

Trip report from Nonouti:

Date: 22nd November to 11 December 2017

Arrival date in Nonouti: 23rd November, 2017

Officers: Tarateiti.Uriam.Timiti (community based fisheries management officer), Bwebwenikai. Rabwere (Senior Fisheries Assistant)

Report written by: Tarateiti.U.Timiti

Objective: To train and upskill Fisheries Assistant and Fisheries Extension Assistant in community based approaches to fisheries management.

Courtesy call: The team arrived in Nonouti on 23rd November, 2017 around 3pm. Upon arrival, the clerk organized a courtesy meeting with the Mayor. All team members briefed the Mayor and Clerk on the purpose of the visit and the team requested a full council meeting the following day to seek the full support of the island.

Full Council meeting: On the 24th of November, a full council meeting convened with Councillors from all wards on Nonouti, clerk, secretariat, Mayor and representatives from the Unimwane Association known as Te Buro and the women's association. All of the different activities that were to be implemented on Nonouti by the whole team were explained. With community based fisheries management, the officers required one village to trial this approach. Because CBFM is new to Nonouti, the program needed to be rolled out from a small scale to ensure greater success and that was the reason for piloting the approach in only one village. It was made clear to councillors that whichever village that was interested had to give in full support and be committed to this program. The councillors also understood that through this initiative, no allowance or incentives of such, be given as that would enhance the sense of ownership of villagers towards the management of their fisheries. To help councillors make the right decision, a few examples were shared from the successes of the CBFM program in its original pilot sites which were North Tarawa and Butaritari.

After much discussions amongst councillors and argument to be selected, the Council decided to finalize the decision on the chosen village in their next usual Council meeting which occurred on 29th of November. Each councillor was advised to inform and seek the full support from their own respective village first and then report in the next meeting. During the meeting in the preceding week, there was more competition amongst the councillors to be champions of CBFM. The chairman of the meeting conducted a lucky pick and whoever picked CBFM would have the program. As a result, Autukia village became the champion of CBFM in Nonouti.

Recruitment of the Fisheries Extension Assistant: The recruitment of the FEA started with the test on 27th of November and 32 candidates applied while only 26 actually sat the test. The test lasted for 1 hour and 30 minutes and the panellists were the two officers from Fisheries and clerk with the Mayor. After the test, the officers marked the test papers and were supervised the Mayor and Clerk. The marked papers were thoroughly double checked by the officers and the clerk. The test paper was out of 45 marks and questions were generally asking on the basic marine ecosystems, fish biology, issues affecting the marine resources, and also touched briefly on fisheries management and the roles of key

stakeholders as well as key attributes. After long hours of marking, the highest mark was scored by two candidates which was 31.5 out of 45 marks. The officers concluded that an interview must convene the following day. The interview was conducted on the 28th of November and Mayor was the chairman of the interview panel. There were six questions developed and the officers with the clerk delivered the questions. The two candidates were Ms. Agnes Ioane and Mr. Tekanimaiu. Tibwere. An end result was Mr. Tekanimaiu. Tibwere.

Training workshop: Once the Fisheries Extension Assistant officer was confirmed, the training convened from the 29th of November. The training was a three day intensive theory capacity building on various topics. On the first day, the training was about, fish and invertebrate biology, marine ecosystems and their services, reef ecology, Ocean chemistry and issues and human activities affecting the marine resources and fisheries management tools. The second day was about facilitation tools and skills and attitudes and behaviours in the community. On the last day, management planning and more participatory tools were taught and complimented with plenary group discussions and exercises. The theory training concluded with the monitoring tools and selection of indicators to measure success of the management plan.

The first part of the training was very useful in preparing the Fisheries Assistant and the Fisheries extension assistant to implement CBFM and understand community's expectations and mentality. The participants commented that the training was very enriching and applicable in many real life situations. The practical part of the training continued from 4th to 5th of December with the demonstration of a few monitoring tools and preparation to community consultation. Monitoring tools taught were creel survey, Point Intersect Transect (PIT) and Quadrat. The FA and FEA with the officers also drafted the agenda for the community consultation and divided tasks amongst each other on a few presentations to the community.

Community Consultation:

Autukia village is the first village from the airstrip towards south. It is a small village and quite isolated from other villages as it is separated by a long stretch of forest on both ends and located between two causeways. It is also next to the capital village of Nonouti going south. The number of bukinibwai or registered household is 28 (figure TBC). The village is known for its abundant bivalve which has become an important dish in community functions or special occasions or served when there are guests. The koikoi (bivalve) is put in the young coconut with coconut cream and baked in the earth oven. The dish is called 'te ibunroro' and is crucially part of the culture of this village and in fact the team was served with this delicacy on the first day of the visit.

On the 6th of December, the team made their first visit to Autukia village. There were many villagers attending this meeting, the unimwane or elders, women, youth and middle aged men or te rorobuaka. An introduction of the program and the team members was made and then followed by participatory exercises led by the CBFM officer. The villagers were put into four groups which were the elders, women, middle aged men and youth.

There were three exercises run for the day and the main purpose was to prepare the community to draft their own fisheries management plan. The first activity was a flash back, where each group was asked to think years back and write what they remembered back in those days. The length of flash

back years differed for each group, the unimwane group looked back 40 years, while the women 20 years ago, the middle aged men 30 years and the youth 10 years. Each group's perception is summarized in the table below:

Table 1: Shows Perception of different groups on their fishery in the past.

	48 years ago (elders)	30 years ago (Middle aged men)	20 years ago (women)	10 years (youth)
Length of Fishing	In those days, we could fish in only an hour or less			Could catch fish quickly such as bonefish and mullets
Fishing ground/ breeding ground	Fishing ground was very close to the shore and we did not waste time to go further out			Octopus could be harvested from close to shore. Seen lots of turtles nestling
Spawning aggregation	Used to witness many spawning aggregations which meant there were many fish in those days.			
Fishing gears and fishing methods	In those days we used only one gillnet to fish and linked it with coconut leaves to make long gill nets. Used to turn over big stones to catch Inai fish (these fishing methods are believed to lessen the pressure on fish)	No out boat motor, a few gill nets and other fishing gears, no water splashing or te ororo. Only a few use handline fishing	Only a few fishing gears owned by villagers	
Number of households	Number of households was around 10.	Number of households was between 27 to 20 and number of people was around 160.	Only a few people	
Species abundance		Lots of koumara, koikoi, bonefish, goatfish, ark shell, emperors, mullets, te roa and silver biddy.	Lots of fish in the special place called te namo; types of fish were goatfish, roa, bonefish,	Te koikoi or bivalve used to be plenty close to the shoreline. Could catch crab easily. Can still

		Women and children could catch or harvest any kind of marine species for food. In the ocean side lots of fish for the kibe or night fishing.	eel, silver biddy, mango, koikoi and crab.	harvest ark shell nowadays and could see mullets aggregating these days Lots of lobsters and sea cucumber
Preservation		There used to be many households preserved their catches such as salted fish, eel and all kinds of reef and lagoon fish.		
Traditional fishing methods		Traditional fishing method called Tebutongotongo and Teraibaenata used to be practised.	Traditional fishing methods used were Te uarai, te aikaari, te auau	

Table 2: Issues and concerns and Root cause by the four groups

Gender	Issues / concerns	Root cause
Elders	Decline in number of fish	Excessive fishing in one area by lots of people for livelihood
	Some fish are hard to find now such as rabbit fish	Increase of destructive fishing gear
	Hard to see fish aggregating nowadays	Change in culture and attitudes from good to greedy. Freedom of people to take as much fish as they want to feed our families.
Middle aged men	Hard to see fish during spawning season close to the shore	The decline is due to overharvesting
	Decreased catch	Excessive overfishing, no laws to control fishing, and fishing during the spawning aggregation
	Fish is becoming more expensive	Due to the decrease in catch
	Koikoi or bivalve decrease in size when harvested unlike before	Due to overharvest
	Issues are growing	Due to increase in population

Youth	Fish is declining	The use of 1 inch mesh size gillnet
	Decrease in coral reef cover	Destruction of coral reef to make limestone powder for te kouben
	Mangroves, seagrass and coral reef deteriorating health	From polluting the sea with household rubbish and defecation
	crabs declining	Harvesting during the new moon and full moon when they are in spawning season
	Excessive cutting of mangroves	For building materials
Aine	Catch of undersize fish	The use of small mesh gillnets
	Disturbance of fish from water splashing that causes them to move away and find other places to live	Te ororo or water splashing
	Alteration of currents affected the life of most bivalves	building seawall and causeways
	algal bloom and marine life affected by pollution	Throwing of rubbish into the sea such as battery and non-biodegradable rubbish, rusted metal pieces
	Decline in fish abundance	Destruction of mangroves
		Increasing temperature
		Increasing population
		Fishing during the spawning aggregation
		Overfishing
		Use of destructive fishing gears

On the 7th of December, the villagers spent time on management planning. The facilitators allowed the community to work again in their respective groups and drafted a vision of how they would like to see in their fisheries in 20 years' time. Once the visions were obtained, it was the job of the facilitators to merge the different visions into one overarching vision for the whole village. The facilitators seek the endorsement of the community for the final vision.

From the final management plan, their vision was "In 20 years' time, Autukia village will prosper through a well-managed marine resource, cleanliness of village, strong cultural values and support of children to formal education" In order to achieve this vision, the management plan contained actions to address issues and concerns concerning their fishery and beyond.

To continue the momentum and interest of the villagers towards their management plan, the Fisheries Assistant with the Fisheries Extension Assistant will continuously visit the village to monitor their actions. For a start, the villagers wanted to manage a small area to replenish the bivalve stock. The

management plan is adaptive, meaning it can be revised and changed periodically according to the interest of the community. This management plan was drawn and owned by the community themselves.

On the 8th of December, the management plans were printed and copies were given to the chairman, Fisheries Assistant and Fisheries Extension Assistant.

General findings:

- Decline of fish due to the practise of destructive fishing gears and methods: e.g. small mesh gillnets, fishing during the spawning aggregation, te ororo
- Destruction of marine habitats:
 - Seagrass: women usually glean on seagrass and use spoon which remove seagrass
 - Mangrove: used for building materials
 - Coral reef: heavily destructed by making limestone powder for te kouben
- Pollution: People make the sea as their dumping site and also use the beach to defecate
- Loss of traditional fishing methods: People tend to use modern technology to fish and therefore increase fishing effort. Before hardly anyone own OBM but only local canoes.
- Lack of awareness: People do destructive activities because they are not fully aware of the consequences of their actions
- Causeways and Seawalls: Altering current pattern and therefore affecting life cycle of fish and affect the health of most invertebrates.
- Lack of legal support for fisheries management

Recommendations:

- Elders of Autukia village required the team to write a full report on their village and a video showing their progress on fisheries management so that they can showcase to the nation and worldwide.
- Now that Autukia is taking the challenge to trial CBFM on Nonouti, it is important that they are invited to future stakeholders meeting with other CBFM islands to share lessons learned to ensure they are motivated.
- Posters and other learning materials on Fisheries should be provided for awareness and information.
- The performance of the Fisheries Assistant and the Fisheries Extension Assistant in doing community based approaches to fisheries management should not be rated on a scale but much wiser if they provide timely reports. This is a learning process and the success of CBFM depends on the commitment of the villagers and the support of FA and FEA as well as CBFM officer in Tarawa.
- Monitoring of the FEA and FA performance and Autukia village should be done at least thrice a year to ensure ongoing commitment

Conclusion: To conclude, it was clear that Autukia villagers were very interested and committed towards the conservation and management of their fisheries to ensure food security and create more opportunities such as tourism. Fisheries Assistant and Fisheries Extension Assistant are quite confident to continue the work but may need clarification from Coastal Fisheries Division from time to time. The overall output of the trip was very successful and all objectives were achieved.

Appendix:

Evaluation of participants on the workshop training:

- Improved communication skills with the public especially the community.
- Time for training is very short and intensive and participants may forget some of the topics
- Need copies of all the training materials
- Know how to present themselves to the community and how to speak under the maneaba
- Better knowledge on fish biology, invertebrates and the overall marine ecosystem
- Have the ability differentiate between the content and process in basic facilitation.
- Need more clarification on selecting indicators to measure success of actions especially on SMART objectives.
- Realized that facilitators need to prepare well and be knowledgeable especially in scientific background on fisheries.



Figure 1 Photo of Fisheries Assistant to the right Iaira. Mauere and Fisheries Extension Assistant Tekanimaiu. Tibwere at the training workshop



Figure 2 Photo of women of Autukia village discussing their issues and concerns



Figure 3 candidates sitting the test for Fisheries Extension Assistant



Figure 4 Auhia villagers with their management plan