

Tuvalu Fisheries Department Coastal Section Trip Report

Nui and Vaitupu 7th – 29th March 2018, Nukufetau 10th – 20th April 2018



Fakatokaga Namoto, Filipo Makolo, Lotokufaki P Kaitu, Matelina Stuart, Paeniu Lopati, Siale Suamalie, Simeona Italeli, Tautalo Iese (authors alphabetical)



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1 Summary

Between the 7th to the 29th of March 2018, 6 staffs from the coastal division, together with 1 staff from the Administration division undertook a 22 days trip to the central islands to implement fisheries related work. The trip consist of 8 days of fisheries support activities devoted for each island that were purposely aim at Kaupule, Fishermen, Primary schools and Communities of the two central islands namely Nui and Vaitupu .The second part of Metronome Trip 8 commenced on the 10th – 20th April consisting of the same old team excluding one coastal staff who was on leave been replaced by one of our staff in the coastal section. Nukufetau was the last island to the central that was left out in the first lag because of a mechanical problem with the RV Talamoana and also RV Manaui.The team travelled on MV Nivaga III to and from Nukufetau Island. The trip was made possible through financial assistance under the World Bank Pacific Regional Oceans cape Programme (PROP), NAPA II and Coastal Recurrent Budget.

Being the first metronome visit for 2018, this trip was targeted mainly to undertake data collection and find out status of the resources (creel surveys, ciguatera,LMMAs and Island profiles), raise awareness of everyone (community, fishermen and primary schools) and investigate fishing capacity (all resources). We have also conducted workshops focused on FADs, sea safety and reviewed grab bags. Other fisheries related information were also collected by the librarian for archive. The main datasets collected and activities completed were:

- (1) Ciguatera poisoning cases;
- (2) Creel surveys of fishers' catches;
- (3) Locally managed marine area / marine protected area (LMMA/MPA) location;
- (4) Independent counts and measurements of new boat & canoe assets on the island;
- (5) Fisheries assets including condition of the CFC and its assets;
- (6) Awareness Workshops with Fishermen, Community and Primary schools
- (7) Inspection and assessment of FADs
- (8) Collect fisheries related information
- (9) Refreshing training with OIDC; and
- (10) Undertake consultations with Kaupule upon arrival and before leaving each island.

Two new fish poisoning records were found from Vaitupu hospital, three cases in Nukufetau and fish poisoning was not an issue on Nui. There were 3 targeted groups for awareness program such as fishermen, community and primary schools on each island. Overall 110 creel surveys were completed on the three concerned islands with 26, 34 and 50 for Nui, Vaitupu and Nukufetau respectively. A total of 3 waypoints were recorded on Nui but none on Vaitupu as it would be the same waypoints been taken by R2R officers recently. There was a need for alteration in Nukufetau's LMMA coordinates however it needs to be endorsed by the Falekaupule in order to be promulgated. These are the late changes to boundaries of the LMMA/MPA that were recorded using GPS on each site. Traditional management arrangements on each island were quite effective and people respect it. The independent boat and canoe survey found a total of 17 new boats and canoes not counting the survey from last year 2017 (9 in Vaitupu and 8 in Nui). The boat and canoe survey in Nukufetau was slightly different from Nui and Vaitupu whereas in Nukufetau, we surveyed all the old and new boats or canoes with a total number of 88. The condition of CFC in Nui Island was poor and many assets are also in poor condition and require proper maintenance. Unlike CFC in Vaitupu were all in good condition. Nukufetau CFC was also in good



condition but need appropriate maintenance to most of their equipment for full operation. Also seasafety training centred on the use of a Global Positioning System (GPS) and reviewing of grabs bags was made on Vaitupu in which 10 grab bags where checked whilst 5 were yet to check as owners are not present on the island. However, Nui have checked with 9 grab bags and 3 were yet to be checked since the owners did not attend the workshop. Furthermore, 11 grab bags were checked in Nukufetau and 5 bags have not been checked as owners did not attend the awareness workshop. There were no FADs in Nui whereas Vaitupu remains with only one offshore FAD and so as Nukufetau with one offshore FAD. Two fisheries related document were collected called ""Palani kite atafaiga o maumea I koga tai ote fenua mo Vtp, 2007" and "Te fakavae ote Afu o Aliki o Vtp, 2006".



2 Introduction

Regular outer island trips have been incorporated as part of the Coastal Fisheries Section's work plan to closely work with Kaupule and the community in gathering regular information on coastal fisheries and fishery assets. The Departmental sections involved during this metronome trip are the Coastal Section and Administration. It is our mandate under the 2018 work plan to have metronome trips to the Outer Islands in order to execute and fulfil what is supposed to be done.

Most of these trips, at least one per island per year, rely on the regular metronome trips coordinated by the Coastal Section under PROP, NAPA II and Coastal recurrent budget. Four trips have been organised for 2018 to be operated in all of the outer islands:

- Fisheries Metronome trip to the central islands Nui, Vaitupu in March and Nukufetau In April (this report);
- Fisheries Metronome trip to the southern islands, Nukulaelae and Niulakita in May;
- Fisheries Metronome trip in August to visit the three northern islands; and
- Fisheries Metronome to the central islands Nui, Nukufetau & Vaitupu in September-November.

This expedition to the central islands focused on gathering data and carrying out activities in 10 major areas:

- 1. Ciguatera poisoning cases, if any, on the island;
- 2. Creel surveys of fishers' catches;
- 3. Locally managed marine area / marine protected area (LMMA/MPA) location, size and rules
- 4. Independent counts and measurements of boat assets on the island including public and private boats;
- 5. Fisheries assets including condition of the CFC and its assets and any other fisheries infrastructure to add to our understanding of fishing capacity;
- 6. Collection of fisheries related information for island profile work and library archive
- 7. Inspection and assessment of FADs and Memorandum of understanding with Fishers on their use and maintenance;
- 8. Awareness program with the community, schools and fishermen; and
- 9. Consultation meetings with Kaupule members
- 10. Collecting fisheries related documents and island profile work

These activities were designed to provide a basis for the island profiles to be produced for each island. Data on creel surveys, infrastructure and other fisheries management practices were gathered to provide baseline information on the importance of fishing in the community (consultations), fishing capacity (all assets) and state of the resources (ciguatera and creel surveys) but mainly for the formulation of Fisheries Management Plans on all the outer islands. The Sea safety/grab bags and FAD work was carried out by Coastal staff on behalf of Operations and Development section on both islands.

3 Methods

The expedition was run between the dates of 7^{th} to 29^{th} March 2018, using the Fisheries Research vessel, the RV Talamoana and passenger boat MV Manufolau. Second lag was undertaken between $10^{th}-20^{th}$ April on MV Nivaga III. Eight days were planned for each island, allowing sufficient time for 7 people to carry out all parts of the survey, assessment, training, workshop and maintenance work on the three islands. However 1 person (NAPA II Officer under coastal section) from the initial team returned after the completion of our work in Nui island. The trip continued to Vaitupu consisting only 5 coastal staff



and 1 Administration staff (see author list on front cover for officers on the trip). A new staff from coastal replaced one of our old team member who went on leave during our second lag to Nukufetau.

All parts of the work requiring data collections were facilitated by the use of formal datasheets (see Appendix 13). The datasheets provided a structure that ensured all questions could be answered for all surveys on each islands. Some of the datasheets followed SPC protocols previously used on creel surveys and seafood poisoning reports by health professionals or our surveyors. Additional datasheets were developed for attendance at group meetings and the independent boat survey.

Data collected during the surveys were entered into the Coastal Fisheries Database. The centralised database consists of diverse individual types of coastal surveys. The Coastal Fisheries Database (CFD), built as a spilt database in Access 2010, was installed in the Coastal Fisheries centralised server which was based in the main office building.

Awareness program targeting communities, primary schools and fishers were run on each island. Initial and debriefing meetings were also conducted with the Kaupule on each island.

The Health staffs were consulted to determine the number of cases of ciguatera or other types of seafood poisoning over the past few years. If the staff, previously given poisoning report forms (see Section 7.2 on page 16-18), had not completed the form, the affected persons were contacted and interviewed by the team.

Creel surveys were carried out around the island wherever fishers were landing their catch. Many of these tended to be boat landings at the main channel for the island, but there were fishers who cast nets across the reef crest by walking there and other forms of fishing. For each catch landed, data were collected on the vessel (or not) used, costs of fishing (fuel, time, other costs), fishers perceptions and length and weight of all seafoods landed. This included any oceanic fishes, reef fishes, invertebrates or other types of seafood that might be targeted. A total of 20-50 creel surveys was the target for each island.

The Locally Managed Marine Area (LMMA/MPA) on Nui Island was visited and its boundaries were recorded using a GPS. For Vaitupu's LMMA, we did find out a confirmation from the community first during the community awareness workshop whether there is any change with their LMMA boundaries after the recent waypoints been marked by R2R Project. However, Vaitupu and Nukufetau LMMA maintained its original boundaries and size as before.

The independent boat survey was carried out during Sundays where there was no fishermen on the island were likely to be fishing unlike for Nukufetau, we did the survey on a Monday as agreed during our first consultation meeting with Kaupule. At that time all of the Coastal Fisheries Team went out together as a team and combed the island to locate every new boat they could with the assistance from the data collector. At that time, they measured the length of the boat and recorded its materials (but not power) along with a GPS reading.

A full condition and assets survey of the CFCs was carried out on each island during this trip. Some photos of CFC condition were taken as evidence of what the condition was in reality.

In addition, the workshops on sea safety and FADs, reviewing of grab bags and GPS were carried out by Coastal Team.



Moreover, fisheries related information was vastly collected from Kaupule members, communities, fishermen and old people on the islands.

4 Results & Data storage

4.1 Ciguatera

No cases were found from hospital on Nui Island while 2 cases of CFP were found in Vaitupu Island and 3 cases on Nukufetau.

4.2 Creel Survey

At Nui, 26 creel data were collected, 34 creel data for Vaitupu Island and 50 samples were collected on Nukufetau.

4.3 LMMA/MPA Assessment

Demarcation of LMMA boundaries: 3 GPS waypoints were collected from Nui and none from Vaitupu; however Vaitupu LMMA boundaries would definitely be using the same coordinates that have been plotted by R2R Project. A draft by-law for Vaitupu was approved in September 2007 and the drafted by-law was sent to the Attorney General office for review. Nui have already formulated their by-law but had not been formalised, relying instead on traditional oral rules. Nukufetau's LMMA was still the same as of what was lately taken by R2R officers. There was a need arise during the community workshop to make a change to their LMMA boundary; however, this has to be initially approved by Falekaupule before it is publicised.

4.4 Independent Boat Survey

The surveys found 9 boats and canoes on Vaitupu and a total of 8 new boats and canoes on Nui.A total of 88 boats and canoes were found in Nukufetau according to our survey findings.

Table 1: Boats and canoes counted on each island

Island name	Aluminium dingy	Aluminium Canoe	Wooden dingy	Wooden Canoe	Fibreglass dingy	Total
Vaitupu	0	0	1	8	0	9
Nui	3	0	0	5	0	8
Nukufetau	49	0	14	20	5	88

4.5 Fisheries assets & CFC

On 11th March an assessment of assets at Nui CFC was carried out. The status of the CFC on Nui is generally very poor and requires proper maintenance work to the building and some of the facilities that are hosted by the centre (Figure 4.5.1). In order to improve the centre, it will require further technical assistance on building the capacity of staff and management systems. Below are the key assets recorded at the site.

The team also did an assessment for Vaitupu CFC and all assets were in good condition. The general manager shared some of the issues they faced with marketing as fishermen do not agree with their market prices. On the other hand, one fisherman is selling his fish at a low price compared to the rest of the fishermen association hence influencing other fishermen to become unsteady with their selling prices. Ice maker machine is functioning well conversely it is occasionally used during funerals, weddings



and if there is a need by Motufoua Secondary school. We also paid a visit to Nukufetau CFC in which we found out that it is located on an islet called Motuloto. We managed to exchange views with the general manager of CFC that he shared about the selling price (\$3.30/kg) and buying price (\$3.00/kg) from fishermen. The only post harvesting method they use nowadays is salting fish whereas the price is a \$10.00/kg for salt fish. A total of 6 freezers were installed in the first time though 3 fridges were stored in the CFC centre while the other 3 have been taken to the main settlement and were placed in the Fish Market for fish storage. The main building is in good condition regardless further maintenance of the centre so that sea spray would not escape through damaging all the resources inside the CFC.

Figure 4.5.1: CFC Assets Assessment





4.6 Sea Safety Training

Sea safety training was delivered on the three islands. Nine safety grab bags were checked on Nui and three yet to be checked as owners of grab bags did not attend the workshop. On Vaitupu, ten bags were reviewed by the team and five bags were yet to be checked since possessors were in Funafuti. The same review process was repeated in Nukufetau and we managed to check 11 grab bags whilst 5 grab bags were not checked due to absence of owners. We also conducted GPS training with fishermen associations on the three islands refreshing them on how to use the GPS device anytime and anywhere they go. The main thought behind this training was for fishermen not to keep their GPS as a jewel but to use it with the purpose of distributing these devices to them.



Figure 1: Fishermen Awareness Workshop

4.7 FAD maintenance

FAD maintenance: FAD maintenance work was undertaken by the team on Vaitupu Island. Two FADs were deployed on each island in 2012, and we discovered that only 1 offshore FAD still active on Vaitupu Island and no FADs left on Nui Island. Nukufetau have one active offshore FAD remaining on the island whereby fisheries team visited the FAD and attached coconut leaves to it. Fisheries team together with some fishermen went out to install coconut leaves onto the FAD in Vaitupu and at the same time showing them how to do it by themselves in future. Moreover, fisheries team with one youth from Nukufetau went to visit their FAD and also attached the coconut leaves for the purpose of aggregating fish at the FAD.





4.8 Other work

School Awareness: A school awareness activity was delivered to educate children of Class 5 to Form 3 for each island on the following topics; Coastal Fisheries and Climate change, Ciguatera Fish Poisoning and Marine Biodiversity and Food Chain. A huge number of students turned up with happy faces showing high interest in listening and absorbing the information delivered to them. Questions were asked by team facilitators to the students and it reveals that they have captured the main messages better. Teachers who attended showed their gratitude and appreciations to the team for organising such awareness programs and recommended for the continuation of having this kind of activity with school kids onwards.



Community Awareness: Comprehensive and detailed awareness were conducted on Nui, Vaitupu and Nukufetau to build capacity level of community members in terms of fisheries related issues. Topics covered during the awareness workshop were deep briefing of the Creel Report 2, Ciguatera Fish Poisoning and a short talk on Locally Managed Marine Areas. Little number of community members from Nui attended the workshop compared to a high number of people turned up in Vaitupu and Nukufetau. Questions and comments raised in the workshop will be attached in Issues, Recommendations and Appendix of the Report.





Outer Island Refreshing Training with Data collector: The refreshing training with three officers was conducted on the first day of arrival onto the island. Four hours approximately was allocated for this training session by going through the Creel Datasheet, clearly explaining on what needs to improve and also emphasize errors that were highlighted from data verification for Creel Report 2. Moreover, we shared with them easy and powerful tips that might accelerate them with their task. We acknowledge the great assistance provided by the officer on each island during our stay.

Collection of Fisheries related information and Island Profile Work: The librarian managed to collect two documents from Vaitupu namely, "Palani kite atafaiga o maumea I koga tai ote fenua mo Vtp, 2007" and "Te fakavae ote Afu o Aliki o Vtp, 2006". No documents have been collected in Nui as most of their papers were still pending for approval from the Falekaupule and so as on Nukufetau .Island profile work has also been undertaking in three islands whereby fisheries staff interviewed Kaupule members and other key persons whom we can get reliable and true information from.

Visit to Nukufetau LMMA: A request was raised during the community consultation for fisheries team to find out species richness of their LMMA in terms of taking videos for them to see. However, the request was made possible where fisheries team went out on a boat with one youth to take short underwater videos. Two officers from the team conducted these video scenes under water inside and outside of the LMMA for fish abundance comparison. Even though this would be the first time to have such videos, it would be very difficult to make a hypothesis or real answer to the request with our findings since there were no previous videos been taken in the past for comparison over time. According to the videos, the amount of fish inside the LMMA is at average compared to the outside which is less but will only see fish schools at areas with coral cover. Some important indicators we saw were the turtles are quite tame and fish abundance is high in places with high coral cover.

5. Issues

The following are the issues raised by the fishermen during the Workshop training with the Fishermen of the island of Nui and additional issues from the Kaupule.

These issues consist of:

No deployed FADs functioning on the island due to the misinformed, being unaware and the
lack of understanding and training on the management and monitoring of the FADs so they
become beneficial for local fishermen. This is due to the lack of awareness, training and
capacity building in the community for fishermen and the local community to be fully



- informed, and well-aware as well as recognizing the important of FADs for the daily subsistence of the people.
- 2. The possibility of providing more grab bags to assist with fishermen who are active fishers but do not have the privilege of owning a bag. This is because some of the fishermen on the island were not present on the island during the distribution of grab bags among the fishermen on the island but they do have boats or canoes that they use for fishing on a daily to a weekly basis.
- 3. Some concerns were raised on the ownership of the grab bag, considering cases where a deceased grab bag owner and one that spends most of his time on the capital island of Funafuti. The group of fishermen wanted clarification on these two main issue whether the grab bag remains in the family, if the owner have passed but have relatives that are using his boat as a source of living or for income, or does the bag have to be returned to its rightful ownership before another designated owner is assigned from those on the island that currently do not possess a grab bag. Also, considering the fishermen who owns a grab bag that is mostly not on the island but the family members are using his grab bag, if the grab bag is meant for the family to keep or only for assigned individual fisherman.
- 4. The possibility of sharing the grab bags or content of the bag with fishermen who do not own a grab bag. However, from this view, others raised concern that though this may be beneficial especially to the safety of the fishermen, others may misuse the content of the bag and damage the equipment as it is not rightfully registered under their name, thus are not fully responsible for missing items or damaged equipment.
- 5. Lack of understanding of who is responsible
- 6. The uncooperative of the Kaupule and the fisheries in terms of financial grant matters in accessing the available funds that they are entitled to.
- 7. The use of FADs by fleet vessels deployed for the local island people, who is of concern to the people and TFD should take into account on ways to go about solving this issue.
- 8. The possibility of applying the system of passing on the grab bags to the next kin when the rightful owner of the grab bag is a deceased.
- 9. TFD to reconsider bags that never been used for fishermen without grab bags but are mainly fishing daily or recurrently during from land in the open sea for safety.
- 10. Is there a fund allocated for the manual labour of the arrival of materials (in short supply) for the new Training centre on the island without prior notice and finding a place for storage.
- 11. The price control of fish in the market fully controlled by the Kaupule without considering profit for the fishermen and the expenses in terms of fuel.

The following issues were raised by the community of Vaitupu during the awareness workshop and training activities.

- 1. The concern on the population as the demand from families exceeds the supply on a daily basis.
- 2. The need for TFD to collect more creel results.
- 3. TFD to address the spawning season for epinephelus groupers so that the fishermen are aware on the spawning seasons for that particular species.
- 4. The responsible party to look after the FADs on the island
- 5. The late payment for the Data Collector on the island
- 6. Ownership of the grab bags on the island.



- 7. The person responsible for replenishing of items in the grab bags, between the TFD and the owner of the bag.
- 8. The price of the fish market, with the need to consider a control price for the fish market that would benefit fishermen.
- 9. President of the fishermen association addressed the incorporate of some members to decision been made. He enquires for some feedbacks from the fisheries operation and development in regards to the issue.
- 10. President also stressed the idea of having the authority of removing members who are not fully committed to the fishing association upon valid reasons.

The below issues sheltered all aspects from awareness and other sided activities in Nukufetau; Refreshing Training with DC:

- 1. Fishermen does not give specific coordinates for their fishing locations, thus it affects filling the creel survey as they often give out wrong details.
- 2. Network problems as it is often down for a minimum of 2 weeks, thus the creel survey data are not delivered to Funafuti on time, thus affecting her work and pay.
- 3. There is only 1 functioning scanner in the Kaupule that is used by the whole island via the Kaupule clerk, thus often there is delay and it is a major problem in sending the scanned datasheet results to Funafuti.
- 4. The Kaupule is not willing to write comments or feedbacks on the work of the DC. Fishermen Workshop:
- 1. Kaupule often fails to deliver messages to the TFD or collaborate effectively with the group of fishermen on the island, thus requests/queries are not through to the Fisheries as they are not able to get any replies due to such inconvenience.
- 2. Distribution of grab bags, as some of the grab bag owners does not own boats while others who have boats do not own a grab bag for sea safety.
- 3. Insufficient amount of grab bags for all the fishermen on land as other who fish further inland are in need of bags but do not have one in their possession.
- 4. Bylaw for fishermen with boats as some fishermen are not willing to share their boats with the best interest concerning the welfare of the local people such as searching for missing fishermen or local people.
- 5. Fishermen do not follow the procedures and protocols in place by the TFD.
- 6. Cut on the VDS, from \$80,000 to \$20,000.
- 7. Fishermen may misuse the grab bags purchased by Nukufetau if it is lent to various fishermen.
- 8. Usage of the welding machine as the ownership is now under the Kaupule and would not allow fishermen to use the machine.
- 9. Conflicts within the group of fishermen and between the Fishermen on the island and the Kaupule.
- 10. Batteries for the GPS as the batteries sold in shops/canteens on the islands are not long lasting for usage of the tool.

Fisheries:

- 1. Generator or electricity, preferably to have electricity on Motuloto islet as the maintenance for the generator is costly.
- 2. Budget for 2018 is not sufficient (Cut from \$80,000 to \$20,000 AUD)
- 3. Maintenance budget for improving and maintenance of the CFC and in running the Fisheries.
- 4. Conflicts between the Kaupule and the Fisheries.
- 5. Non-functional generator for the running of the CFC, no power supply. Community awareness:
- 1. People are poaching in the LMMA



6 Recommendations

A number of recommendations are made on improvements for future outer islands trips as follows:

- 1. Full review of Creel database is required. There are lots of missing questions and misplace numbers on the database. Some questions on Data sheet may also need some clarification.
- 2. Creel activities on each island should be implemented by at least 3 people (data collector alone cannot do this). It is recommended that the R2R, Data collector and someone from either the Kaupule or the CFC to be trained and delegate to implement creel surveys.
- 3. Lateness of receiving additional imperest. Officer in charge has to be more capable with her/his job
- 4. More awareness should be targeted to fisher, the community, Kaupule members and most importantly with schools.
- 5. OIDC training in Nui required a good translator who can clearly deliver instructions and work information in Nui language.
- 6. Printed CFP form should be available at hospital for recording CFP cases.
- 7. Business plan for Nui has been completely done.
- 8. There is a need to allocate a communication allowance for every metronome trip so that staff can use that package for better contact with work related issues
- Vessel should not be allowed for any charger during metro trip unless case of emergency.
 Priority should be given to team mission and this is to ensure that the team will be able to execute activities according to plans.
- 10.CFC should be refurbished to accommodate visiting staffs to each island.
- 11. Other division of the department should be encouraged to make use of each metro trip.
- 12. Staff should not be more than 6 people to execute activities on the missions.
- 13. Right equipment for mission should be identified (camera, projector, PA system, laptops, Creel equipment)
- 14. Media Department need not to release false information about metronome activities however the key person supposed to contact Media Department has to constantly give updates of the trip
- 15. Both islands need urgent action from Department in developing their Management Plans
- 16. Both islands request the Department to carry out baseline surveys in their lagoon as well as LMMAs they need to know the status of their lagoons and LMMAs
- 17. Both islands requested assistance to undergo dredging in their lagoons due to the issue of hard to catch fish as patch reefs are buried by sand since TC PAM
- 18. Smokefish training is needed by Nukufetau CFC management
- 19. Short notice about the arrival of a vessel to pick up the team is not satisfactory and acceptable to team members as we need enough time to pack up and completely doing what we were called to execute on the outer islands.
- 20. Be mindful that for future metronome trips, whatever are written on the TOR is a must to be fulfilled otherwise we would be having a bad reputation of our Department.
- 21. Delivery of GPS and motorbikes for data collectors is highly needed now for enhancing their normal duties
- 22. Tray scales are highly suggested for swift weighing of reef fishes as they would be in bulk quantities for all data collectors
- 23. Need motorbikes in future Metronome trips to Nukufetau for quick accessible of staff to landing sites since fishermen landed their catches adjacent to their houses
- 24 Request for someone from TFD to come to Nukufetau to weld boats for the fishermen as the Kaupule is not allowing the welding machine to be of use to the fishermen.



- 25. The Group of Fishermen of Nukufetau wanted and have all agreed to have a policy in place for the grab bags so that there are no more cases of misusing of the contents of the bags but are solely use for their purpose.
- 26. Nukufetau community requested TFD that they need FADs to be deployed in the lagoon
- 27. Urgent need by Nukufetau Island to have its Management Plan in place for better management of their coastal fisheries
- 28. Nukufetau community seek a little expansion to their LMMA
- 29. GPS Training in Nukufetau
- 30. Small jetty for Nukufetau CFC
- 31. Electricity for the CFC at Motuloto islet
- 32. Is it possible for the Fisheries to order the batteries for the GPS and then allow the fishermen to buy it off for their fishing trip
- 33. Encourage the Kaupule in Nukufetau to work together and assist the DC especially when encountering technical problems.
- 34. New additional 5 grab bags purchased by Nukufetau, to remain under the ownership of the Kaupule and can be lended to fishermen without grab bags and return after fishing.

7. Appendix

7.1 Attendance sheet for Groups



Tuvalu Fisheries

4.6 Attendance sheet for Groups



Tuvalu Fisheries Survey Data Sheets

Attendance at Meetings				
Target Group:		Any group meeting		
Island: Vaitupu	Date: 12/03/2018	Surveyor 1:	Surveyor 2:	
Latitude (DD):		Longitude (DD):		

Name	Gender	Age	Occupation	Village	Phone/Email
Teagai	Male	73	Island Chief		
Pokia Kolone	Male	62	Fisherman		
John Talia	Male	64	Fishermen's President		
Silo Moti	Male	70	Fisherman		
Itinua Selava	Male	67	Fisherman		
Matakea Lotomau	Male	22	Fisherman		



Tegei	Male	60	Fisherman			
Lapaula Etimoni	Male	37	Fisherman			
Sosene File	Male	37	Fisherman			
Manatoa	Male	55	Fisherman			
Samalu Katepu	Male	54	Fisherman			
Viliamu Topai	Male	32	Fisherman			
Taalapa Siona	Male	59	Fisherman			
Ketala Tanei	Male	47	Fisherman			
Lepaio Tanei	Male	50	Fisherman			
Iutana John	Male	22	Fisherman			
	THANK YOU					

Attendance at Meetings			
Target Group: Fishermen		Any group meeting	
Island: Nui	Date: 19/03/2017	Surveyor 1: Lotokufaki, Siale, Simeona, Paeniu, Tautalo, & Fakatokaga	Surveyor 2:
Latitude (DD):		Longitude (DD):	

Name	Gender	Age	Occupation	Village	Phone/Email
Papua Ulisese	Male	44	Island Secretary		
lafeta Puafuti	Male	49	Fisher		
Ala lolesi	Male	69	Fisher		
Malua Kilifi	Male	59	Fisher		
Alo Seluka	Male	53	Fisher		
Tuiteke Lolesi	Male	62	Fisher		



Teuo Neinei	Male	58	Fisher		
Tealava Ulika	Male	26	Fisher		
Kausasa Neinei	Male	50	Fisher		
Konai Taulialia	Male	49	Fisher		
Okelani Palaki	Male	63	Fisher		
Maselusi Boream	Male	51	Fisher		
Tepaa Tiei	Male	50	Fisher		
Kesu Iolesi	Male	60	Fisher		
Kiteli Vaeama	Male	37			
Tili Kulaliki	Male	48			
THANK YOU					



Consultation with Nukufetau Kaupule

#	NAME	GENDER	AFFILIATION
1	Suetusi	Male	Kaupule member



2	Filioma	Male	Head of Council
3	Lavasaki	Male	Kaupule member
4	Natano	Male	Kaupule member
5	Kiuti	Male	Kaupule member
6	Tilaima	Male	Kaupule Secretary
7	Siale S	Male	SFO Coastal Management
8	Tautalo I	Female	Fisheries Officer NAPA II
9	Lotokufaki P	Female	SFO Coastal Management
10	Fakatokaga N	Female	FO Coastal Management
11	Filipo M	Male	FO Resource Assesement&Monitoring
			FO Resource
12	Paeniu L	Male	Assesement&Monitoring
			Fisheries Librarian & Public Relation
13	Matelina S	Female	Officer
14			
15			



Awareness Activity with Nukufetau Fishermen

#	NAME	GENDER	AFFILIATION	DOB
1	Afatala T	Female	Fisherwoman	27/7/67
2	Kausea F	Male	Fisherman	8/7/73
3	Kiasi Logologo	Male	Fisherman	23/5/51



4	Simona Luuni	Male	Fisherman	16/12/82
5	Penaia Sauni	Male	Fisherman	29/6/63
6	Tusitapu Maitoga	Male	Fisherman	3/6/87
7	Aletima Ianuali	Male	Fisherman	11/2/51
8	Famasino Pokia	Male	Fisherman	21/9/60
9	Mainaga Nikotemo	Male	Fisherman	8/6/65
10	Kaiga Mesako	Male	Fisherman	24/7/84
11	Toluono Tusela	Male	Fisherman	16/5/89
12	Taukiei Sakalua	Male	Fisherman	19/5/64
13	Makesi Lipua	Male	Fisherman	27/9/84
14	Letia Vatau	Male	Fishermen's President	12/11/53
15	Falani Malua	Male	Fisherman	19/7/70
16	Loneesi	Male	Fisherman	09/1/56
17	Filipo Makolo	Male	FO	13/9/89
18	Paeniu Lopati	Male	FO	24/1/88
19	Tautalo lese	Female	FONAPA II	19/10/95
20	Matelina Stuart	Female	FL&PR Officer	26/2/86
21				

7.2 Minutes

Date: 12th April 2018

Fishermen Programme (Nukufetau Island)

TO DO: pay \$100 to Aletima for the using of the maneapa

Commences at 9.00am

Programme:

- 1. Greeting
- 2. Prayer
- 3. Presentations
- 4. GPS Training



5. Review status of grab bags

Prayer by Letia.

Filipo presents on Sea Safety (Tausiga tou ola ite tai).

- Reminding the fishermen on the importance of sea safety for ensuring your security and livelihood.
- Taking care of the fishing materials
- Taking care of the boat, to ensure that nothing will happen while you are away from land
- Taking necessary items to ensure safety on the sea
- It is important not to take for granted the little things that will save our lives

Filipo opens the floor to the fishermen for discussion.

One fisherman ask (Letia) from the fishermen queries on knowing the possible farthest the distance of using the walkie talkie. Paeniu replies that the distance in which the walkie talkie can be used depends on the strength of the battery as well. Thus, Filipo encourages to consistently change the batteries when they know they are low, or to charge if the batteries are chargeable. Moving on to FADs, Filipo reminds and encourage the fishermen to work together instead of competing on whose responsible for looking after the FADs and in tying the coconut leaves on the FADs in attracting various fish species.

Fishermen not to take lightly tools that are provided by the Fisheries as they are costly and often imported from far countries and those who damage the FADs will have to pay fines or serve in prison for an approximate 3 months.

He requests for some black ropes to help in tying the coconut leaves as he no longer has them, from fishing nets from the ships to help in tying the coconut leaves to the FADs. He mostly visits the FADs every 3 months to tie coconut leaves but has not been able to do so, as he no longer has nets or ropes for tying. Thus, he is kindly requesting if there can be an assistance in the supply of ropes for tying the coconut leaves to the FADs. He is seeking for some sort of assistance as other people are negligence but still uses the FADs for fishing.

Paeniu replied and explain not to add other type of drifting materials that are dense as the FAD, its structure have been designed in a way the bottom (anchorage) to support the drifting part of the FAD.

Another guy, asks who is responsible for getting the report to the Fishermen?

Filipo replied to the question that the Kaupule is the working body for the Fishermen, thus reports can be directly to the Kaupule, or work together with the Kaupule in getting the report to the Fisheries.

Also, another member brought up the fact that often Kaupule fails to deliver messages across or collaborate effectively, thus often requests or queries are not through to the Fisheries and they are not able to get any replies back due to such inconvenience. Filipo explained that the main purpose of the Metronome Trip include some of the following activities carried out by the Coastal Section of the TFD.

These are:



- Reviewing of PLB numbers
- Checking the total number of safety grab bags on island
- Confirm sites for the Installation of radio beacons
- Review MOU for FADs
- GPS Training

After the presentation and a few discussions among the Coastal staffs and the Nukufetau group of fishermen, the fishermen were asked to get ready for the reviewing of grab bags. This activity was done by a team of four Coastal staff members which consists of Paeniu, Filipo, Matelina and Tautalo. The team was split up in two, in which Paeniu paired up with Tautalo, and Matelina with Filipo in reviewing the grab bags for the fishermen.

Filipo concluded the reviewing of grab bags and thank all the fishermen for bringing their grab bags along for review in ensuring their sea safety when out on the sea.

Then opens up the floor for questions, issues and queries.

One fishermen seeks for a possible chance or assistance for those who have bags but are not using the bags, whereas those who do not have bags but are actively fishing. The fault befalls during the distribution of the bags as some have bags but do not own a fishing boat/canoe. He would like to ask for a thorough training in the usage of the bags as most fishermen have bags but are not actively using their bags, which could be due to the lack of capacity and understanding of the tools and equipment inside the bag. Filipo replied that it is possible and the Fisheries are happy to assist the fishermen and the best people to conduct the trainings for the grab bags are the other section in the TFD which is Operation and Development (O&D) Sector which are more trained and capable on assisting with the grab bags.

Matelina raised a question on how the grab bags were distributed.

Letia replied that the bags were distributed to those who were present in the meeting. He commented that it is important that people share the same understanding as the purpose of the bag is to ensure the safety and save the lives of fishermen going out to fish in the open sea.

Some of the fishermen wanted to know how the bags that were brought by the Coastal team be distributed.

Paeniu responded that the bags are still under the ownership of the O&D and Tupulaga will see to it that the bags are distributed properly as it is now brought to the attention of the Fisheries that issue of the distribution of grab bags as some of the bags are with owners that do not own a boat, which is a case that the Fisheries are not aware of.

Letia stressed that it is important that everyone shares the same understanding on such issues. Also, it was not confirmed as to whom the grab bags to be given to.

Another issue raised was the fact that there is not enough grab bags for every fishermen and since grab bags as being reminded were distributed according to those who own boats, say for example, a fishermen does not have a grab bag but would construct a boat in



order to get a grab bag, how would the Fisheries solve or deal with such issue. And keeping in mind, that there are many fishermen and some who fishes out in the open sea but do not use their grab bags at all.

Another fisherman agreed to the issue that there is not enough grab bags as they missed out on the distribution due to being in Funafuti or outside of Tuvalu. However, some of the fishermen whom have in their possession the grab bags but are only fishing in the coastal areas near the main island or in the namo (lagoon side) thus are not in need of a grab bag, but their particular grab bag can be used by those who goes out to the open sea and conducting various type of fishing method.

Filipo retorted that the Fisheries (TFD) will help and give assistance whenever possible.

Letia raised an issue/request if there can be a bylaw for fishermen or fishermen with boats. This is because, there was a man that went missing on another islet nearby and the whole island agreed to all go and search for the missing person. The problem was that it was low tide and all the boats were on the beach or stuck on the reefs, however there was a man fishing in the passage with his boat that can be used by the island for the search but would not budge or allow his boat to be used so that the help and assistance can be quick in locating the missing person.

Is it possible to have a bylaw for such cases as the owner of the boat, owning a boat that is ready to assist but would not consent. This resulted in having to drag boats from the beaches and shoreline right out to the open sea to search for the missing person.

Paeniu encourages the importance of helping one another, as there will be a time we will need someone's help or assistance.

Makisi from the fishermen raised an issue that some people make their own decisions and do not follow the correct procedures in place or seek assistance from the Fisheries which can then result in conflicts with other fishermen or the Kaupule.

He elaborated that the grab bags were distributed alphabetically according to the list of names of fishermen on the island to those present in the meeting, not taking into consideration those with boats or not owning a boat/canoe.

Matelina reiterated that the main idea behind the grab bags was for those who owns boats/canoes and fish out in the open sea further from the mainland for their sea safety.

Another man seeks clarification on the 5 new grab bags seen and how would these be distributed.

Matelina replied that these 5 grab bags were purchased by Nukufetau though these bags would not be distributed first in order to properly train the fishermen whom are to own the bags by the O&D people (Tupulaga's team) and then the bags will be distributed so that the owners are fully capable of using all the bag's content. There is a VDS fund for the islands which is one of the way that could help fishermen in purchasing more bags if needed.

One man raised that it is good to do something, so that the new purchased grab bags are not given to those without boats, if the bags that are already distributed to some fishermen that do not own any boats cannot be given to those with boats whom were not present in the island during the distribution and away on Funafuti due to medical reasons or other personal reasoning.

Another man raised an issue on the VDS fund for the island send to the Kaupule, is that it is unfairness is seen that initially the amount for the Fishermen is 80,000 but now has been cut down to 20,000 and they are holding back the leftover amount of 60,000. Most fishermen agreed if something can be done about this as if it was initially decided to have 80,000 for the Fishermen then to keep that amount instead of cutting it down to use for other uses.



Matelina responded that the thought behind the VDS fund is for the Kaupule and the Fishermen to work together in making use of the given funds for the better state of the Fishermen and Fisheries of Nukufetau.

A man from the audience asked how the grab bags were funded.

Matelina replied that it was the NAPA Project that funded the grab bags and these bags were distributed in collaboration with the Fisheries to assist with the Fishermen on all the islands.

Paeniu added that the main purpose on the fund from the NAPA was to help islands in recovering from the impacts of the Tropical Cyclone Pam.

Another man asked that he heard the new purchased grab bags for Nukufetau are with the Kaupule and will only be lend to assist those going out to the open sea and will be returned after using the bag. He added that if this is the case, he agreed that this is important and fishermen without bags can use these and return them after usage for their sea safety during fishing out in the open sea.

Another man added that he also liked the idea and he agreed to it, mainly because the lives of fishermen are very crucial and the Kaupule can check the contents before lending and upon return.

Another man however, raised the issue that some of the fishermen may not use it appropriately and may end up damaging contents of the bag.

Filipo replied that it is important to look after the contents of the bag, and to care for the bag and its content if under your care. Makisi raised that some of the distributed grab bags have contents that are found elsewhere while the bag is still with the registered owner.

Paeniu replied that the responsibility is with the registered owner of the grab bag and it is his responsibility to care for the bag and its content.

Matelina added that there can be policy in place if needed but this is under the O&D work, and they can assist if needed to have a policy for the grab bags.

Note: The Fishermen of Nukufetau wanted and have agreed to have a policy in place for the grab bags, this is a suggestion raised up and they have all agreed to it to have a policy for the grab bags. The fishermen are aware that the O&D have a trip to the outer islands and would like request that when they arrive, they will have the policy with the fines for all the people if the bags are misused.

Another man from the Fishermen, raised an issue that they do not agree that the Kaupula decreased their amount or will cut down the

Another man from the Fishermen, raised an issue that they do not agree that the Kaupule decreased their amount or will cut down the amount in the future, so if it has been agreed that there is 80,000 allocated for the Fishermen Group then to stick to that amount and they do not accept any more changes in the amount that is for the Fishermen on the island.

Another man raised that there is welding machine but it is not of usage as it does not have a sized roll to be used.

Another man raised that there is conflicts among the fishermen and often suggestions and advices from the Fisheries in Funafuti are often not taken into consideration. There are also conflicts with the Kaupule and often they do not collaborate fairly with the Fishermen group on the island.

Another man raised that it is important to wash the boats and then indicate or mark the spots or areas to be welded.



A man from the fishermen raised that at times, there are procedures in place that are often changed by the Fisheries. This is because, when the O&D team comes to Nukufetau, they do not charge fishermen in welding their boats, but upon their return the Fisheries are charging \$5 per welding.

Makisi replied as he was part of the welding team that the Kaupule were thinking of getting some sort of fund as it is their electricity that is being used for the welding machine. Thus, it is a reasonable price as some fishermen did not bring their boats when the O&D from the TFD were welding all the boats with holes at the same time.

Another member from the fishermen asked if the welding machine should remain under the Kaupule or can be transferred elsewhere as often the Kaupule does not allow the fishermen to use the machine for the purpose it was brought to the island in the first place.

Request from Letia, if it is possible to have someone from the TFD to weld boats as at the moment, the Kaupule is not allowing the welding machine to be of use.

Matelina responded that the Coastal team will pass the issue on to Tupulaga and the O&D Team for their request.

Filipo asks the floor if training is required for the GPS and most of the fishermen replied that they are confident in using the GPS. Thus, the opportunity is open to those who wants extra training on GPS, most welcome to pay a visit to the house of residence on Savave if needed to go through a manual training on using the GPS. He then concludes and thank everyone for availing their time for the workshop, and asks Letia for a closing prayer and to bless the food.

Letia does the closing prayer and thanksgiving for the food.

Lunch and then concluding remarks (11am).

Additional issue (during the Reviewing of Grab bags)

Can the Fisheries order batteries for the GPS and then allow fisheries to buy it off from the island for their personal use as the batteries in shops are not long lasting for usage.

Minutes for Data Collector Refreshing Training

Refreshing Training with the Nukufetau Data Collector, Fuifui Afega (11/04/18, 1 – 2pm)

Siale goes through the Tuvalu Fisheries Creel Datasheets. The most important part is that the creel datasheet is filled completely and without missing information, as all the information are crucial.

Fuifui Afega, DC of Nukufetau raises that one issue is not having a GPS as their family does not own a grab bag thus is not able to record latitude and longitude for the locations.

She asks for clarification on the methods to be listed.

The most important part clarified is that for fishermen to prioritize the methods that a fishermen perform per fishing expenditure. Another part clarified is dividing the catch for subsistence and income, can be in estimates of number then converting it to percentage. Kufaki reminds that using the local language for naming is encouraged and then translated later into the scientific name later. But the

Fisheries are always available if further queries arise due to the naming of fish species.

Siale clarifies that it is important to make use of the reef-book in identifying the fish species.



Moving on to C5, ensuring that the costs per gears are accurate or precisely accurate without giving out wrong information.

One of the issue raised by the DC is that most of the fishermen are not able to give specific coordinates for the locations in which they fish. This is often a personal issue as some of the fishing grounds are passed down from generations and stays within the family, thus are not willing to share the information.

Reminder: Ensuring fishermen especially those who normally perform trolling to take grab bags as their lives depend on it. C7 part, needs to be reviewed to only be questioned once.

Problems:

Network problems, often down for minimum of 2 weeks.

Only 1 scanner working in the Kaupule, thus clerk of the Kaupule (Lelepasi) has the only working scanner on the whole island. Thus, it is a major problem in sending the scanned datasheet results to Funafuti.

Comment from the Kaupule: Needs to follow-up on a written note or feedbacks. The importance of his views on the work of the DC.

Minutes for Community Awareness

7:30- Dinner starts

8:00 – Presentation starts – Kufaki. P. Kaitu

- Presentation of Creel Survey and the needs to why it is being done.(purposes)
- Question- Were all of fishing methods presented done by all fishermen in Tuvalu?
- Answer- Yes but it is categorised with the most practised fishing method in Tuvalu but if there are specific fishing methods that needs to have management plans, then so to have establish plans to manage them.
- Comment- All islands should be skilful in all fishing methods outlined
- Comment :Fisheries should carefully look in to species that are mature enough to eat
- Q- Small fishes are all fished due to needs to earn money-(competition on the island needs to be stopped)
- Q- Will the fish with the hook be affected if you let it go after it is caught?
- Answer- it depends on how deep that fish lives.
- Nothing wrong with that fish at all
- There's a need for a management plan of the island coastal fisheries to conserve resources in our coastal areas.
- Acknowledging the presentation but the important thing is the need to have a management plan for our marine resources on our coastal areas.
- Do we have to let you know whether we need to create that plan or not? (question from the community)
- Q- Management plan- Are there any laws of compensation if anyone goes against the plan?
- Answer- the whole creation of the plan is up with the island.
- A need for more elaboration on the whole creel survey form so that they would fully understand before they go down to make the plan



A need to have FADS in the lagoon

LMMA presentation (Tautalo)

- **LMMA** area needs to have an extension.
- What would be the status of LMMA as of now, needing evidences straight away.
- How would R2R collaborate with the fisheries department?
- Need the LMMA area in hard copy so everyone would see it
- The area is what the island has decided for it to be shaped like, but what would it be exactly like if it were up to fisheries department to plot the LMMA area depending on the richness of the area.
- Need strong by laws to suit violators and who still continue to fish in the LMMAs

Fish Poisoning Presentation (Paeniu)

- What's the name of the first consumer?
- Is there any case where someone would get poisoned after eating Limu?
- What the reason for the Fakamea not having this poisonous thing anymore?
- How would you tell a poisonous fish?
- Will rust matters contribute to fish poisoning?
- FADS- Semese confirmed for this year that there would be FADS to be installed in the lagoon. (to be confirmed)



Fisheries Ponsultation with Nukufetau Kaupule (Pouncil)

MINUTES



[11th April 2018] [11:00hrs] [Nukufetau Island Kaupule]

MEETING CALLED BY	Coastal Sector (Fisheries Department)		
FACILITATOR	Siale S, Paeniu L, Tautalo I, Lotokufaki P, Fakatokaga N,		
	Filipo M		
RAPPORTUER	Matelina M Stuart		
ATTANDEES	List Attached		
ABSENTEES			

Introduction

Filioma (Head of Council) open the meeting discussion. He expresses a warm welcome to the fisher's team.

Lotokufaki P thanks the council members for availing their time, and kindly asked everyone to introduce themselves.

The fisher's team one by one introduce themselves as well as the council members.

Brief with Nukufetau Kaupule: The purpose of the trip

Lotokufaki explained to the council members the purpose of the trip and also shared the metronome trip tentative program of activities that to be run for the eight days on land. She asked the council members for their opinions and approval in discussing and finalised the tentative program.

General Discussion

Filioma (Head of council) give the approval to the team fishers to carry on with their activities according to the tentative program as planned.

Natano (council member) questioned the activity on Sunday on the tentative program which is the boat and canoe survey. He asked to change and to do the mention activity on Monday.

Filioma kindly asked the council secretary to negotiate first with the community island leader on the availability of the community. He then closed the meeting discussion for the day.

Filioma (Head of Council) adjourned the meeting at 12:35pm

MINUTES

[8th March 2018] [08:29hrs] [Nui Island Kaupule]

MEETING CALLED BY	Coastal Sector (Fisheries Department)
FACILITATOR	Lotokufaki P, Siale S, Simeona I, Paeniu L, Tautalo, Fakatokaaga N
RAPPORTUER	Matelina M Stuart
ATTANDEES	Sikope T, Tili, Palamene Anelu, Talanisi Taloka, Papua Ulisese, Makitou Taeia
ABSENTEES Kotema (member of Nui Kaupule)	



1. Introduction

2. **General**

Brief with Nui Kaupule: Purpose of the trip

Lotokufaki Paka first of all talked about the main purpose of the trip to the island. She further emphasizes the roles, activities and responsibilities that the team from the fisheries would be done on land for a period of eight days.

Discussion and approval of purpose of visiting the island

Document attached: *Metronome 8 Tentative program of activities that to be run on the island*. This document describes daily duties and activities that the team would be run while on the island for eight days.

On behalf of the council members, Sikope (Head of Council) has given the approval for the team to carry on with their roles and activities. Sikope also suggested TFD to provide refresh training on utilising of grab bags.

Palemene commented on the DC working days which are 2 days only.

Again Lotokufaki elaborate on the DC working days & as well thanks the council members for their understanding and cooperative.

Meeting adjourned at 9:10am

MINUTES

[13th March 2018] [08:15am] [Manatua Mai Au Falekaupule]

MEETING CALLED BY	Coastal Sector (Fisheries Department)		
FACILITATOR	Lotokufaki P, Siale S, Simeona I, Paeniu L, Tautalo, Fakatokaaga N		
RAPPORTUER	Matelina M Stuart		
ATTANDEES	Nui Fishermen (amt of 16)		
ABSENTEES			

General

Simeona Italeli, introduce the team first and then start off with the workshop training on Terminology of FAD's types and a refresh training on sea safety and GPS training. He also announce that after the training there will be a cross checking of grab bags that were distributed to fishers.



Recommendations/Suggestions & Views of Attendees

- 1. A suggestion to deploy a FAD's in the lagoon with the idea that it would benefit those who are old enough to go out to the open ocean;
- 2. Deployed FAD's on Nui were long gone and was also been reported to Semese Alefaio
- 3. A need for more Grab Bags, yet recommended a provision of more Grab bags for those who do not have one
- 4. Questioning the ownership of the grab bag;
- 5. Need more training & workshops on FAD's;
- 6. A view on sharing the grab bags among fishers who do not have one;
- 7. The concerned on who is the responsible person to report when there's anything go wrong with the, FAD's or any fisheries development, whether them (fishers) to TFD or fishers to the Kaupule (Island Council) & then to TFD?;
- 8. The problem of uncooperative of the Kaupule and the fishers in terms of financial grant matters;
- 9. Need an update on the current condition of the CFC
- 10. A concern on fleet vessels that usually fished on the FAD's that been deployed by the TFD, which is the TFD should take into account;
- 11. A view on applying the system of passing the grab bag to the next of kin when the owner of the grab bag is decease;
- 12. TFD to reconsider that some that being given the grab bags have never or not being used.
- 13. The new CFC will be construct where the old CFC is

Closed off Workshop/Training @ 12:50pm

MINUTES

[19th March 2018] [20:05hrs] [Vaitupu Island Kaupule]

MEETING CALLED BY	Coastal Sector (Fisheries Department)	
FACILITATOR	Lotokufaki P, Siale S, Simeona I, Paeniu L, Fakatokaaga N	
RAPPORTUER	Matelina M Stuart	
ATTANDEES	Vaitupu Community (Amt of 18)	
ABSENTEES		

Lotokufaki Paka started the discussion about the creel survey result of last year 2017. She also explain what is a creel survey, how is being done and why is it important.

Siale Suamalie discussed about the LMMA and the MPA.

While Paeniu Lopati on the other hand discussed about Ciguatera Fish Poisoning



Recommendations/Suggestions/Questions & Views

- 1. The concern on the population of Vtp which is something that the TFD should look at it first that might cause an impact on their coastal resources
- 2. The suggestion for TFD to collect more creel results
- 3. TFD to address the spawning season for epinephelus groupers
- 4. Vaitupu has already established a fishery management plan since 2007
- 5. The idea for TFD to work in cooperate with the R2R project
- 6. How does the TFD indicate that the condition of their reef is in danger?
- 7. A request for TFD to survey the VTP lagoon
- 8. A request to TFD to provide a welding machine for boat maintenance
- 9. A concern on CFP areas; what is the TFD's plan?
- 10. A suggestion for TFD to survey and reconsider these protected areas;
- 11. Can TFD foresee/tell a poison fish;
- 12. A view to emphasize old myths of our ancestors, by telling a poison fish
- 13. Urgent need for a management plan of coastal fisheries.
- 14. For the lagoon, the people need a management plan to preserve and protect the resources in it.

MINUTES

[22nd March 2018] [12: oohrs] [Vaitupu Island Kaupule]

MEETING CALLED BY	Coastal Sector (Fisheries Department)	
FACILITATOR	Lotokufaki P, Siale S, Simeona I, Paeniu L, Fakatokaaga N	
RAPPORTUER	Matelina M Stuart	
ATTANDEES	Kaupule Vaitupu	
ABSENTEES		

General

Charles (Head Council) says words of prayer before the meeting proceed.

Lotokufaki precede the meeting with a word of appreciation and gratitude to every Kaupule and the Secretary who present at the meeting and kindly asked Siale to proceed with findings and results of activities that were done during the eight days on land.



Siale shared the findings of activities and surveys that was been done on land by the TFD team. He further emphasize that there were quite a number of creel survey were done. The team has checked the FAD which is one left and need to work in collaborate with fishermen in taking good care of it. The CFP survey was also carried out and found out two new cases of CFP. The Vtp CFC is still in good condition.

Recommendations/Suggestions/Questions & Views

- The following fish species needed to be preserved;
 - 1. Kasi rod fishing (commonly used)
 - **2.** Te kiokio
 - 3. Tanutanu
 - 4. Milk fish
 - 5. Kapalagi
 - 6. Epinephelus hexagonatus
 - **7.** Tupa
 - 8. Matu
 - **9.** Uu
- Species to preserve in the lagoon are;
 - 1. Kafakafa
 - **2.** Kanase
 - 3. and Turtles
- There is no changes to the Vtp LMMA;
- There is a new protected area on the island, where they conserve coconut crab;
- The kiokio species season, is usually in the middle of the year;
- The epinephelus species season is usually around starting of the year;
- The CFC's ice making machine is not often used;
- A request for TFD to provide equipment for the Vtp CFC:
 - **1.** Freezer
 - 2. Laptops
 - 3. Printers & toners
 - **4.** And computers
- Request for a Fishing Equipment Catalogue and need assistance from the TFD in the ordering process.
- A concern about the DC's pay the problem of receiving it late
- A request to inaugurate the aquaponic on milk fish
- Maintain school awareness during metronome trips



- Request for TFD to deploy more of inshore FAD's, depend on fishermen with canoes;
- Is it possible for fishermen who used canoes for fishing to have grab bags?
- Another concern about the ownership of grab bags Does the Kaupule has the right to the grab bag?
- The concern on replenishing of items in the grab bag is it the TFD or the owner itself is responsible for that?
- A concern on the price of the fish market TFD to consider a control price for fish market
- A request to the team needed a copy of the metronome trip 8 Report

Meeting Adjourned @ 13:55hrs

7.2 Seafood Poisoining Report Form (SPC)



SPC Seafood Poisoning Report Form

This is an electronic form. Please fill the fields or check the boxes using your keyboard and mouse. Text fields will expand to accommodate any amount of text, so do not worry of the space for your answer seems small.

Rei	DO	rt	Fo	rm
	_	_		

Report Form					
Details of person filling in report form					
Name					
Contact Address					
Date		Signature			
Poisoned person's	details				
Name		Sex (M/F)	Į.	Age (yrs)	
Address					
Details of the seafo	od that caused the p	oisoning (tick all that	apply)		
Type of food	Where caught	How preserved	What eaten	How eaten	
Fish	River 🗌	Fresh, no ice	Head _	Raw	
Crab 🗌	Mangrove 🗌	Fresh, iced	Flesh _	Marinated 🗌	
Lobster	Beach	Frozen	Skin _	Cooked	
Other crustacean	Patch reef 🗌	Salted	Liver]	
Gastropod	Lagoon	Dried	Roe _	How many others:	
Bivalve	Outer reef 🗌	Smoked 🗌	Other	Ate this meal?	
	-	6: 11 1	c :t	E II . 13	
	Ocean 📗	Pickled	Specify:	Felt sick?	
Other mollusc	Other	Other	Specify:	Were admitted to	
Specify: Unknown	Specify: Unknown	Specify:	Specify: Unknown	hospital?	
What is the local nam	<u> </u>	Unknown 🔝	UNKNOWN L	J Unknown □	
What is the English na					
Name of vendor or re					
Name of the place it v					
When was the food e			Time:		
	When did you first feel sick? Date: Time: Time:				
When did you mat reer sick:					
Symptoms (tick all that apply)					
Burning or pain when touching cold water Pin pricking sensation on touching water					
Tingling or numbness Strange taste in mouth					
Difficulty or pain urinating Skin itching or red					
Difficulty breathing Excessive salivation Fever / chills					
				Headache	
	ulty talking 🔲	Diarrho	~ Z	Joint aches	
Eye irritation Vomiting Muscle cramps					
Others:					



History					
Have you had seafood poisoning before?			Yes N	0	
How many times?					
Details	When?	Type seafood	Hosp	ital?	How long to recover?
Case 1			Yes 🔲 No 🗀		
Case 2			Yes 🔲 No 🗀		
Case 3			Yes No		
Case 4			Yes 🔲 No 📗		
Case 5			Yes No		
Case 6			Yes No		
Anything y	ou remember about pas	t poisoning?			
Medical o	lata				
Pulse:		Blood pressure:	/	Pupils:	
		Brood procedurer	,		
In case of	death				
Date of de					
Date of de	dlII.				
Autopsy fii	o din acc				
Autopsy III	nuings:				
Other info	rmation:				
Logal	Vn ovvlodao o	nd Daalran	ound Dat	-0	
Local	Knowledge a	ina Backgr	buna Dai	la	
Survey Questionnaire No/					
, -					
Details of	person filling out this	form			
Name:	person ming out this		Job/Position:		
			ווטוורטאונוטוו:		
Contact Ac	iaress.				



Date:	Signature:			
Details of the person interviewed (optional)				
Name:	Sex (M/F): Male Female			
Age (years):	Ethnic Group:			
Questionnaire (tick the boxes where appropriate of	or fill in the blank spaces)			
1. Are you aware of any previous cases of food poison	ing from seafood products Yes 🗌 No 🔲			
among your family and friends?				
2. If so, could you give a rough estimate of the number	r of such cases of food poisoning?			
Yes 🗌 No 🔲 If yes, how ma	any?			
3. Have there been periods or years in which the num	ber of cases has been higher?			
Yes 🗌 No 🔲 If yes, when?				
How would you explain this?				
4. What are the most frequent symptoms of the peop	le who have such food poisoning?			
5. Which seafood products were supposed to have ca	used this seatood poisoning?			
Fish What type of fish?				
Other What type of seafood?				
Don't know	1.2			
6. Where are the toxic seafood products most often c	augnt?			
Ocean Lagoon Others Specify:				

Please return this form to: The Tuvalu Fisheries Department. Thank you.



7.3 Creel Survey (SPC)



Tuvalu Fisheries Creel Survey Data Sheets

Use ONE sheet for each landing met (replicate). This can be a boat or catch basket brought in by gleaners etc. Note that this is presented by slice, to show all the data so you can choose which parts of the information you want to collect.

Date:				Serial / ID Number:						
Island:				Village/Site:						
Surveyor 1:				Surveyor 2:						
Latit	ude (DD):			Longit	:ude (DD):					
C1 B	asic Infor	matio	on on Fishers							
Lead	Fisher's	Name	e:							
Date	of birth:			Gende	er:	☐ Male	☐ Female			
Addr	ess as Vil	lage	/ Town / City:							
Is the	e fisher w	ith o	thers?			☐ Yes	□ No			
→ D	ata on ot	her f	ishers in the landing toda	ау:		i				
#	Fisher's	Nam	e:		DOB (d/m/y)	Gender				
1						☐ Male	☐ Female			
2						☐ Male	☐ Female			
3						☐ Male	☐ Female			
4						☐ Male	☐ Female			
5						☐ Male	☐ Female			
→ Back to Lead fisher:							<u> </u>			
			go fishing per month?							
		,	8			/ month				
How	many mo	onths	a year do you fish							
(i.e. 6	exclude ci	losed	months)			months fished				
Wha	t fishing r	neth	ods do you usually use		Method 1:					
(ovei	r the last	year))?							
Method 2:					Method 3:					
Method 4:					Method 5:					
Whe	re else do	you	land your fish? What ot	her loca	itions?					
(List	by priorit	y and	d use map)							
Most	t often	#	Location			# trips/mo	nth			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1								
	Ψ	2								
		3								



4												
Least often 5												
Why do you go fishing?												
	☐ Sul	osisten	ce 🗆 In	come	□ Bot	h 🗆 C	ther					
Please provide details:	<u>i</u>											
About how much of today's catch will be eaten at home / sold? Home: Sold										%		
What would you expect	as incom	e from	todav's c	atch ox	rerall?			70		70		
What would you expect	ds incom	ic mom	today s c	aten ov	Crair.		\$					
What is your eye-estima	te of the	total w	eight of t	he dav'	s catch?		Υ					
(Estimated by you, not the			O	,						kg		
						i.						
C2 Species composition	/ counts	5										
What is the total count	by speci	es of al	l fishes /	inverte	ebrates /	other I	anded?					
Species name / Group			Number	Sp	ecies na	me / Gr	oup		Numb	Number		
		<u>l</u>		<u>I</u>								
C3 Species sizes and C4	Species	weight	S									
Species Name	· •	·····	catch in	cm and	d all weig	ghts in k	g					
			ng rows f			ch row	fits 5 fish	n. Repea	ıt specie:	s in a		
	new lin		ı need m		ce)			7	· [ī		
	cm	kg	cm	kg	cm	kg	cm	kg	cm	kg		



C5	Effort data for CPUE										
Hov	How many hours spent fishing today? hrs										
Fishing method / gears used for each species group (separate pelagic fish, reef fish, crabs, lobsters etc) and how much they cost the fisher to buy											
#	Species / Group		ds / gea				·			Cost k	ouy
1										\$	
2										\$	
3										\$	
4										\$	
5										\$	
Did	you have any gear	losses du	ıring thi	s fishing	trip? W	hat and	how m	uch to r	eplace o	r repairî	?
#	Gear What loss / damage?								Cost r/r		
1									\$		
2										\$	
3										\$	
4											
5									\$		
Ple	ase list any other co	sts of th	is fishin	g trip. In	clude fu	el, wage	es, ice, f	ood, dri	nk, any c	ther ite	ms
#	Item description									Price	
1										\$	
2										\$	
3										\$	
4										\$	
5										\$	
	at is the distance to			•		•					
(ası	k person to show yo	u on ma _l	_D and dr	aw, we							km
#	Site name				Lat	itude (D	D)	- 1	Longitud	e (DD)	
1											
2											
3											
4											
5											
Wh	at kind of boat used	d today?									
Construction: ☐ Wood ☐ Fibreglass ☐ Plastic ☐ Steel ☐ Concrete											
Type of boat: \square Alia \square Canoe \square Dinghy \square Punt \square Skiff \square Other \square None											
If "	other", what kind o	f boat?									



How is the boat powered?	 □ Sail □ I	nboard Outboard: \Box	2 stroke [☐ 4 stroke			
Length:	Er m	ngine:		hp			
What safety gear do you have on board today? (tick all that apply)	☐ GPS	□ Life jackets □ □ Flares □ Bailors (specify):	•	□ EPIRB			
C7 Perceptions of fishers							
How long have you been fishing?				years			
How long have you been doing this type of fishing?	of			years			
What other types of fishing have you don	e in the pas t	t?					
•	•						
Do you do other types of fishing now?			☐ Yes	□ No			
Describe:							
Are you fishing in the same areas as 5 year	rs ago?		☐ Yes	□ No			
Please explain:							
Are you catching the same quantities as 5	years ago?		□ Yes	□ No			
Please explain:							
Are you catching the same sizes as 5 years	s ago?		□ Yes	□ No			
Please explain:							
If catches are different , what has changed	1?						
-							
Are you aware of any existing Fisheries La	ws?		☐ Yes	□ No			



Please explain:								
Do you have any concerns about the resources?								
Thank you								



7.4 Independent Boat Survey



Tuvalu Fisheries Independent Boat Survey Data Sheets

Boat and Canoe	Survey				
					on all boats and canoes on the No not include 'dead' boats that
are really rubbis		ora some co	Jilultioii i	momation.	No not include dead boats that
are really rubbis					
Island:			Date:		
Latitude (DD):			Longitu	de (DD):	
Surveyor 1:			Surveyo		
GPS:					
Boat and Canoe	Counts	··•		7	
Type (boat/ canoe/etc)	Lat (DD)	Lon (DD)	Length (m)	Condition / Comments (storage, good, poor, etc)

TO THE PARTY OF TH									
Comments and observations									



7.5 Appendix: Current draft of MOU for FADs

PEIGA, TAUSIGA MOTE FAKATUMAUGA O POE FAKALATA IKA SE FAKATOKAGA IO MESE FEAGAIGA (MOA) ITE VASIA OTE KAUPULE, FAKAPOTOPOTOGA TAGATA FAIKA O MOTE MALO.

E ATAFIAGINA me i poe fakalaika ka fesoasoani malosi ki tagata faika pena foki tino ote fenua i te fakamauaga mote fakafaigofiega te sala o ika pela mo atu, kasi/tavatava, takua mo nisi ika aka foki, fakafolikiga a te fakamaumau o penitini kae fakamama foki a te faika i koga tai pili ote fenua;

E ATAFIAGINA FOKI ite fakamauaga, faitega mote peiga ote POE fakalata ika e se faigofie tusa ko mea ne fakaoga kite faitega, peofuga o tino mote togi ote vaka, pooti ne aofia i te peiga;

E AMANAIAGINA i te MALO fakatasi foki mo taugasoa feasoasoani e se mafai o fakatumau a te fesoasoani ki te fakamauaga o POE, vagana ke isi ne fakamaoniga e iloa i ei a te aoga mote fesoasoani o POE i feitu tau sene, kae ke maua foki se fakamapatonuga me ka se afaina a sose POE pogai mai te fakamasei o te kope io me kote tuku tiakina;

E MALAMALAMA foki ite Tulafono mo Maumea ote Tai e fakatapu ne ia a mea konei - te fakamasei, kaisoa io me sai (o se paopao, pooti, foulua) ki luga i te POE, kae e fakasala foki ne ia sose tino e soli ne ia ate tulafono ki sala e aofia – togi tupe kise aofaki e mafai o oko kise \$5,000, 3 masina ite falepuipui, io me togi tupe (pau mote togi ote POE katoa) kite malo;

E ATAFIAGINA KAE AMANAIAGINA FOKI ate tusaga fesoasoani ote NAPA 2 ki fenua tela ka aofia e 4 POE fakalata ika ka pei i loto i te 4 tausaga ote polotieki (2015-2018);

MAI POGAI KONEI MAI LUGA, a te Fakapotopotoga Tagata Faika mote Kaupule o mote Malo (auala ite matagaluega Faika o Tuvalu) ko talia kae lotofiafia ki fakanofoga konei e fakaasi mai lalo:

FAKAMAUAGA MOTE PEIGA O POE

- 1. Ate matagaluega faika ote malo ka fesoasoani kite fenua ite fakamauaga pena foki mote peiga o POE aofia I ei a POE kola ka fakamaua mai lalo ote NAPA;
- 2. Ate matagaluega faika ka fai ne ia se akoga mo tagata faika ote fenua kite fakapikipikiga pena foki mote peiga o POE mote taimi muamua.
- 3. A te fakapotopotoga faika ote fenua ka panaki mote fakapikiga mote peiga o sose POE faopoopo mai tua o te akoakoga tenei.
- 4. Ate fakapotoptoga tagata faika ote fenua mote matagaluega ke galue ke maua ne sene mo togi ne POE faopoopo pena foki mote tausiga o POE ko oti ne pei fakatasi mo poe e 4 ote NAPA konei ka fakatautau ke pei;
- 5. Ate fakapotopotoga tagata faika ote fenua ke fakapatonu a kogakoga kola ka pei ki ei a sose POE fou kae ke sokotaki foki kite matagaluega faika fakatasi mote matagaluega o vaka koi tuai o pei a te POE;

TAUPULEGA, TAUSIGA MOTE ONOONOGA

- 6. Ate kope tenei ia te fenua (Falekaupule) kae kote te tausiga mote fakaogaaga o te kope e nofo mote fakapotopotoga tagata faika fakatasi mote Kaupule.
- 7. Ate Falekaupule ke fakatoka ne ia ne aofaga ko tino ote fenua ke usiusi tai ki fakanofoga o POE fakalata ika. Kote fakapotopotoga faika MOTE Kaupule ote fenua ka onoono kite fakamalosiga o tulafono mo POE mo nisi fakanofoga faopoopo kola ko oti ne pasia nete falakaupule;



- 8. Ate fakapotopotoga faika ote fenua ka fai ne ia ne asiasiga fakatumau ki POE fakalata ika kae fai foki a galuega e fakatau ifo e tau ke fai. Konei mea e manakogina ke fai I asiga takitasi,
 - a. Asi a launiu sai mafai ko galo
 - b. Asi a te mata ote loopu tela i tou toe sai mafai a poe ko tai too
 - c. Asi ate soko mafai e mafai, sui ate uka tela ki luga mafai ko kaina ate loopu
 - d. Lipooti tala ote asiga kite matagaluega faika
- 9. A te Kaupule ke fesoasoani kite fakapotopotoga tagata faika i te fakatupega ote galuega asiasi ki POE fakalata ika pena foki mote fakamauaga o POE fou manafai ko manakogina.

FAKAMAUGA O IKA MAUA MAI POE

- 10. Ate fakapotopotoga faika ote fenua ke galue tasi mo tino fakamau ika i luga i te fenua kite fakamauaga o mea konei
 - a. Aofaki o ika (I vaega kesekese) ne maua i POE
 - b. Te ioga ote faiva ne fai, aso mote po masina
 - c. Te aofaki mo igoa o tino ne olo ite faiva
 - d. Te koga ne faika I ei mote leva ote faikaga
 - e. Mo nisi mea aka foki

TALA O ASIASIGA FAKATASI MO TULAGA FAKAMASEIGINA O SOSE POE

- 11. Fakapotptoga tagata faika ke avaka se lipooti kite Kaupule i sose taimi e fai ei ate asiasiga.
- 12. Ate Kaupule ke fakaokooko a tala o asiasiga o POE kite matagaluega faika fakatasi ite 3 masina. Te lippoti tenei ke aofia te aofaki o taimi ne asiasi mo galuega ne fai ki POE (mafai e isi).
- 13. Te Kaupule ke lipooti fakavave kite matagaluega faika mafai ko isi se fakalavelave ko tupu kite POE
- 14. Matagaleuga faika ka fai ne ia se sukesukega mafai ko isi se POE ko lipooti mai me ko galo ko te mea ke maua se tala maea kite pogai ne galo I ei
- 15. Kafai ate POE ne fakamaseigina, ke fakasala eiloa a tino io mese fakapotoptoga tela/kola ne aofia ite fakamaseiga ote POE.

FAKALAUSAGA TE ILOA O TINO

- 16. A te matagaluega faika ka fai ne ia ne polokalame ko te mea ke avaka te iloa o tino ote atufenua i POE fakalata ika, te taua/aoga, tausiga, koga e pei i ei mo nisi mea aka.
- 17. Ate matagaluega faika ke fakailoa kite matagaluega o vaka a kogakoga o POE fakalata ika o fenua katoa



7.10 Appendix: Photographs

















