplap)*

CLIMATE CHANGE EXPERIENCES AND FUTURE CONCERNS

Looking at the DIL survey, the climatic change most frequently reported by Ailinglaplap Atoll participants was sea level rise (n=28, DIL) followed by increased air temperature (n=15, DIL), and drought (n=3). A few participants did not feel they had observed changes to the climate.

Current observations of climate change in Ailinglaplap (DIL3A, n=46)

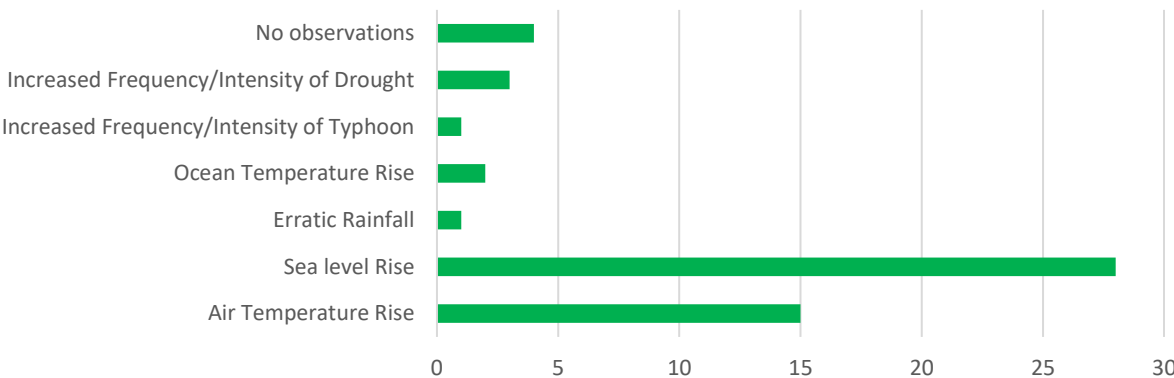


Figure 3: Observations of climate change in Wotje

The HVCM exercise in Aerok demonstrated that the western tip of Aerok is particularly exposed to coastal erosion as well as in the east past the main settlement. This latter area, which is less vegetated is also heavily affected by drought.

Participants in the HVCM exercise in Aerok (involving a large portion of the Ailinglaplap Atoll’s adult population) described the top two climate impacts as drought and typhoons (see map in Figure 5). This contrasts slightly with the DIL method findings where typhoons were not commonly cited.



Figure 4: Participants involved in NAP consultation



Figure 5: HVCM Map Aerok, Ailinglaplap Atoll

Aerok is particularly sensitive to drought as there is limited storage for water and no means to purify water. 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, reverse osmosis (RO) Units). These drought concerns come out clearly during the Youth and Arts Engagement as well.

Social impacts climate change in Ailinglaplap (DIL3a&3a1)

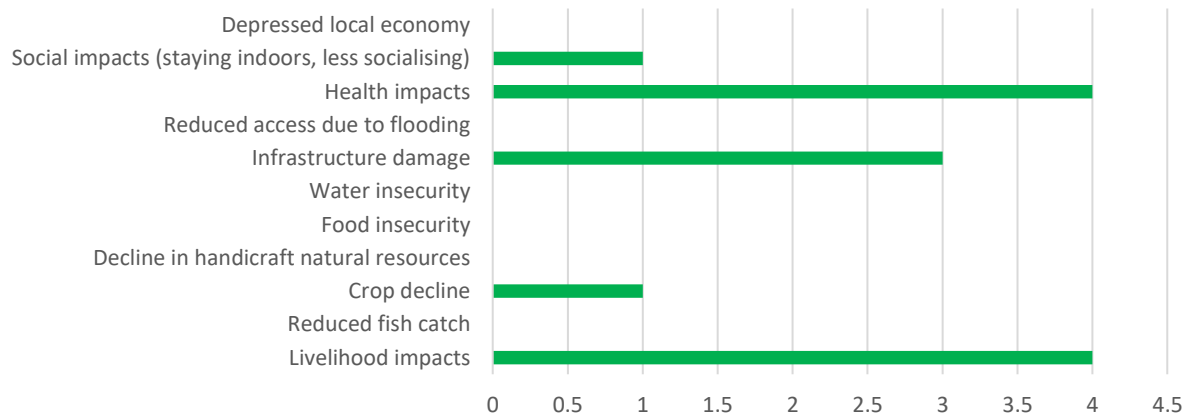


Figure 6: Social Impacts of Climate Change in Ailinglaplap Atoll

Aerok is sensitive 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 are to stock first aid kits and emergency go kits (flashlights, medicine, water, and food supplies). The long-term goals are to build seawalls, emergency evacuation shelters, identify evacuation routes, and obtain better transportation.

In addition to these factors, participants reported other social impacts stemming from these climatic changes as part of the DIL activity. These are highlighted in figure 6.

## SOCIAL IMPACTS OF CLIMATE CHANGE

The high impacts on people's livelihoods stem from a range of factors:

- Higher air temperatures have reduced crop yield to the point that copra is very difficult to grow and sustain. This affects household incomes for buying and the high cost of goods means that households are struggling to buy what they need (for example of a 20 lbs bag of flour is \$40).
- The high heat during the day means that some people are not able to work outside, particularly women who travel in search of natural resources for handicrafts. This means they have less income from handicrafts.
- As there are less fish in nearby fisheries (as fish travel to cooler waters, or their reef habitat in damaged) fishermen are catching less fish that they are able to sell, or they need to travel further to catch the same yield with higher fuel costs leading to less profit.

There have been health impacts reported due to climate change impacts:

- More mosquitos and more opportunity for vector borne diseases
- Higher number of people reporting getting sick from eating fish (ciguatera)
- More cases of pink eye and diarrhea



Figure 7: Ailinglaplap Youth with art work

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Participants reported several impacts on infrastructure linked to coastal erosion and flooding:

- Inundation and flooding during daily high tides as well as king tides are damaging the road between Aerok and Bouj. This reduces the ability for people to travel to Bouj and Jebwan, and impacts people's ability to access flights out of Aerok.
- There are some places between Aerok and Bouj where daily flooding occurs during high tides. This flooding comes up from the groundwater rather than from coastal incursion. This has a daily impact on people's ability to access other parts of the island.
- The dock in Bouj has been damaged by high tides and rust to the point that it is no longer in use. This means that people need to load or offload goods offshore which is more strenuous.

## OTHER COMMUNITY EXPERIENCES AND CONCERNS

Participants reported several other challenges within the community that exacerbate climate change impacts and vulnerability (co-drivers). These are:

- Infrastructure challenges: a lack of storm shelters, lack of water storage and treatment facilities such as filter buckets and RO units. Decline in existing infrastructure particularly the Bouj port.
- Health service challenges: insufficient medical supplies (sometimes dispensing out of date medication), a lack of female medical staff and midwives, disputes between patients and medical staff can mean some women are not attending the health service despite needing treatment.
- Insufficient transport: whilst planes come twice a week in Ailinglaplap Atoll people have constrained access to the airport due to daily high tide flooding. Ships are not sufficiently frequent and this means there is not a steady supply of food and other resources to complement local resources. This is further exacerbated due to the decline of locally grown food.
- Governance challenges: some participants felt there was a lack of communication with government authorities.
- Economic challenges: participants reported a high cost of living compared to their incomes, particularly for those whose livelihoods depend on natural resources. For example, fishers have to travel further to fish now and this requires more fuel but at \$12 per gallon for gas this is difficult for many households to afford.

## ADAPTATION PRACTICES AND IDEAS

Several adaptation practices are currently underway. These have all been initiated and implemented by the local communities. Participants in the HVCM activity discussed that the community in Aerok has started to do replanting across the island to increase local food sources as well as increase natural resources for handicrafts. The local communities between Aerok and Jebwan have constructed a makeshift seawall to protect the road from inundation (it gets high use as it's the only way to travel to the local airport).

The men in Aerok have also started to fish in large groups to catch fish for the entire community. There are also RO units available within the community. In terms of disaster risk reduction, the community uses schools and churches as an evacuation shelter.



### Adaptation ideas in Ailinglaplap (n=46, DIL)

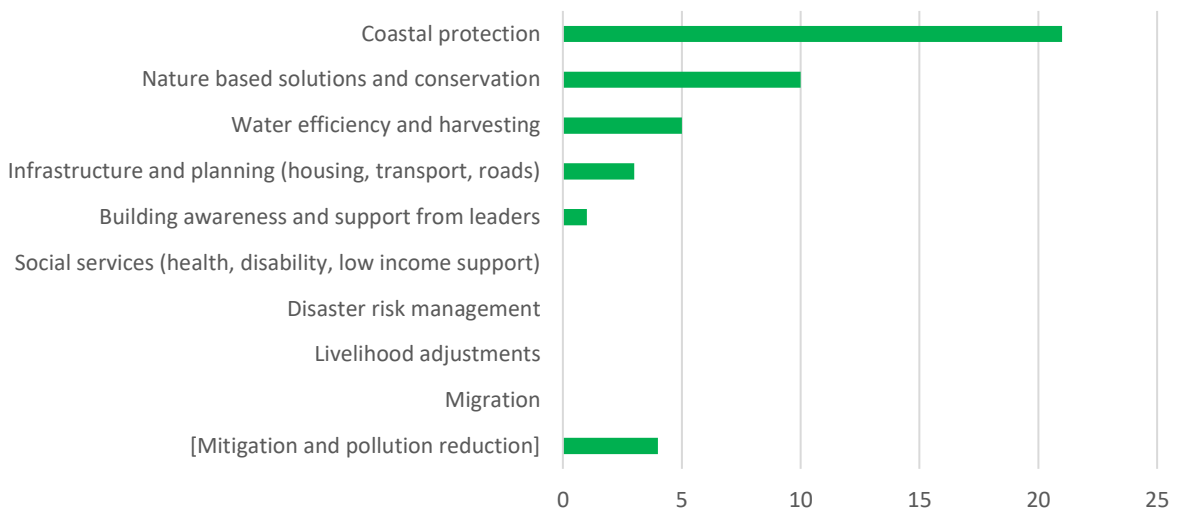


Figure 8: Adaptation ideas in Ailinglaplap Atoll

Participants shared their ideas about future adaptation. Notably, no participants discussed migration as an adaptation idea. The most common adaptation ideas were coastal protection measures (namely seawalls, n=21), followed by nature-based solutions (tree planting along the coast, n=10) and water security actions (more water tanks, n=5).

Participants who suggested nature-based solutions (n=10) cited multiple benefits that could come from tree-planting: offering protection to housing from strong winds, and protection for eroding coastlines.

Participants who suggested infrastructure-based adaptation ideas suggested:

- Improving the drainage on the side of roads
- Improving housing by elevating housing to improve flood management and providing storm shutters.

Participants suggested ideas to improve water security measures:

- Improved rainwater harvesting systems (tanks, gutters, downpipes)
- Water purifying stations (water filter buckets, RO Units)
- Increasing the number of wells and providing suitable covers to protect wells
- Training on water management.

Participants suggested ideas to improve disaster management:

- Building evacuation shelters for extreme weather events
- Emergency supplies such as first aid kits, flashlights and emergency food and water
- Communicating evacuation plans.

Participants suggested ideas to improve food security and livelihoods:

- Farming drought resistant crops
- Increasing aquaculture and agricultural projects.



## BARRIERS, OPPORTUNITIES, AND IMPLICATIONS FOR ADAPTATION

The consultation in Ailinglaplap Atoll has demonstrated the strengths of the community. The community has initiated their own seawall and have initiated replanting across the island. This shows strong local capacity and organisation, motivated in large part by their strong commitment to their island and the community who lives there.

The consultation identified several factors that impede adaptation, particularly related to existing infrastructure (the Bouj port, and roads), insufficient transport and medical services, as well as the high costs of living without sufficient local natural resources.

A preliminary analysis of these findings suggest several low-cost, no regret options for the community.

<b>Adaptation activities that could begin immediately (identified by community and low risk of regret)</b>
increase the number and capacity of household rainwater tanks, and fix roofs and gutters where needed
Provide support to extend tree planting initiatives to help improve food security and coastal protection
Strengthen agriculture through drought resistant crops and introducing aquaculture
Establish more community gardens, including providing training, tools and other supplies.
Provide a RO unit for every community to complement rainwater collection, along with training on operations and maintenance
Build a new dock at Bouj, so the community can safely off load and load supplies
Increase support for health services, including funding a female health attendant role to encourage women to attend health services as health impacts from climate change are amplifying.
Increase disaster risk management, including building typhoon shelters.

<b>Adaptation activities that could begin in the next five years (identified by community and require further consultation and planning)</b>
Participants suggested training and supplies for the community so that the community can independently fix road damage from regular flooding of the road that leads to the airport. Given the frequency of this flooding and the disruption to everyday activities, assess the possibility of elevating that section of the road.
Land-use planning and infrastructure changes such as elevation of housing
Coral reef protection, regeneration and replanting. This could include navigation equipment on boats to prevent additional damage to coral.
Engagement on coastal protection measures.



Figure 9: Consultations in in Ailinglaplap Atoll

## KEY OBSERVATIONS FROM 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

- “walk the talk” it was our second time on Aerok - consultation fatigue
- The decline in natural resources due to climate change is affecting the women’s ability to produce income
- Limited understanding of gender-based violence, all the women were very interested in the stories and lessons they learned from the WUTMI workshop, and it was nice seeing everyone let loose and be comfortable talking about difficult topics
- The men in Jabwon were voicing their concerns about domestic violence and how they also endured domestic violence from their wives.
- The community coming together to fix the roads due to the high tides taking over
- Men from Aerok indicated that the island needs to be elevated and also requires a safe seawall.

## Key Actions

- Coast protection, both sea walls and nature-based solutions.
- Coral regeneration and replanting.
- Fixing every households gutters and hanging boards, make sure catchment are available for every household, and fix roofs where needed.
- Fix the dock at Bouj, it has rusted and started to float apart.
- Training for men to fix the road every time it floods, along with materials and tools. So, they can work together as a community. Then they don't have to wait for someone to come and fix from Majuro.
- Female health attendant, and increased health care services. Women don't feel comfortable going to the current health attendant.
- Women groups in every community have one garden already, requesting continued training and supplies, also to expand for more gardens or increase current gardens.
- Elevate foundation of homes for now, and then elevate the land long term.
- Navigation aids in the lagoon to avoid coral damage from boats hitting into reef.
- Community water catchments requested.
- RO unit for every community, along with training on operations and maintenance.
- Request for government leaders to work on finding a place for all RMI citizens to relocation if necessary to relocate due to climate change.



Figure 10: HVCM consultations in Ailinglaplap Atoll



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## Annex

1. Airok, Ailinglaplap Community Profile
2. Jebwan, Ailinglaplap Community Profile
3. Enewe, Ailinglaplap Community Profile
4. Buoj, Ailinglaplap Community Profile
5. Jah, Ailinglaplap Community Profile
6. Jeh, Ailinglaplap Community Profile
7. Majel, Ailinglaplap Community Profile
8. Aerok, Ailinglaplap Community Profile
9. Ailinglaplap Atoll Socioeconomic Survey
- 10 Youth Art work form Jo-Jikum Engagement
11. Gender Based Violence Directory