

Greater Noakhali Aquaculture Extension Component

Evaluation Report on PME Piloting Farmers

<p style="text-align: center;">Kazi Gias Uddin Monitoring & Evaluation Officer Masud Rana Resource Development Manger</p>
--

Introduction:

From the beginning of the project MEU has developed an M&E strategy to monitor over all project input, output and outcome. This M&E process serve mostly to strengthen the project management decision making process and measuring the outputs. The extension strategies of GNAEP are usually transferred technology by training advice provided through the regular weekly meeting and individual pond visits. The way of technology transfer may not be an effective way to promote aquaculture, and of aquaculture techniques have not spread more effectively than the project expectation. In order to strengthen the interactive learning process among the participants and field worker, participatory approach in M&E is through to be a good approach and an initiative was taken by GNAEC to move towards PM&E. The system constitutes participatory monitoring and sample surveys using questionnaire. All qualitative and quantitative information that project participants and staff considered important to them for making decision is generated in PM&E session. The information is instantly analyzed and used by farmers and Extension Trainers of GNAEC. The information then goes to different level of managers and is used to analyze and identify areas for backstopping. This report described the comparison of baseline and evaluation information that is generated and collected through participatory methods on 18 PME piloting group from 2002 batch FFG.

Context:

Participatory Monitoring and Evaluation (PME) has been introduced as pilot basis in 18 FFG from 2002 batch GNAEC farmers for 2002-2003 pond fish culture season. Through the PME process, GNAEP beneficiaries have chance to articulate their existing situation of aquaculture (base information), set up their target, prepare plan, monitor and evaluation through generating both quantities and qualitative information. At the time of evaluation, they can assess how far target has been achieved. The GNAEC staff can generate, analyze and use information to take better decision. At the beginning of the season, baseline information on these 18 FFG was collected through PRA process. Now the evaluation information has collected using same tools from these 18 FFG.

Objective of report:

- To compare pre and post fish culture status and production.
- To analyzing the reasons of success and failure.
- To inspire participants to make future planning and implementation based on gathered learning.
- Make decision by the GNAEC management for further PME implementation.

Data collection Methods and Materials:

The evaluation data collected through FGD using same tools used at the time of baseline data collection. The farmers and the Extension Trainer jointly did this work using visual tools (Picture on different fish culture activities and seeds etc). Two Extension Trainer (ET) actively involve in each session. One ET plays the facilitators role and conduct the session and other ET plays the role of co-facilitator/record keeper. A set of picture showing different fish culture activities, art paper, art liner also used (Annex-1).

Limitation:

During PME baseline session 204 farmers from 18 PME FFG were participated in the session. The baseline data were collected on those 204 farmers. But during the evaluation session 197 farmers were participated in the session. Information of those 7 farmers was not collected in the evaluation session. Comparison between pre and post data was made on percentage of farmers who participated in the session.

Findings:

Pond preparation, feeding and fertilizing:

To achieve the better production pond preparation is an important activity for semi-intensive fish culture. All the piloting farmers found to do all the steps of pond preparation activity. From baseline information it is found that only 30% farmers dry out their pond or repair the pond dike or remove the aquatic weed. Before joining with GNAEC only 35% remove the predator, 21% farmers applied lime, 19% farmers applied fertilizer before stocking.

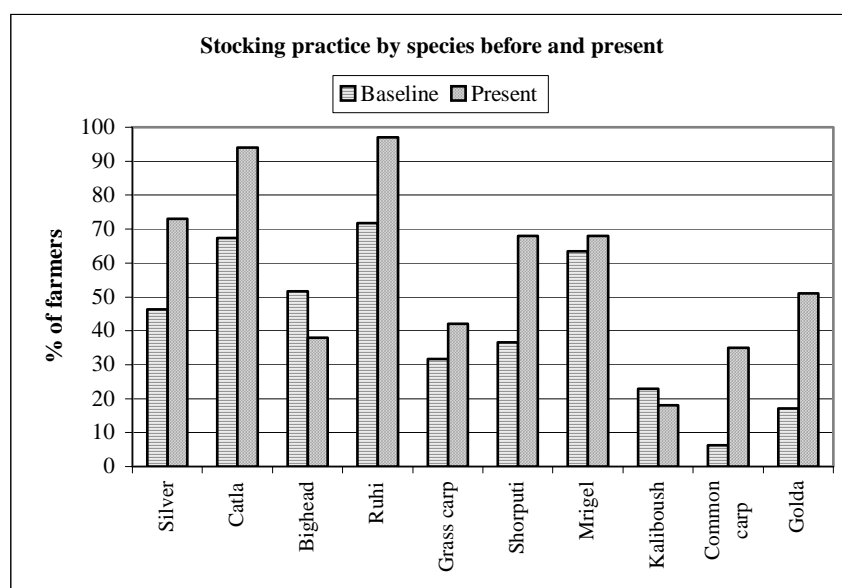
Farmers Opinion	
Reasons not to do before GNAEC	Reasons to do now
It is costly They don't no the proper way to do Lack of money Water quality deteriorated due to apply of organic fertilizer Don't know the feed fertilizer rate	Now the farmers learn the proper pond preparation from GNAEC training. They come to know the importance of pond preparation. They learn the rate to apply of feed and fertilizer

Pond preparation				
Activities	Baseline		Present	
	Farmers did.	Farmers didn't	Farmers do	Farmers not do
	%	%	%	%
Dry out/Dike repairing/ Weed removal	30	63	100	0
Predator removal	35	60	100	0
Lime use during preparation	21	79	100	0
Fertilizer before stocking (Organic/inorganic)	19	81	100	0
Feed applied	36	61	100	0

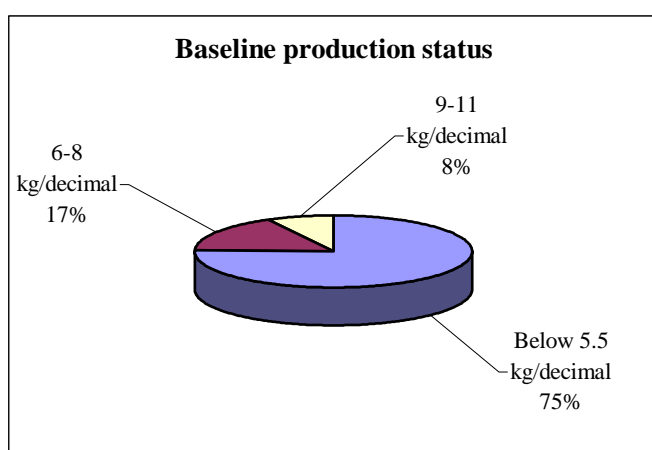
Stocking Practices:

Only 10% farmers found to stock the fingerlings follow the species combination and density before GNAEC but now 95% farmers found to stock follow the species combination and density. The major changes have been found regarding the species choice is in Silver carp and Golda. Before GNAEC only 46% farmers stocked silver carp but now it increase to 72% and Golda increases from 17% to 51%. Regarding species farmers' opinion is that before GNAEC they didn't know the proper combination and density of stocking and they consider Silver carp and Bighead are same nature. But now they come to know the differences between these two species and proper stocking density and combination.

Stocking Practice		
Type and time of stocking	Baseline	Present
Optimum stocking density (Proper species combination and counting and stock appropriate number)	10	95
Over stocking or less stocking and not proper species combination	89	5
Stock in early stocking period	34	48
Stocking in pick period	55	51
Late stocking	10	1

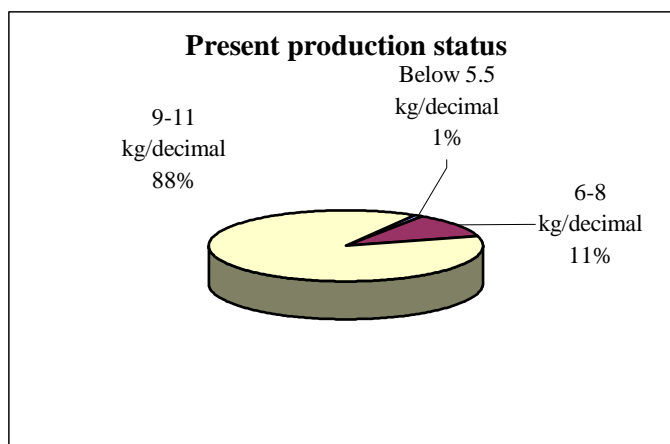


Fish Production and Income:



It is found from the data collected during evaluation session that 88% farmers achieved more than 9 kg production per decimal in a year, before GNAEC which was only 8%. According to the farmers opinion the reason behind to increase production is

to follow the GNAEC recommendation accordingly. The fish consumption and income also increase remarkably due to increase production. The remaining 12% farmers who didn't achieve the higher production majority of them mentioned the flooding and Poaching. Before GNAEC only 7% farmers earned more than 5,000 taka per year from pond but at present it increased 52%. Also due to increased production 60% farmers mentioned that the per head fish consumption of the HH members has increased.



Comparative Production and Income of PME Participated Farmers		
Average annual production (% of farmers)		
	Baseline	Present
Below 5.5 kg/decimal	75	1
6-8 kg/decimal	17	11
9 kg and above per decimal	8	88
Average consumption fish from own pond by each family member (% of farmers)		
	Baseline	Present
Below 5 kg/year	53	5
6-10 kg/Year	35	35
11-20 kg/Year	13	60
Estimated per HH annual income from pond (% of farmers)		
	Baseline	Present
No cash income	55	7
500-2000 taka	21	17
2000-5000 taka	17	24
Above 5000 taka	7	52

Integrated farming:

Vegetable cultivation on pond dike or homestead area has increased from 48% to 66%. The percentage of vegetable cultivation in agriculture land has remained same. The poultry and livestock rearing have found not remarkably increase. The farmers opinion is not received any potential support from GNAEC on these two issues. Farmers received seeds of different kinds of vegetable from GNAEC free of cost last year and also received short training on vegetable cultivation. These types of support encourage the farmers to cultivate vegetable on pond dike and homestead area.

Integrated Farming		
	Baseline	Present
Not cultivate any vegetable	18	0
Cultivate vegetable on pond dike or homestead	48	66
Cultivate vegetable in agriculture land	34	34
Not rearing any poultry	6	0
Rearing poultry upto 5 numbers	20	29
Rearing poultry 6-10 numbers	74	71
Not rearing livestock	50	33
Rearing livestock upto 2 numbers	29	43
Rearing livestock 3-5 numbers	20	24

Conclusion:

PME is an educational process which enabled farmers and field staff to monitor their progress by their own, analyze the reasons of success and failure and to use the result for further improvement. From the above analysis it found that most of the farmers had poor technical knowledge on semi-intensive pond aquaculture and integration with other farm activities before GNAEC. After joining with GNAEC they gained knowledge on integrated fish culture through received training. Adopt the training knowledge the farmers achieved a significant result on fish production. Through PME process farmers monitored and evaluate their activities by themselves and they could realize their lacking and reason behind the success. This realization will help them in future planning for sustainable fish culture in their pond and rice fields.