

# Ulien, Arno HVCM Final Report

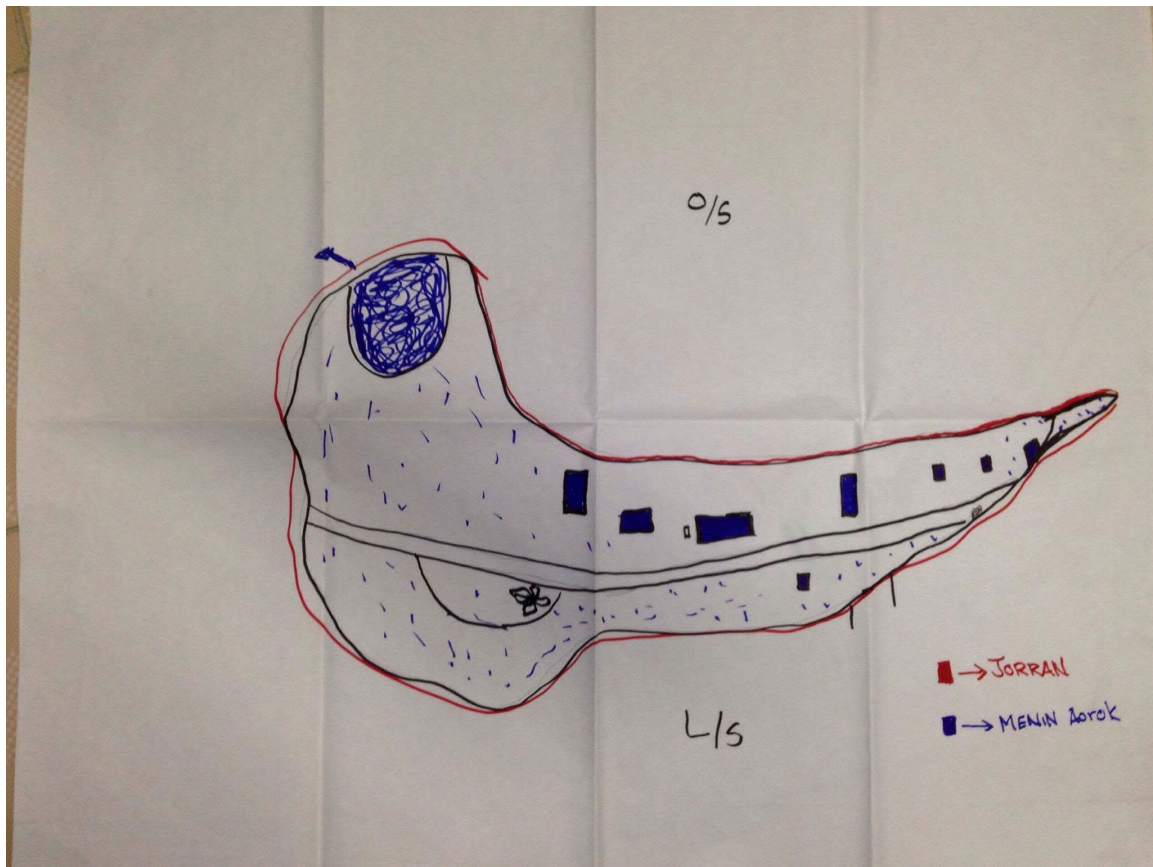
CADRE PLUS

Jacky Patrick | Community HVCM Facilitator | WUTMI

## Table of Contents

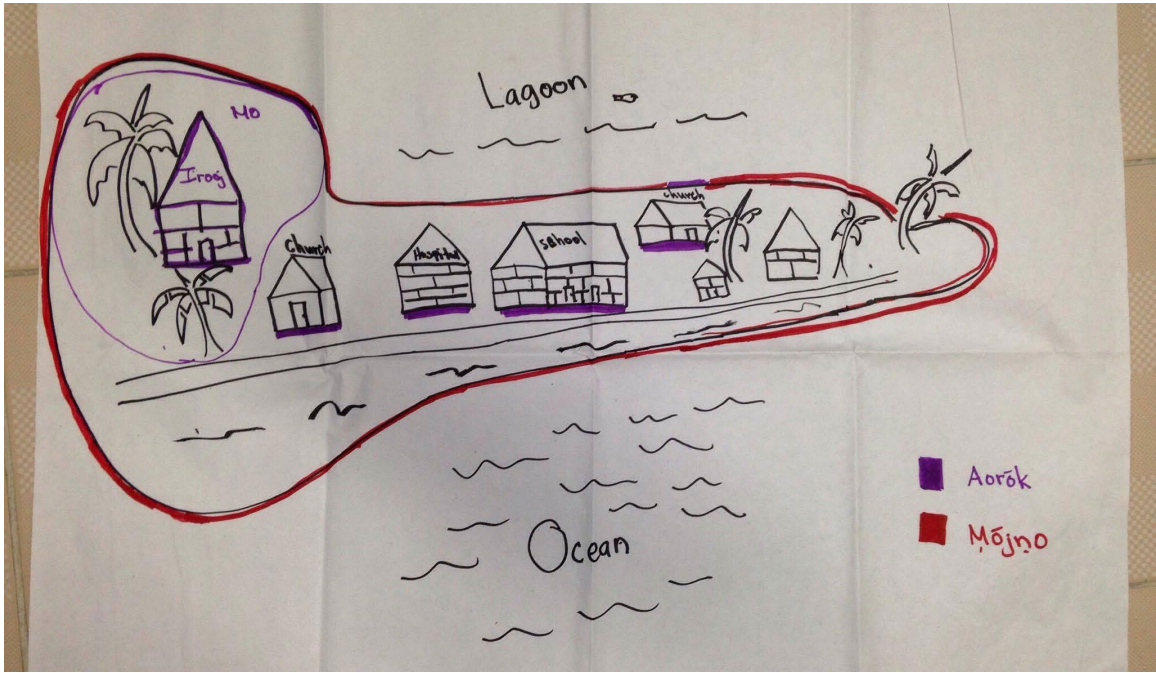
Spatial (overview of main features) .....	2
Hazard and Vulnerabilities Assessment .....	4
Hazard and Capacities Assessment .....	7
Socio-economic factors.....	9
Community Action Plan .....	11
Summary .....	13

## Spatial (overview of main features)

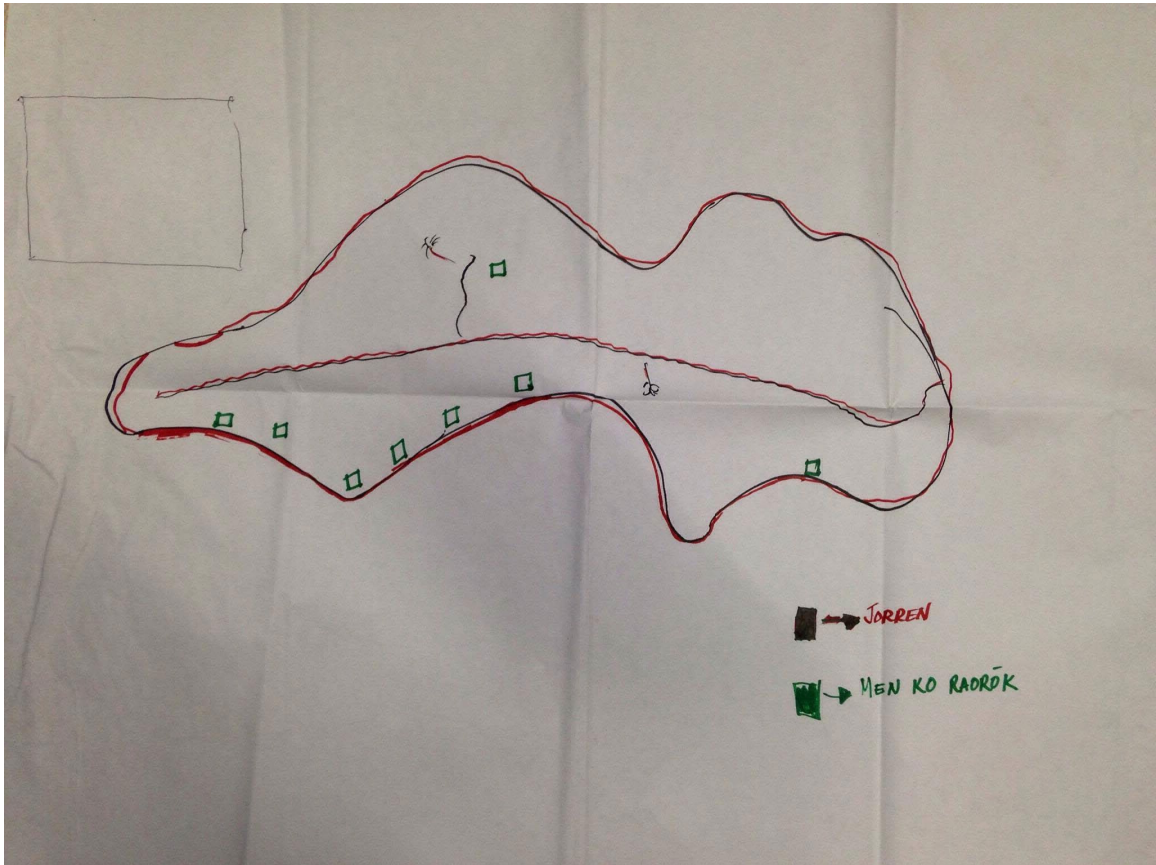


(Youth group map of Ulien, Arno)





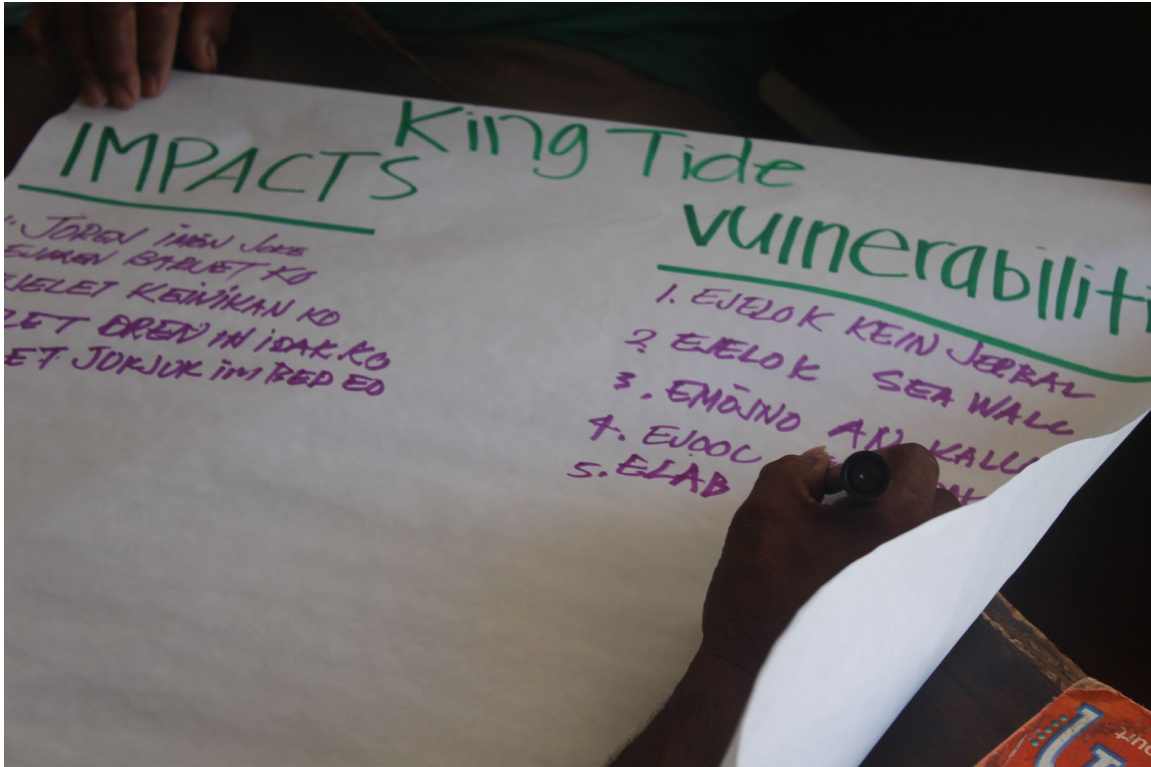
(Women's group map of Ulien, Arno)



(Men's group map of Ulien, Arno)

Ulien is an islet of Arno, Atoll that stretches for nearly a mile long, and less than half of a mile wide. It is approximately two miles north of the Arno community with three smaller islets in between. In the community, there is a health assistant and a dispensary, an elementary school, and two churches. There are small boats that travel to and from Ulien and neighboring islets and other atolls.

## Hazard and Vulnerabilities Assessment



(Men's group listing down the impacts and vulnerabilities of King Tides affecting their community)

Information gathered from the people of Ulien concludes that there are three major disasters that occur the most: droughts, high tides, and epidemics of illnesses/diseases (refer to Table 1 below). Ulien receives disaster warnings through the national radio station, V7AB. Warnings are also made by the Ministry of Health via the Health Assistant

Droughts are what harm the Ulien community the most. The lack of rain affects the crops and wells. As a result, the people would become dependent on imported provisions that don't come by as often as needed. The wells on the islet are exposed to the salty atmosphere, and with no rain, they are prone to contamination. During these times, IOM would provide a reverse osmosis (RO) system to Arno Atoll. However, the RO system would remain in the Arno, Arno community. Therefore, the people on Ulien have to go by boat to fetch water in Arno, Arno and may do this many times in a week as the water they fetch does not last a week. Storage containers are not enough to fetch large quantity of water, and would be heavier to transport. Another issue that is raised during drought is the widespread of illnesses caused when there is no water to wash to

ensure good hygiene management. There are not enough materials to clean the water, wells, or the community.

High tides are also a main cause of distress in Ulien. Houses and crops become damaged when waves wash over the land. The fruits become weak to supply the whole village. There are not enough tools and machinery to renovate or replant. Also, there are not enough equipment to clean up the community when debris washes up and contaminates the land and wells. Over the years, the Ulien community are noticing land erosion due to the rise in sea level. No coastal protection has been developed to protect the land from being erosion.

Ulien have faced widespread of diseases that devastate the community. There have been many outbreaks, though the ones that the locals can remember clearly are Chikungunya of 2015, and Dengue Fever of 2016. Fortunately, there is a health assistant and dispensary. However, when these diseases spread, there were not enough medication in stock, nor were there enough hygienic products to protect themselves from spreading the illnesses. Tables below depict various impacts and vulnerabilities of the three hazards that affect Ulien the most.

<b>Table 1/A: Hazard Assessment</b>		
	1. Hazard type	Drought
	2. Warning sign	Crops/plants damaged
	3. Forewarning	Radio: V7AB announcement
	4. Speed of onset	Slow
	5. Frequency	
	6. When	1983 2016
	7. Duration	
	8. Extent	Relocation to find provisions Illnesses/diseases spread in unclean atmosphere

<b>Table 1/B: Hazard Assessment</b>		
	1. Hazard type	High tides
	2. Warning sign	Sudden rise in sea level
	3. Forewarning	Radio: V7AB announcement
	4. Speed of onset	Rapid
	5. Frequency	Seasonal
	6. When	2015
	7. Duration	
	8. Extent	Houses damaged Erosion Crops and wells contaminated

	1. Hazard type	Epidemic of illness/disease
	2. Warning sign	Many cases of the illness
	3. Forewarning	MOH announcements Radio: V7AB announcements
	4. Speed of onset	Rapid
	5. Frequency	
	6. When	Chikungunya-2015 Dengue Fever-2016
	7. Duration	
	8. Extent	Epidemics were spread by mosquitoes Pregnant women and children were most vulnerable

<b>Drought Impacts</b>	<b>Vulnerabilities</b>
Fresh water becomes salty	No RO system for the community
Illnesses/diseases spread	Not enough medication on island and awareness about preventative measures
Hunger	Not enough water for crops
Thirst/not enough water	Not enough water containers
Contamination/pollution	Not enough sanitation products

<b>High Tide Impacts</b>	<b>Vulnerabilities</b>
Homes destroyed	No tools to renovate/rebuild
Depletion of shores/land	No seawall
Crops are affected	Weak production of fruits/seeds
Community is polluted/debris everywhere	Not enough tools for community cleanup
Drinking water contaminated	No disinfectants to clean water/water containers

<b>Diseases Impacts</b>	<b>Vulnerabilities</b>
Illnesses spread	Not enough medication on island
“”	Not enough hygiene products



## Hazard and Capacities Assessment



(Youth group presenting Ulien's capacities during times of epidemics)

Though Ulien is faced with many challenges, their strengths are what keeps the community standing. For instance, when epidemics of any disease or illness were to surface, there is a dispensary and health assistant to attend to those affected. If the medicine stock were to run low, there are also local medicines available. Most recent widespread of diseases are passed around by mosquitos. Mosquito coils, nets, and other repellants are available on island.

The people come together to overcome any disaster that may occur. If homes were destroyed, they would gather to help rebuild, and donate any necessities to the affected families. The churches are also a part of Ulien's strengths. The smaller circles or organizations within the churches take part in improving the community with projects such as cleanups and planting new crops.

High tides are the most pressing issue today, as the world is facing global warming and the sea level continues to rise. Fortunately, there are groups within the village that are committed to coastal replantation to help prevent tides or debris washing up onto the land. They are also able to access rocks to create barriers. Some groups involved in such projects are Jined Kibed, Ulien's men's group, and the youth. They also take part in reviving damaged crops with healthy seeds. Homes that are located near the shores are the most vulnerable during high tides, and wound up becoming damaged. However, the people are accustomed to repairing their homes with the wood from the different trees; the coconut palms and pandanus leaves are used to thatch roofs if necessary.



The Ulien community is also fortunate to have a dispensary and health assistant to tend to the ill. Diseases and illnesses spread by mosquitoes are the most common in the village. Luckily, mosquito repellants are easily found in the local stores, and many households own mosquito nets. Pink eye is another common illness that is spread around the community, especially during droughts. There are other illnesses that can be more serious that affect the body's main organs. In just about any case of sickness, there are traditional methods and remedies available to the locals.

Droughts have the most devastating outcomes. With no rain for months at a time, the locals ration the water that is left in the wells. During the drought in year 2016, a reverse osmosis system was placed in the Arno, Arno community by IOM. Ulien locals owned boats and were able to make trips to retrieve water when necessary.

<b>High Tide Impacts</b>	<b>Capacities</b>
Crops damaged	Seeds for replantation
Homes destroyed	Trees, coconut palms, pandanus leaves to reconstruct/rebuild homes
Depletion of shores	Rocks to create barrier/seawall
Drinking water becomes contaminated	Boats to search for water in neighboring communities
Flooding	Floatation devices available
Illnesses/diseases spread	Doctor

<b>Diseases Impacts</b>	<b>Capacities</b>
Pink Eye	Dispensary/medicines accessible
Diseases from mosquitos	Repellants, nets available
Amoebic dysentery	Sanitation products
Unclean water	Can boil water
Illnesses that affect main organs	Local medicine

<b>Drought Impacts</b>	<b>Capacities</b>
No rain	Wells
Illnesses spread	Doctor on island
Crops are weak	Seeds to replant

Hunger	Local foods available (can be preserved)
No water	Boat available to find water in neighboring communities

## Socio-economic factors



(Ulien Lagoon view- Phillip Jessup)

There are over 200 people who reside in the community of Ulien, Arno. Their main source of income is from fishing and handicraft making, but mostly from copra making. Droughts have been one of the main concerns; luckily, the national Disaster Office has provided a community water catchment. The local resources that this community depends on are the ocean for food, trees for building houses, local foods, and pandanus for making handicrafts. The chief of Ulien has created strong organization among the people. The councilmen of Arno are scattered amongst the atoll; therefore, everyone abides by the chief's decisions.

Though the chief runs a lively village, the locals face challenges caused by the changes in climate. Droughts have left plants to be malnourished to the point where the fruits and crops are deformed, and cannot supply enough for the whole community. The shortage of water catchments resulted in lack of water during the dry season, as well. Even though an RO system was set up in the Arno, Arno community, and boats were available to retrieve water during the drought, one trip

couldn't supply enough water for one week. Global warming and ocean acidification has contributed to the reduction of fish in Ulien waters.

Even with all the challenges the locals encounter, smaller groups within the community have built strong foundations to hold up the community. Church groups have the most influence: men, women, and youth are the three main categories. These groups are meant to help unite the community. Organizations formed outside of the churches would include WUTMI and Jined Kibed, both centered on empowering Marshallese women. These groups have participated in projects to help the community. One example would be Jined Kibed and their coastal replantation project to help decrease the impacts made by high tides. They have also taken part in replanting crops in areas affected by droughts. At the end of each day, everyone works together to keep the community functioning.

## Community Action Plan

What	When	Who
1. [unclear]	1. NO	1. [unclear]
2. Ukok dan	2. NO	2. [unclear]
3. Pump (water)	3. NO	3. [unclear]
4. Seawall	4. YES	4. Comm. Leaders Youth Foreign Embassies NDMO, EPA WUTMI, IOM
5. Mon Ko	5. NO	5. Head teacher Comm. Leaders Land Owners Kien, WUTMI, IOM, NDMO
6. Wa (tina)	6. NO	6. Comm. Leaders
7. Kein Kenno	7. NO	7. Jined Kiped Foreign Embassies IOM, WUTMI, Kien
8. Bathroom	8. NO	8. Communications Team NTA, NDMO, WUTMI, IOM
9. Wa (pickup)	9. NO	9. Comm. Leader Men's group Community WUTMI, IOM Kien, Foreign Embassies, EPA
10. Kein Karreo	10. NO	
10. Comm. Leaders		
EPA, MCH RND, Public Works, Kien		

When: 2017, 4.2017, 5. Jun 2017 \* (Summer)

All plans made by the Ulien community have been set to take place during the year of 2017. The tables below depict the actions that are to take place within the year.

Brown	Plans for drought
Purple	Plans for high tides
Blue	Plans for typhoon



What can be done?	Who's responsible (inside community)?	Outside of community	When to be implemented
Water catchment	Men's circle, water monitors	Foreign embassies, national government	2017
RO System	Men's circle, water monitors	Foreign embassies, national government	2017
Water pump	Men's circle, water monitors	Foreign embassies, national government	2017
Seawall	Community leaders, youth	Foreign embassies, Disaster office, EPA, WUTMI, IOM	2017
Evacuation center	Shelter monitors, head teacher, community leaders, land owners	National government, WUTMI, IOM, Disaster office	Summer 2017
Boat	Community leaders, Jined Kiped	Foreign embassies, IOM, WUTMI, national government	2017
Communication devices	Communications team	NTA, Disaster office, WUTMI, IOM	2017
Latrines	Community leaders, men's circle, community	WUTMI, IOM, national government, foreign embassies, EPA	2017
Pickup truck	Community leaders, Jined Kiped	Foreign embassies, IOM, WUTMI, national government	2017
Cleaning tools/materials	Community leaders	EPA, MOH, MRND, Public works, national government	2017

## Summary



(Ulien community during HVCM)

The organization in the community is very strong under the ruling of the local Chief, and the people work very well with each other. The participants were very enthusiastic about the HVCM exercises. Everything went according to schedule; the exercises were finished within three days. Participants were very active and they all took part answering every question asked about the hazards that have affected the village. It was not hard to find volunteers to tour the team around the island to visit the vulnerable and most important areas. To conclude, the HVCM exercises in Ulien, Arno were a success.