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Fraunhofer EMB

KUANAR

GMA Gesellschaft für Marine Aquakultur

ICH- LIEBE -FISCH | I LOVE FISH PROJECT

POND INSPECTION REPORT

FEBRUARY, 2018

Table of Contents

1.0 INTRODUCTION

A trip was organized to the districts of Nkhotakota and Mchinji on February 8th and 10th, 2018 respectively. This trip aimed at assessing the fish ponds and making them ready for the projects implementation phase. At the beginning of the projects pilot phase in the preceding year of 2017, the project organized a seminar which involved the first extensive pond preparation trainings.

The farmers were asked to prepare their ponds for the second phase of the project hence this trip was arranged to follow up on the progress and reach out to the pond preparation challenges farmers were facing on the ground.

2.0 INSPECTION IN NKHOTAKOTA DISTRICT

On 8th February, 2018 clubs representatives from a total of 11 farmer clubs gathered at Benga catholic church for this exercise. There were 6 representatives from each club adding to a total of 66 people.

Table 1. Number of clubs attended the second pond preparation training in Nkhotakota

CLUB NUMBER	CLUB NAME	NO. PONDS	NO. OF REPRESENTATIVES
1	Tikondane Loti 1	2	6
2	Mnyanga Youth	1	6
3	Masakatila	1	6
4	Makowa	2	6
5	Sinoya	1	6
6	Njolo	1	6
7	Teen Mission	2	6
8	Benga II	1	6
9	Chijere	1	6
10	Mnyanga	2	6
11	Maluzi Dam	1	6

At the meeting place the farmers were asked if they still remembered the pond preparation techniques they learned in the previous year. They were also asked to report on their pond preparation progress. After that a brief revision lecture was Co-facilitated by the inspection team. After this theoretical training, the farmers chose two ponds from the 11 clubs where the practical session was conducted. This was done to give room for the different clubs to interact and share their ideas and challenges.

The farmers collaboratively drained the selected ponds and desilted them to remove all the mud and wild fish. This work involved three representatives from the respective clubs. The other three representatives were with the horticultural officer on the second pond site where they were practically learning how to identify crops suitable for their different soils they have, where and how to construct grow beds for fish vegetable integration system. The farmers were also taught how to maximize the utilization of pond mud by incorporating them into the vegetable grow beds and pond dikes.

After this exercise the farmers were then asked to go to their respective ponds, where the technicians were now recommending the best way to prepare the club individual ponds and specify the suitable crop for integration based on the specific soil type and the farmers preference.

Figure 1: Teaching farmers how to open their ponds for draining

Table 2 below shows the pond status and recommended vegetables variety by the horticulturist per club.

Table 2: Pond status and Recommended Vegetable varieties in Nkhotakota district

POND #	POND NAME	# OF AVAILLABLE PONDS	PREFFERED VEGETABLE TYPE	RECOMMENDED VEGETABLE TYPE	# OF PONDS TO BE STOCKED	POND SIZE/ M^2	REQUIRED FINGERLINGS	REMARKS
1	CHIJERE	1	Amaranthus	Amaranthus and pumpkin leaves	1	660	3300	good condition
2	MAKUWA 3	2	mustard	Chinese cabbage and mustard	1	375	1875	good condition one pond already stocked by LDF
3	MALUZI	1	mustard	Pumpkin leaves and amaranthus	1	600	3000	good condition
4	TIKONDANE LOTI 1	2	Mustard and pumpkin leaves	Pumpkin leaves and amaranthus	2	600	3000	good condition
5	TIKONDANE LOTI 1		Mustard and pumpkin leaves	Mustard and Chinese cabbage		594	2970	good condition
6	MASAKATIRA	4	Mustard Chinese cabbage and rape	Mustard Chinese cabbage, rape and pumpkin leaves	2	450	2250	good condition and one pond is already stocked
7	MASAKATIRA		Mustard Chinese cabbage and rape	Mustard Chinese cabbage, rape and pumpkin leaves		770	3850	good condition
8	TEEN MISSION	2	Pumpkin,	Rape, mustard,	1	400	2000	good condition and the

			mustard leaves	pumpkin leaves				other pond is already stocked
9	BENGA 2	2	Mustard	Mustard, rape, amaranthus	1	1225	6125	good condition
10	NJOLO	2	rape	Pumpkin leaves, amaranthus , rape	2	600	3000	good condition
11	NJOLO		rape	Chinese cabbage		500	2500	good condition
12	SINOYA	1	amarant hus	Mustard, Chinese cabbage and amaranthus	1	500	2500	good condition
	MNYANG A YOUTH	3		Previously they did not participate due to internal conflict within the club				The ponds in bad condition and Not recommend ed for stocking for the experiment. if possible they can be stocked to be fed with maize bran as suggested by Marina's team
	MNYANG A CLUB	5		Previously they did not participate due to internal conflict within the club				The ponds in bad condition and Not recommend ed for stocking for the experiment. if possible they can be stocked to

								be fed with maize bran as suggested by Marina's team
TOTAL							**36370**	

The clubs were then taught how to fertilize their ponds to enhance natural feed and they were given two weeks to refill and fertilize their ponds in preparation to fish stocking.

3.0 INSPECTION IN MCHINJI DISTRICT

On 10th February, 2018 the inspection exercise was conducted at the second project site, Mchinji district. Mchinji district had a total number of 3 clubs and 3 individual farmers. Since clubs in Mchinji are very far apart, the procedure was changed and this time the clubs were told to remain at their respective sites.

Table 3. Number of clubs attended the second pond preparation training in Mchinji

CLUB NUMBER	CLUB NAME	NO. PONDS
1	Tikondane	9
2	Chikondi	3
3	Ntawa	6

Table 4. Number of individual farmers involved in the second pond preparation training in Mchinji

FARMER NUMBER	FARMER NAME	NO. PONDS
1	Mr Jefter Zenas	1
2	Jamikael Kanyenda	1
3	Stefano Phiri	1

4.0 DISCUSSION

Challenges

Similar pond preparation trainings were conducted in Mchinji and Nkhotakota. However, both the farmers faced some challenges in the exercise. In Nkhotakota, the major challenge was that most of their ponds have no outlets as such they had to dig up the dikes to allow water to drain through. Additional, the gradient inside the ponds is slightly at a lower side than the outside as such the water drains slowly and canals have to be dug deep to prevent backflow into the ponds.

On the other side, the major challenge in Mchinji is water logging. Most of the pond beds are in contact with the aquifers (underground streams) hence it is required to construct many drainages to make sure that all the water is drained completely. The farmers in Mchinji therefore were advised to construct new drainage systems that would ease the drainage.

Adoption rate

Following the general observations made in this pond inspection trip, different clubs are responding differently in terms of adopting the aquaculture technology and ideologies. In Nkhotakota most of the clubs seemed to have forgotten the pond preparation process and IAA hence the revision had to start from basics.

However; most farmers in Mchinji seem to adopt the technology very quickly, and they were still making some progress after their first harvest. Some farmers have dug individual ponds following the motivation they got from their club results.

The project impacts have attracted some stakeholders in Mchinji to the point that government representatives (including the District Commissioner) visited the project site (Tikondane Fish Club) with the media (Malawi Broadcasting Corporation TV) to witness source of the fish that were sold in the district in November 2017 that many consumers liked, and this was beamed on the National television. This motivated the farmers a lot and they have great expectations from the project.

Tikondane Fish Club already prepared their ponds and all the ponds are not stocked. Ntawa Fish and Chikondi club started preparing their ponds the day the inspection team visited them. Ntawa has one pond stocked by Local Development Fund (LDF) and all the Chikondi Fish Club ponds

are non-stocked. The horticulturist recommended the following vegetables; pumpkin leaves, Amaranths and local rape based on the soil type in the district.

Figure 2: farmers in Mchinji (Tikondane Fish Club) sustained IAA systems during rainy season

5.0 CONCLUSION

The pond preparation process was successfully completed in all the project sites in preparation for the second phase of the project. The farmers were advised to fertilize their ponds prior to fish stocking. The farmers are optimistic that they will sustain fish farming even when the project phases out. The only worry they have is the source of seed (fingerlings) hence the project officers recommended that it would be ideal if the farmers are trained how to produce seed at small scale, which will ensure sustainability of the beneficial impacts of the entire I love Fish Project. This would be more challenging in Nkhotakota since the clubs own one or two small ponds only.