



STUDY ON ADOPTION LEVEL OF BENEFICIARIES OF INLAND AQUACULTURE UNDER RKVY PROJECT

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Abstract- A fishery in India is a very important economic activity and a flourishing sector with varied resources and potentials. Only after the Indian Independence, fisheries together with agriculture been recognized as an important sector. The inland aquaculture practices are being adopted by the farmers. For the present study Navsari district was selected on the basis of a project "inland aquaculture" was launched the year 2009-2010 by the Krishi Vigyan Kendra, NAU, Navsari with the assistance of Rashtriya Krishi Vikas Yojana (RKVY). It can be concluded that in overall extent of adoption, nearly (59.49 per cent) three-fifth of the beneficiaries had medium level of adoption about the inland aquaculture practices.

Keywords- Inland aquaculture, Adoption, RKVY, management.

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Introduction

Agricultural is major livelihood sector, which support Indian economy and in agricultural fish has been recognized as an important source of nutritious food as it constitutes high quality, balanced and easily digestible proteins and the much-needed essential amino acid by the human beings. Fisheries sector plays a dominant role in national economy through foreign exchange, generation of employment and providing nutritional security besides augmenting food supply. Fish provides cheap animal protein at affordable prices in interior places to a large segment of the population, i.e., small and marginal farmers, agricultural and non-agricultural laborers, rural artisans and fishermen. Further, fish farming generates additional rural employment and increased income, and provide livelihood to traditional fisher folk and other unemployed youths.

The successful adoption of new technology can be considered as means to achieve higher productivity and there by improve the standard of livelihood. An innovation has little effect until it is distributed among the numbers of fishery farmers and they put it into use. The change is taking place among them or in to their social system as a result of adoption or rejection. The socio-economic-techno impact is the resultant changes occurred among the inland aquaculture owners due to adoption of inland aquaculture practices. The anticipated, direct or desirable impact due to the adoption of inland aquaculture practices which generates economic benefits and ultimate change in social and many other aspects of livelihood. Keeping this view in mind, the present study entitled "STUDY ON ADOPTION LEVEL OF BENEFICIARIES OF INLAND AQUACULTURE UNDER RKVY PROJECT".

Materials and Methods

The present study was conducted in Navsari district. It was selected on the basis of a project "inland aquaculture" was launched the year 2009-2010 by the Krishi Vigyan Kendra, NAU, Navsari with the assistance of Rashtriya Krishi Vikas Yojana. This district has six talukas viz., Chikhli, Gandevi, Jalalpor, Khargam, Navsari and Vandsa. Considering the potentiality of Gandevi, Jalalpor and Navsari talukas and villages mentioned were selected in to for the present study.

The Krishi Vigyan Kendra, NAU, Navsari has executed the project hence the list of beneficiaries covered under project was obtained. All the 158 respondents selected from the identified villages. Ex-post facto research design was used for the study. Adoption refers as a mental process through which an individual puts all available scientific management practices in actual use.

$$\text{Adoption quotient (A.Q)} = \frac{\text{Actual adoption of practice}}{\text{Recommended practices}} \times 100$$

Adoption Level		
Sr.	Category	Range
1	Low	< \bar{X} - S.D.
2	Medium	In between \bar{X} + S.D.
3	High	> \bar{X} + S.D.

For quantifying the data, "one" score was given for correct answer and "zero" score was given for incorrect answer. The total maximum score that could be secured by an individual respondent was 24 as 24 questions /practices were included in the schedule. The adoption quotient was calculated for every respondent. Later on all the respondents were classified into three categories on the basis of mean (\bar{X}) and standard deviation (S.D.). The data was collected with the help of well-structured, pre-tested, Gujarati version interview scheduled through personal contact and data were compiled, tabulated and analyzed to get answers for objectives of the study.

Result and Discussion

Adoption about inland aquaculture

The data regarding distribution of beneficiaries according to their level of adoption about inland aquaculture are presented in [Table-1].

From the [Table-1] indicated that a high percentage of beneficiaries had correct extent of adoption regarding quantity of organic manure applied (86.00 per cent),

soil composition (82.27 per cent), fertilizers should applied (80.37 per cent), health management practices (79.11 per cent), stage of water exchange and amount of water (78.48 per cent), methods of harvesting (77.84 per cent), weight of fish should at the time of harvesting (76.58 per cent), desirable colour (75.31 per cent), time of harvesting (75.31 per cent), type of aeration used for pond (75.00 per cent), ideal temperature of pond (74.05 per cent), time and quantity applied of fertilizers and manures (73.50 per cent), ideal depth of pond (72.15 per cent),

composition of ingredients in fish pond (71.25 per cent), after fertilizers application pond ready for fish seed (71.25 per cent), fish species and ratio (70.88 per cent), control of predators and undesirable fish fauna (70.00 per cent), methods of removing the weeds (69.00 per cent), recommended pH of pond (66.45 per cent), periodic netting to check to growth and health of fish (61.80 per cent), benefits of aeration (61.00 per cent), treatment of disease (60.12 per cent) and desirable C/N ratio (56.96 per cent).

Table-1 Distribution of beneficiaries according to their level of adoption about inland aquaculture

n= 158			
Sr. No.	Practices	Adopters (F)	Per cent
Pre-Stocking			
Soil and water management			
1	Soil composition	130	82.27
2	Desirable C/N ratio	90	56.96
3	Desirable colour of fishery pond	119	75.31
4	Ideal temperature	117	74.05
5	Recommended pH	105	66.45
6	Ideal depth of pond	114	72.15
7	Soil pH maintain	120	79.11
General pond management			
8	Methods of removing the weeds	109	69.00
9	Health management practices	125	79.11
10	Control of predators and undesirable fish fauna	110	70.00
11	Fertilizers should applied	127	80.37
12	Time and quantity applied of fertilizers and manures	116	73.50
13	After fertilizers application pond ready for fish seed	113	71.25
14	Fish species and ratio	112	70.88
Post stocking management			
Feeding practices			
15	Composition of ingredients in fish pond	113	71.25
General pond management			
16	Quantity of organic manure applied	137	86.00
17	Benefits of aeration	96	61.00
18	Major type of aeration used for pond	118	75.00
19	Periodic netting to check to growth and health of fish	97	61.80
Water exchange			
20	Stage of water exchange and amount of water	124	78.48
Disease management			
21	Treatment of disease	95	60.12
Harvesting			
22	Methods of harvesting	123	77.84
23	Time of harvesting	119	75.31
24	Weight of fish at the time of harvesting	121	76.58

Overall Extent of Adoption Level of Beneficiaries of Inland Aquaculture under RKVY Project

The data regarding overall extent of adoption level of beneficiaries are presented in [Table-2].

Table-2 Distribution of beneficiaries according to their overall adoption level about inland aquaculture

n= 158			
Sr. No.	Categories	Frequency	Percent
1.	Low (< 12)	27	17.00
2.	Medium (12 to 16)	94	59.49
3.	High (> 16.00)	37	23.51
Total		158	100.00

(Mean= 14.04 / SD= 1.97)

The data presented in the [Table-2] shown that three-fifth (59.49 per cent) of the beneficiaries had medium level of adoption about the inland aquaculture, while 23.51 per cent and 17.00 per cent of them high level and low level of adoption about the inland aquaculture, respectively.

This findings similar to the finding by [1 to 5]

Conclusion

This project not only increase adoption of fish culture in village ponds of selected

villages but also created awareness, encouraged and built up the confidence among the surrounding more than 30 villages and as a result about 40 ponds now are actively engaged in fish farming. On the basis of above finding it can be concluded that high percentage of beneficiaries had correct extent of adoption regarding quantity of organic manure applied, soil composition, fertilizers should applied, health management practices, stage of water exchange and amount of water, methods of harvesting and majority of the beneficiaries had medium to high level of overall adoption regarding inland aquaculture farming.

Conflict of Interest: None declared

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