Period (date) of	20 <sup>th</sup> – 29 <sup>th</sup> April, 2018	Key Stakeholder:	Wards Rep from the community
Activity:			
Venue:	Maiana Island	Name of person	Tirae Tabee Taubuki – SFA
		writing report:	
Reviewed and	Taati Eria – SFO (Fisheries	Endorsed for	
checked by:	Division)	Release by:	

## A. Nature of Activity Undertaken

- To follow up with Fisheries Assistant since the clerk just arrived on the island for the arrangement for meeting with the Council for each village briefing of program and distributed letter for further information on this visit.
- Conduct post-harvest and seafood processing trainings targeting anyone assigned from their wards or community to enhance dietary consumption and nutritional value of fish.
- To promote means of value adding techniques to diversity income generation opportunities.
- To ensure the sustainability of subsistence fisheries in supporting community livelihood, income generation and efforts to enhance food security in the face of climate change.

## **B.** OBJECTIVES

Food Security in light of climate change project, better known as the LDCF project, hence working with line the Ministry of Fisheries and Marine Resource Development to ensure that programs are implemented to address issues that could build an adaptive capacity of our local communities. Such as through the promotion of initiatives example value adding techniques. This training program will look at empowering local communities through hands-on training programs to promote means of value adding techniques to diversify income generation opportunities.

In achieving the aim of this program, it is quite important to achieve through the listed key objectives:

- 1. To learn and understand the importance of observing good hygienic practices to ensure safe and quality fish products.
- 2. To implement an effective and practical framework to support outer-island fisheries development initiatives to enhance food security opportunities in the face of climate change.
- 3. To support initiatives in promoting marketing of value-added products at the community level,
- 4. Much more aware of the Government assistance that will support food security initiatives on a fisheries in promoting/encouraging with the importance of our marine resources associated involved,
- 5. Will have increased their knowledge on the importance of fish handling, fish preservation and fish processing,
- 6. To empower local communities and promote self-reliance at the community level to address food security, sustainable livelihoods, employment opportunities and income generation initiatives through hands-on post -harvest training programs.

The delivery of the training program aligns with Outcome 2: Implementation of community adaptation measures to increase food security under the LDCF project with the expected Output 2.4 through promotion of seafood value added techniques through hands-on demonstration programs.

The training in Maiana also provide an adaptive strategy whereas the use of canning fish in bottle instead of using tins also promoted, nevertheless the use of canning materials provided for the Island Council as in-kind support from KOICA also utilized at the training. Other products also promoted in the making including fish ball, smoke fish, and pickled seafood such as clam, and octopus, ark-shell and sea worm as alternative food sources for food security and to sustain protein source from preservation methods such as lifelong products sourced from our marine resources.

## C. RESULTS ACHIEVED

During the training there are two sessions carried out which include; the theory part which involved delivery of presentation on post-harvest: fish handling, fish preservation, fish processing and cooking demonstration for all participants. The additional value with wards representative in the community and for those who are interested in the training. The Fisheries Assistant, the Extension Fisheries Assistant and I requested to the Officer in charge for the CPPL building if we could use their ice-plant fish center for our training venue. This building is much more convenience to the participants, comfortable and well equipped where we can use all the materials available in the fish center such as solar power, ice-cube for icing fish and rainwater.

List of recipes covered in the hands-on training demonstration

- 1. Smoke fish
- 2. Fish ball/Meat ball
- 3. Pickle clam/sea worm and Koikoi in bottle
- 4. Fish in tomato sauce in bottle

On Sunday I went to the islet called Tebikerai where I slept over during the night before I carried out the activity. On day one I met with the councilor and the participants on Tebikerai at the KPC Maneaba where we are going to use it for our training activity. First of all I introduce myself and the purpose of the visit to Maiana Island. Then I present using power point and continue our activities on cooking demonstration. First we did bonefish meat to prepare for fish ball. Then we have pickle clam, ark-shell and other reef fish using other ingredient such as tomato sauce, vinegar and soy sauce to marinate all this with our marine product and we used empty bottles to cook in the pot before they store all this marine products for long life span. I spent two nights on the islet and returned the next day on Tuesday 24<sup>th</sup> April, 2018.

I continue my training on the main land from Tuesday 24<sup>th</sup> April, at 1 o'clock in the afternoon with the other 7 wards from Tekaranga to Teora. Firstly, I used a power point to present on a Fish Handling, Fish Preservation and Fish Processing. Good hygienic before handling and processing marine products. The important of using ice cube and seawater for fish freshness and good quality.

Then I did the demonstration to all the participants on the steps of how to make and prepare ingredients to use for all the marine products. Step by step preparation of the fish followed by making on how to marinate fish smoke, drying and smoking of the fish. Demonstration on smoke fish is carried out but not Tuna Turkey cannot be carried out due to unavailable of Tuna, however the recipe on marinating the fish also shared to apply to bonefish but the preferred species is tuna since we could not buy tuna fish at that time. Most fishermen just using fishing net to catch fish that why most of the catches are reef fish and bonefish. I did demonstrate other recipes for making pickled clams and sea worm and bottled seafood with the application of various flavors such as tomato sauce, soy sauce in sesame oil and brine with vinegar and water. The process marine products placed inside empty bottles to cook in the pressure pot about 2 hours then after cooking ready for participants to taste and take home. The trainees separated in their wards during the demonstration activity and everyone allowed participating in the making of these cooking recipes.

The 6 remaining wards from Tebiauea to Bubutei continue the training on day 4 to5 at the same place CPPL building. So the participants did the same activities that are conducted similar to the first group from Tekaranga to Teora wards. Then on the last day during the weekend I did the same training to the council staff including those they did not have selected from their wards, so they have a chance to join the training on smoke bone fish and fish ball.

The objective is achieved and very interesting from participants as most of them did not know how to do smoke fish and they really admire the new techniques on using empty bottles to preserve seafood and marine products as means to address alternative protein source and for food security.

## **D. BENEFICIARY**

Post-harvest processing and value adding on seafood training on Maiana Island (20 <sup>th</sup> -29 <sup>th</sup> April, 2018.					
Day 1 – 2	Tebikerai islet	- Tebikerai islet			
Day 3 – 4	7 wards covered	- Tekaranga to Toora			
Day 5 - 6	6 wards covered Staff at Island Council	<ul><li>Tebiauea to Bubutei</li><li>Tebangitua</li></ul>			

#### **Course of Training program**

Table1: Record on the days covered for the training with target wards involved.

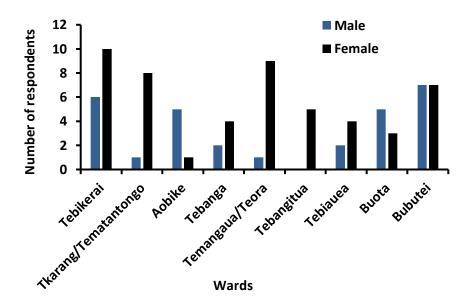
Approximate number of beneficiaries reached by Activity (% breakdown by gender and age).

Island Council Ward	Total No. of	Gender		Percent %		Age Category	
	Participants	Male	Female	% Male	% Female	% 18 -39	% 40>
Tebikerai	16	6	10	8	13	12	4
Tekaranga-Teora	31	9	22	11	28	29	2
Tebangitua-Bubutei	33	14	19	18	24	21	12
Total	80	29	51	36	64	62	18

*Table 2.* Approximate number of beneficiaries reached for this training program with breakdown of number of partipants by gender and age group for the wards covered.

Government staff and NGOs were pleased to be participated in the training activity so they proposed if they could have it on Saturday as most of them are busy during working hour from Monday to Friday. So I separate their training with the selected participants from each ward. The selected participants from each ward were non-workers, farmers; fisherman and housewife participated in the training.

The program targeted community members on Maiana with the understanding that any feedback and lessons learnt will further guide any future training programs. However, the coverage of the training not able to reach the representative of the population in Maiana whist representatives from community groups could share the skills acquired upon return to their communities as indicated in Figure 1.



*Figure 1.* Record on the number of participants attending the training by gender and ward.

### Evaluation of the training program

The evaluation program able to provide feedback and views from participants for any future inputs towards the training module. Questionnaires are printed and carried along during the trip to Maiana. Participants asked to fill the questionnaires (Appendix 1) and returned with further analysis on the outcome of the feedback and views collected shown in the graph below in Fig 2.

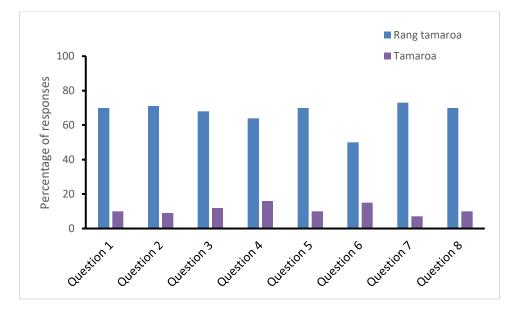


Figure 2. The graph shows a great postive from the views from participants on the training.

# E. BUDGET USED

Costing estimates for Post-harvest training in Maiana				
Descriptions	Cost	Total Cost		
Per diem for 1 x 10	\$70.00	\$700.00		
motorbike hire for 5 days	\$20.00	\$100.00		
fuel for 5 days *2L	\$1.30	\$13.00		
boat hire for Trainer to Tebikerai	\$200.00	\$200.00		
Airport tax	\$20.00	\$20.00		
Ingredients see attached program	\$60.00	\$60.00		
Gas stove fuel @\$2.20 for 4cans per day x 12 wards	\$2.20	\$105.60		
Fish @ 10.00 for 6 training days	\$10.00	\$60.00		
Transport for workshop \$2.50 x 6 days x 30 participants)	\$30.00	\$450.00		
Transport airport/hotel/airport return	\$50.00	\$100.00		
Grand total	\$1455.60			

 Table 3. Breakdown of the costing of the activity in Maiana.

## F. LESSONS LEARNED/SELF EVALUATION

At the outset, the training is very beneficial for the communities however there are also some challenges and lessons learnt as identified and listed below:

1. Do away with payment of sitting allowances – this should never be encouraged and hope the project could develop some incentives to sustain the momentum of participation from the communities and encourage small projects on post harvest for private involvement.

2. Duration of the hands-on training – as a feedback from participants few requests for extension of the days covered for the training. If possible to plan training per ward as lessons learnt from the visit to the islet and most of the village members attend and willing to contribute what they get for our cooking practical such as clam, sea worm and Koikoi etc.

3. Reflection of the demonstration training - participants have shown great keenness and interest to learn new techniques and ideas on how to preserve seafood and stored inside the bottles.

## G. Contribution to Media:

Theory Part: Presentation on fish handling, post harvest techniques delivered to the trainees.



Figure 3. Participants at the training on post-harvest techniques in Maiana (a) and (b).



Preparation, adding ingredient and marinated raw materials.

**Figure 4.** *Participants involved in the hands-on preparation of ingredients for marinating of the raw materials at the training in Maiana (c) and (d).* 

Cooking of raw materials and making of the seafood products.



Figure 5. Participants involved in the hands-on working process of the seafood products (e) and (f).

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*Figure 6.* Bottled clams, ark shell and fish ball already cooked (g) and ready in bottles (h).



Figure 7.Drying and the final stage of bonefish in smoking process(local man made oven) (j).