2023

NATIONAL ADAPTATION PLAN COMMUNITY ENGAGEMENT SUMMARY REPORT

Ailuk Atoll

IOM UN MIGRATION

JO-JIKUM

MICS 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

Part of the Ratak Chain, Ailuk Atoll has 57 islets and a total land area of 5.4 square kilometres, with a lagoon area of over 177 square kilometres. Despite the small population, Ailuk Atoll has a thriving handicraft production sector that makes good use of local resources (plants).

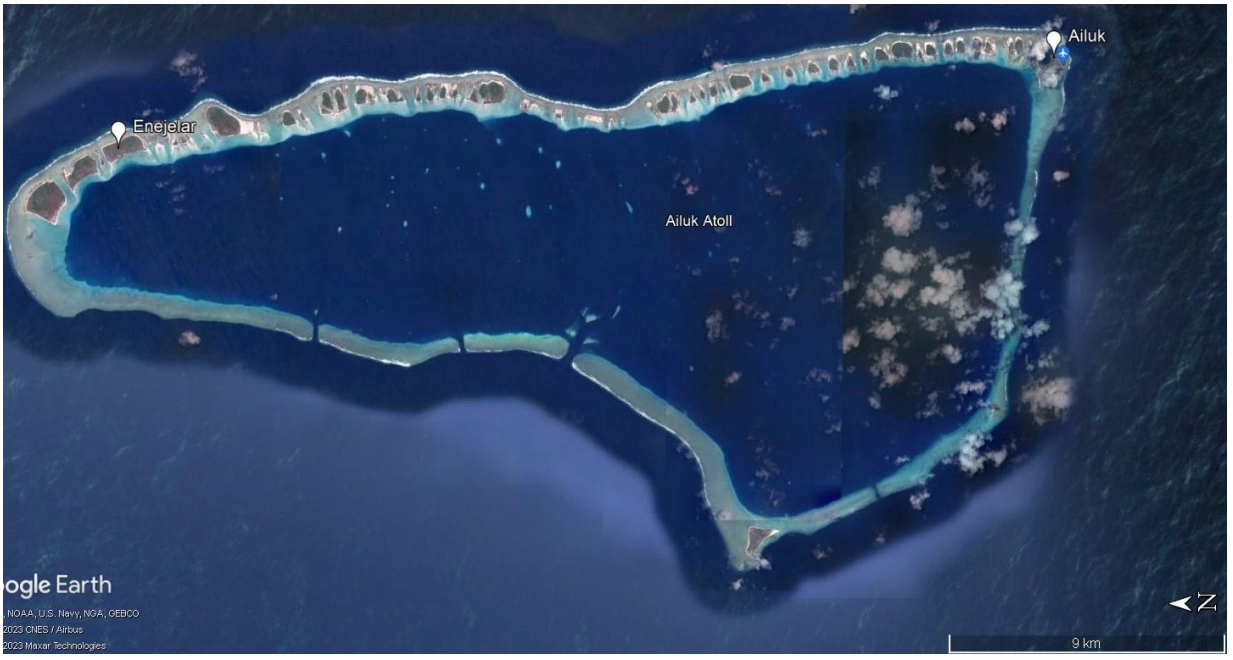

Figure 1: Ailuk Atoll satellite image showing Ailuk and Enejelar communities (source Google Earth)

Demographics

According to the preliminary 2021 Census, Ailuk Atoll, including Ailuk and Enejelar islands, has a total population of 235 (118 women and 117 men in 56 households), down from 339 in 2011 (-30.7%, one of the highest population declines in the country). The median age is 22 years old, with 46% of the population under 18, and 5% above 65. Slightly more than half (54%) are high school graduates and less than 1% of the population have tertiary education. A total of 11 people (4.7%) report a disability. Community profiles collected during the consultations can be found in Annex 1. 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 2-6. Ailuk Atoll is considered a rural community.

Services

There is a school and a medical facility in both Ailuk and Enejelar. Ailuk has mobile phone accessibility (but not Enejelar), and both communities have no internet access. All households in both communities have solar power for lighting, although less than 50% use theirs for refrigeration, with the rest using the public school's solar power. The Ailuk City Hall provides a space for community meetings and some basic administrative services (e.g. business and driving licenses, some legal services).

Infrastructure and projects

In terms of development projects and infrastructure Ailuk Atoll has the following: a greenhouse, a reverse osmosis (RO) unit for water desalination, some coastal protection at both ends of the runway to slow down erosion at the airport, a dock, a airport terminal, a new prison block, an evacuation centre owned by the local government, a coral farming project (took place earlier and no longer active), Enejelar warehouse, and a project to replant coconut and other indigenous tree species.

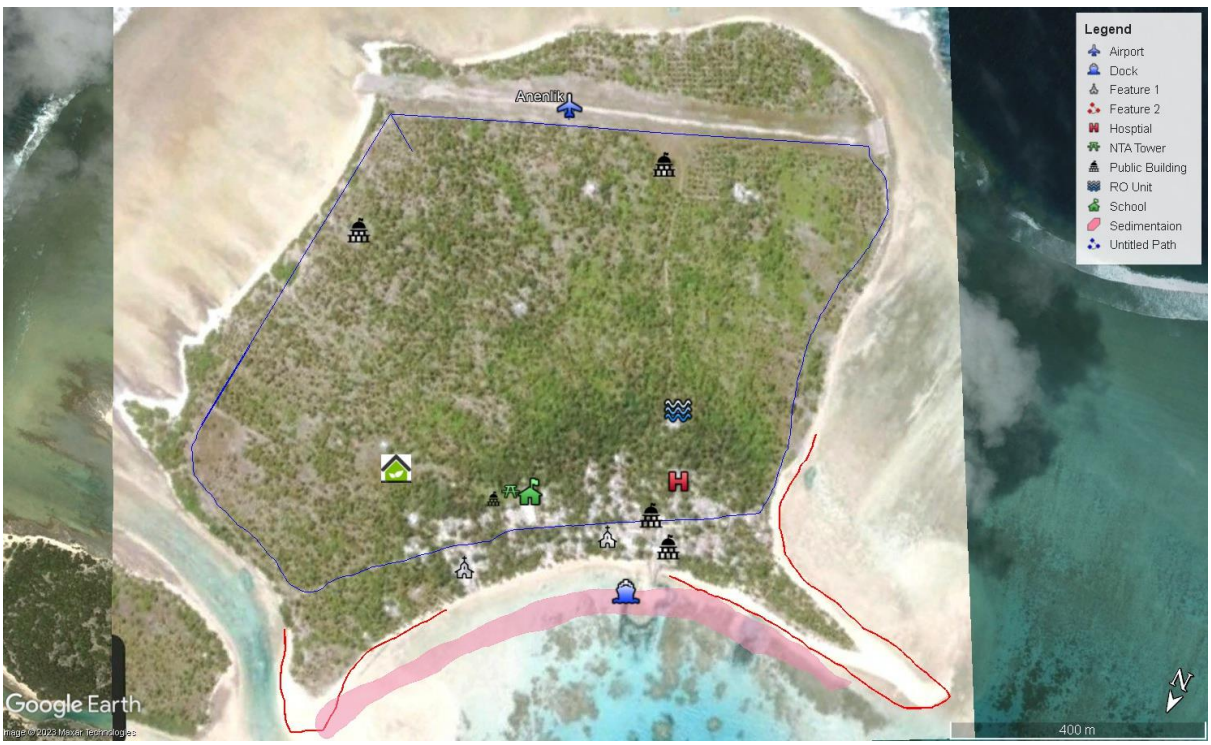

Figure 2: Ailuk community facilities and infrastructures (from IOM Community Profile)

Previous studies on disasters, environmental challenges and human development

Ailuk Atoll has experienced three severe drought periods in recent history (1998, 2013 and 2016) that affected crops, corals and the drinking water supply, which had an impact on health. food and water security. In 1992 there was a typhoon that caused loss of homes and infrastructure. In terms of environmental challenges, coastal erosion and its associated impacts (e.g. king tides) as well as periodic droughts are the main issues previously reported (before the current consultation). In terms of human development, outmigration and the dwindling of the local workforce is the main problem.

Figure 4: Enejelar community facilities and infrastructures (from IOM Community Profile)

METHODS

The engagement team visited Ailuk Atoll (including Enejelar) beginning of November 2022. 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. The consultation for the NAP involved six 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; focus group discussions from two targeted groups (youth and women); semi-structured interviews with community members from targeted groups (women, youth, fishermen and/or farmers and landowners and community leaders); community profiles; Hazard Vulnerability Capacity Mapping (HVCM) (community leaders and Disaster Committee); and Youth and Arts Engagement. Some individuals participated in more than one methodology.

Method	Female	Male	Youth	Middle aged	Elderly
Baseline survey	8	4	1	11	0
Day in Life	17	19	n/a	n/a	n/a
HVCM	24	20	n/a	n/a	n/a
Focus Groups	29	28	n/a	n/a	n/a
Interviews	7	6	n/a	n/a	n/a
Youth and Arts Engagement					
TOTAL	**85**	**77**	**1**	**11**	**0**

Figure 4: Respondents by research method

GUIDING VALUES FOR ADAPTATION

People in Ailuk Atoll regularly participate in church activities and often list those as one of their life guiding principles. Likewise, family and friends are cited as important values by participants, who also recognise the significance that natural resources have to sustain livelihoods (e.g. fish and crops for food, plants for handicraft-making). Communities in Ailuk Atoll value their homeland and the good, easy life of the atoll (especially when compared to Majuro). The Youth and Arts Engagement brought forth themes of canoe sailing, fishing, coastal systems, and the greenery of the island that were important to the youth.

The DIL survey gives a glimpse of individual and communal activities, and how those might change in the future. Daily activities include making copra and fishing for men and house chores (e.g. getting firewood, cooking, cleaning) and making handicrafts for women (although some men too list handicraft-making as an activity). With the exception of church going, daily and weekend activities do not differ much, and there are not significant differences between those of youth and other groups.

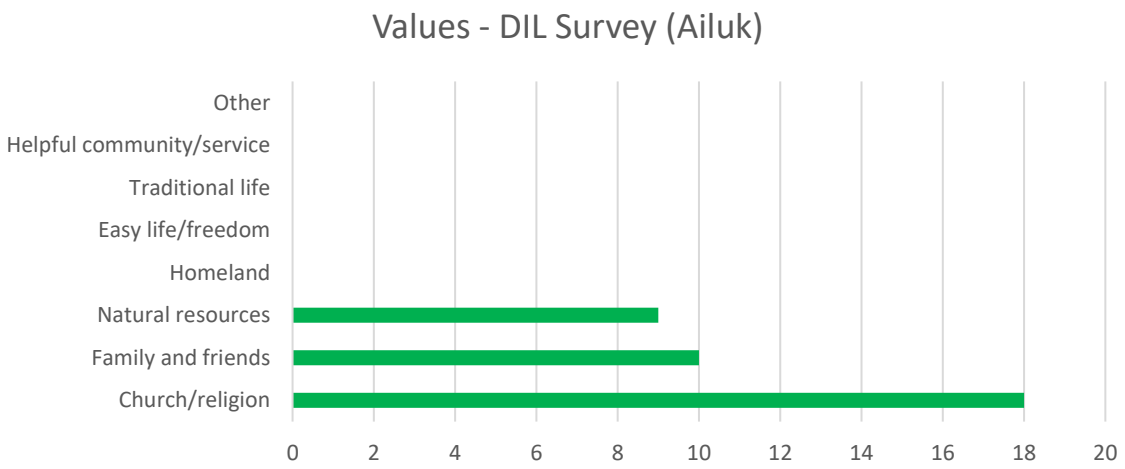

Figure 5: Value as mentioned by participants during the DIL activity

In terms of aspirations and how people imagine their future, 51% of the participants in the DIL activity said they had plans to migrate, compared to 40% who anticipated coping locally. Instead, a majority of participants in the Baseline Survey expressed their desire to stay rather than migrate (7 to 1). Likewise, several participants expressed their wishes for future generations to stay in Ailuk Atoll and look after their homes, land and natural resources, and they are hopeful that with assistance from the government this can be achieved.

The fact that some participants have considered moving elsewhere does not mean that there is not a strong enough mandate for adapting in place and protecting the two local communities, as many of the people who express their intentions to migrate do so as secondary or last resort options, and many highlight the importance of preserving the land and its resources for future generations.

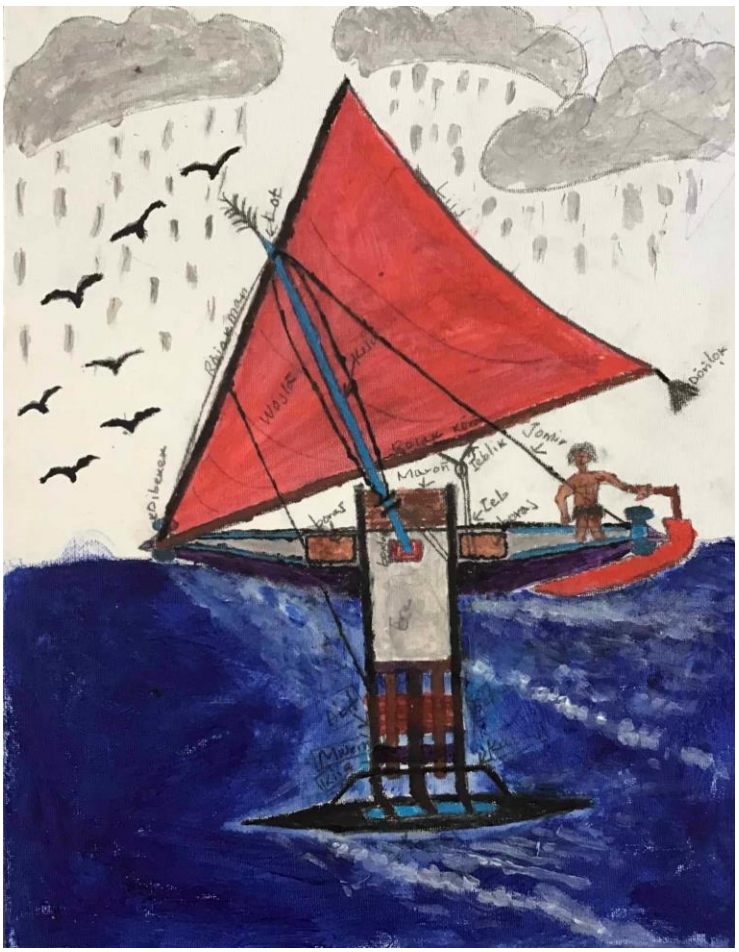

Figure 5: Youth Art from Ailuk representing connection to sailing and home

CLIMATE CHANGE EXPERIENCES AND CONCERNS

According to data from the DIL survey, the climatic changes most frequently reported by Ailuk Atoll participants were sea level rise (cited by 34 participants), the increased frequency and intensity of droughts (27 participants) and the rise of air temperatures (22 participants). Erratic rainfall and increased ocean temperatures were also observed by participants. During the Youth and Arts Engagement the group created a song that illustrated the environmental damage caused to their land: coastal erosion, drought, typhoons, and how they need to work together to find solutions to mitigate these environmental hazards. One participant stated:

> *"I have no idea what to do in the event of floods because I constantly imagine being swept away by the water and eventually drowned. We don't have any elevated houses." (male participant)*

The climatic changes cited above have resulted in a number of social impacts, many of which have affected local livelihoods, according to more than half of the participants in the DIL survey. Some people complain that "there aren't enough trees to meet our demands."

Results from focus groups show that a decline in natural resources (e.g. less pandanus and coconuts, used forhandicraft-making and copra) means less income and a negative impact on livelihoods, which in turn generates conflict such as land disputes, which are projected to increase in the future with further land erosion. Furthermore, droughts, rising sea levels and heatwaves disproportionately affect women as they are unable to make *amimono* (handcrafts); this is often the base for gender-based violence when women are blamed for not being able to provide for their families. Water security and food security are concerns as well, as more heat in the air and the ocean and less rain are seen as contributing to increased groundwater salinity and declining fish stocks and crops (e.g. crops such as tapioca can no longer be grown). The increased heat is responsible for a number of health issues such as diarrhea and pink eye, as well as fear and anxiety. Furthermore, the heat is forcing people to stay indoors, diminishing their opportunities for socializing.

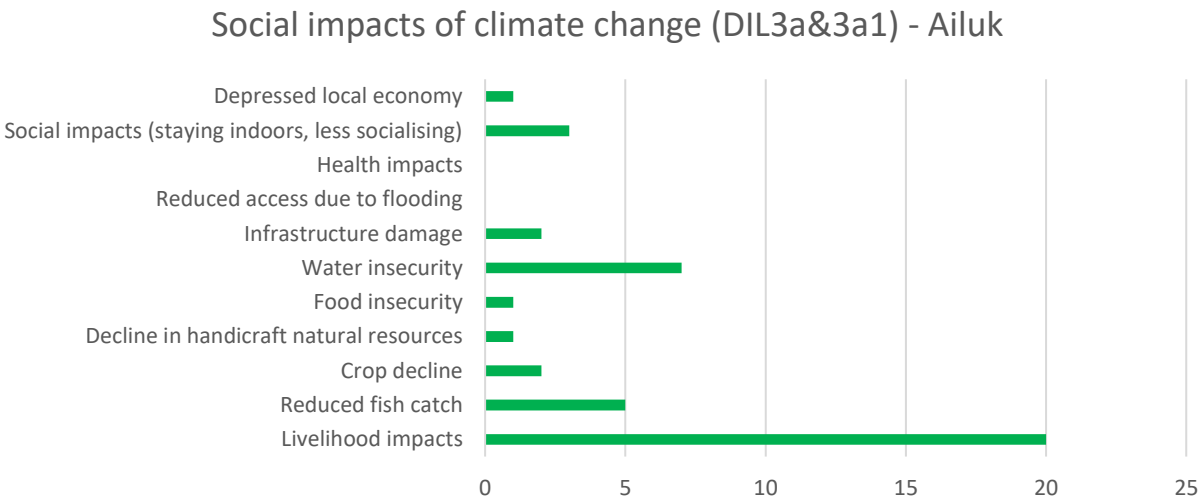

Figure 6: Social impacts of climate change in Ailuk Atoll (DIL survey)

In the focus groups, participants also voiced concerns about the lack of services (mostly transportation to reach other islands within the atoll but also transport for mobility-impaired people) and infrastructure (no WiFi, understaffed and under resourced hospital). Some of the interviewees stated that the school too needs renovations

Participants in the focus groups are concerned about the loss of land and the potential increase of outmigration that future climatic impacts may have. Given that handicrafts are such an important part of life in Ailuk Atoll, most people fear that droughts, sea level rise and heat could spell the end of the handicraft industry. Participants also acknowledge that the younger generations will be the ones bearing the brunt of climate change impacts.

ADAPTATION PRACTICES AND IDEAS

The incidence of recent climatic impacts, such as the droughts of 2013 and 2016, has forced atoll inhabitants to enact a number of adaptation practices, particularly in relation to food and water security. During the Youth and Arts Engagement, themes were illustrated that there is no time to look back; they have to pave a way forward for themselves and their island's survival. When asked how the government can help their community in the future, one participant stated:

> *"With the current government not much impact will be made. However, with carefully selected leaders a positive change can happen." (female participant)*

Figure 7: Day in the Life Exercise with Ailuk, Ailuk Participants

In terms of food security, the people of Ailuk Atoll are already implementing a number of adaptation strategies to cope with the impacts of climate change. For example, people do selective planting and harvesting ahead of drought periods, and some of the uninhabited islets in Ailuk Atoll are also used for that purpose, which stresses how important transportation within the island is for adaptation purposes. Having access to good gardening equipment is also cited as a necessary adaptation measure. Traditional food preparation of crops such as breadfruit and pandanus allows for extended storage to guarantee food security.

The participants in the DIL Survey shared their ideas for future adaptation projects as follows:

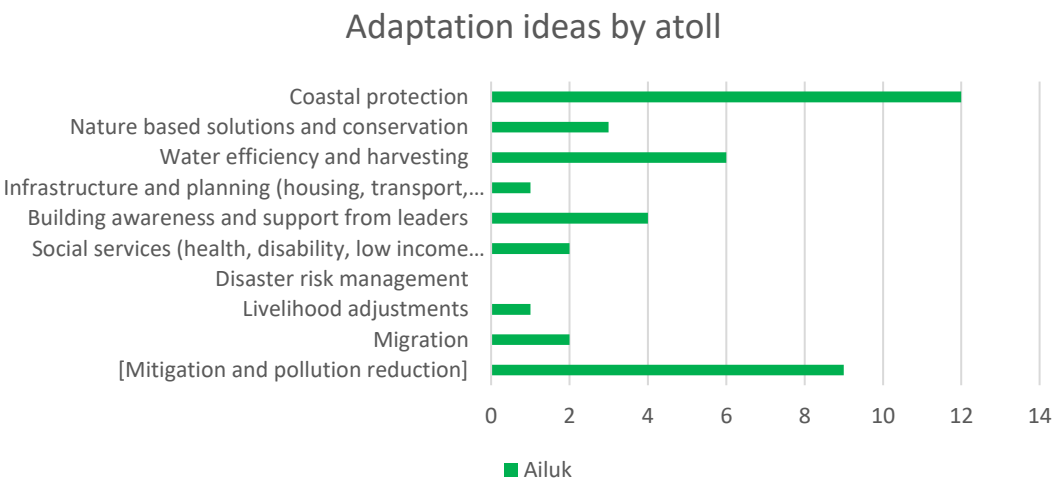

Figure 8: Proposed adaptation ideas in Ailuk

With increased droughts and erratic rainfall, the people of Ailuk Atoll have had to resort to sharing their water supplies amongst neighbours, although once all the water tanks were running low they had no choice but to use groundwater, in which case it was first sloshed and then boiled to make particulars rise and filtered before consumption.

In addition to these, participants in focus groups and interviews also had ideas on how to tackle the impacts of climate change:

- In terms of infrastructure, coastal protection was suggested to slow down coastal erosion in affected areas; an appropriate shelter for disasters is needed in Enejelar. Elevating houses near the shoreline was also mentioned as a potential adaptation.
- Better transportation (in the form of boats and canoes) was advocated as a way to rationalize access to services and resources (e.g. fish, crops and materials for handicrafts in uninhabited islands).
- More water catchments, storage tanks, RO units and/or a desalination plant were suggested as solution to water security problems.
- Social services, in the form of education and healthcare, need to improve to help communities adapt (e.g. a new maternity ward).
- Nature-based solutions were also proposed, mostly planting trees and crops, and keeping the land and the ocean clean and free from pollutants.

Many participants agreed that the government needs to play an active role in adaptation, including helping to educate the communities about climate change and possible solutions and contributing towards the cost and implementation of adaptation projects in a more proactive, less reactive way.

Figure 8: Youth participating in the Youth and Arts Engagement in Ailuk Atoll

BARRIERS, OPPORTUNITIES, AND IMPLICATIONS FOR ADAPTATION

There are a number of barriers that are perceived as potentially impeding adaptation:

- Lack of transportation: boats and canoes are seen as instrumental for people to keep their livelihoods in a changing environment where mobility will be key to adapt.
- Lack of financial aid: financial aid is seen as crucial to help individuals with adaptation, especially with relation to mobility, as people are aware of the high costs of traveling.

Taking into account data from the consultation, the following adaptation initiatives are proposed, keeping in line with the values, impacts and solutions (existing and suggested).

Adaptation activities that could begin immediately (as per community needs and low regrets)
Increase the number and capacity of rainwater tanks
Increase the number of water catchments
Ensure training for technician for RO unit is up to date
Introduce a community bulletin board for sharing information about adaptation ideas, new initiatives and disaster preparedness
Carry out a tree and plant census and earmark those that will need to be replaced
Tree planting for handicrafts
Tree planting to help protect shorelines, reduce heat, and increase food supply
Disaster preparedness workshops

Adaptation activities that could begin in the next five years (identified by community and require further consultation and planning)
Site assessments to determine the causes of erosion and the most appropriate adaptation response
Sign agreement with NTA to expand mobile phone and internet (WiFi) capacity of Ailuk and Enejelar
Build a maternity ward
Building community facilities that can serve as shelters in times of disasters and cool refuges for people experiencing heat stress
Introduce a canoe-building programme and assist with the building of new canoes
Consultations on future land uses, including to: • relocate houses near eroding coasts, • locate new disaster shelters / cool refuges • plan locations for future houses and developments • determine the best locations for community gardens
Double the frequency of shipping services without increasing the cost
Pilot new housing systems that are elevated, cooler, and able to withstand strong winds

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 takeways from each community and key action points for each community provided by IOM, Jo-Jikum, WUTMI, and MICS.

Key Takeaways Observed from the Field Engagement team

- Migration issues: in order for the public school in Enejelar to be opened and operational, families with children migrated form Aiuk, Ailuk to live temporarily in Enejelar for the number of students to reach the required threshold.
- Social tensions: within families, social tensions related to lack of raw materials for handicrafts were voiced by women. Women expressed feelings of resentment from male heads of families when they run out of raw materials to make handicrafts (one of the main sources of income for families in Ailuk)
- The community's awareness on migration of fish due to increase in temperatures – changes in usual fishing grounds and a decline in catches.
- The community was very expressive about their concerns for the environment, they were able to pinpoint a few very vulnerable areas.
- The youth's illustration of not having to look back at the damage, but looking forward with the determination of making a difference for a better future.
- Lack of training and activities for women and young people, there fore they are less active and busy then the rest of the community.

Key actions request observed from the Field Engagement Team

- Coasts protect (aka sea wall) especially on side with erosion happening there.
- Reverse Osmosis (RO) units accompanied with training on operations and maintenance.
- Projects have happened before on gardens, what is required now is for local government to put in their budgets annual money to maintain and operate these gardens. Additional they would like to have training and support with coral farming.
- Enejelar specifically requested additional transportation options – one idea was to create a canoe building project for the men in the community to build additional local canoes. This would help with transportation and ability to visit small islands to collect copra.
- Enejelar requires a new school building.
- Request for training on coastal protection, especially nature passed solution to implement along side the sea wall costal protection options.
- More education on climate change for the community and school.
- There is an evacuation center – on the Senator's land in Ailuk, Ailuk – but build one for other side. No evacuation center on Enejalar.
- Sedimentation is covering the coal on lagoon side, so corals dead due to this. There for the fish have migrated out and the fisher people are having to go further to fish – what can be done to mitigate this from happening and further damage taking place.
- Currently, transporting elderly people is done with wheelbarrow, need something that is appropriate for elderly on the rough terrain.
- Paid jobs for sustaining coral farming/gardening
- Need the government to create a project that will allow for young people and women to construct their own island Safe house for use in evacuation

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Annex

1. Ailuk, Ailuk Community Profile
2. Enejalar, Ailuk Community Profile
3. Ailuk Atoll HVCM Report (NAP)
4. Ailuk Atoll Disaster Management Plan
5. Aiuk Atoll Community Profile (NAP)
6. Youth and Arts Engagement
7. IOM GBV Directory FINAL Oct 19 2021