



Research Article

MEMBERS' PERCEPTION TOWARDS FISHERMEN'S COOPERATIVE SOCIETIES: A STUDY IN TRIPURA

CHAKRAPANI PEGU, SARKAR A.*, BISWAS P., UPADHYAY A.D., PAL P. AND SINGH Y.J.

College of Fisheries, Lembucherra, Agartala, 799210, Tripura, Central Agricultural University, Iroisemba, Imphal, 795004, Manipur, India

*Corresponding Author: Email - atanusarkar1954@gmail.com

Received: May 16, 2018; Revised: May 21, 2018; Accepted: May 25, 2018; Published: May 30, 2018

Abstract: The study was conducted during September-December, 2017 in the north-eastern state of Tripura (India) to examine the functioning of fishermen's cooperative societies in the light of perception of the members themselves. Primary data was collected from 123 number of cooperative members spread over eight societies across West Tripura and Gomati districts. It was revealed that in terms of length of membership, apart from 9.76% of the respondents who had >20 yrs. of association with their respective societies, 73.17% more were having 6-20 yrs. of such attachment. Though 73.17% of the members were found to be in the category of below poverty line and a very high proportion of 97.56% of them were representing Scheduled Caste and Scheduled Tribe community, which called for shielding such populace by fishermen's cooperatives as handy institutional device, according to the perception of 83.55% respondents they could accrue very little benefits from their societies. In terms of extent of participation of members in various functional activities of their societies also, very high extent of non-participation was detected to pose challenge to the basic tenets of cooperative societies that repose faith on self-help and mutual-help to derive some common benefits. Among the perceived functional weaknesses, 'unsatisfactory economic performance' appeared to be the prime one, followed in descending order by 'inadequate water area before hand for fish culture activity', 'lack of financial support from the government', 'lack of transparency in fund management', 'lack of proper pond embankment', 'casual approach towards timely disbursement of dividend/share of profit' etc.

Keywords: Fishermen's cooperative society, performance, perception, participation, benefits, Tripura

Citation: Chakrapani Pegu, et al., (2018) Members' Perception towards Fishermen's Cooperative Societies: A Study in Tripura. International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 10, Issue 10, pp.- 6104-6108.

Copyright: Chakrapani Pegu, et al., This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original author and source are credited.

Academic Editor / Reviewer: Saha Biswarup, S. M. Feroze

Introduction

Cooperative society is a voluntary association of persons who come forward as a group and work together on the principle of self-help and mutual help to promote their economic interest and derive some common benefit out of it [1]. Contextual to the small-scale fisheries sector, cooperatives are a way of maximizing long-term community benefits to deal with the threats of fisheries mismanagement, livelihood insecurity and poverty, which are the harsh realities for many of the world's small-scale fishers [2]. About the fishers in India, they are mostly considered among the socio-economically weakest sections and as the shield for such weak populace, fishermen's cooperatives are seemingly the most appropriate organization to improve their socio-economic status [3]. In India, the north eastern state of Tripura is having a long tradition of fishermen's cooperative societies. Its journey in the state began in 1950's with the establishment of the Rudrasagar Udbastu Fishermen Samabaya Samity in 1951 which was succeeded by the Udaipur Matsyajibi Samabaya Samity Ltd. in 1954. Then after, with an exception of a period of lag during 1960's, in the span between 1970's and 1980's the process of growth of fishermen's cooperative societies in the state attained the peak. Though in a retarded pace, the establishment process of such cooperative societies had continued in the first decade of new millennium. In Tripura, 25333 ha water area is available for culture fisheries [4]. Herein, 145 Fishermen's Co-operative Societies are in existence to support the livelihood of more than 19307 fishermen. The state envisages enhancement of average domestic fish productivity up to 3000 kg/ha/year by 2020 from its current level of 2700 kg/ha/annum [5]. Under the circumstances, along with effectual support to cause sustainable livelihood of their members, the Fishermen's Co-operative Societies of the state are also supposed to play a formidable catalytic role in efficiently contributing towards furthering the

productive performance of domestic fisheries sector. However, in terms of productive performance, the ground level indications suggested that out of total functioning 78 fishermen's cooperatives in the state at the end of March, 2012, as high as 57.69 percent were under low-level of productivity (<1500 kg/ha), 23.08 percent were in medium level of productivity (1500-2500 kg/ha) and only 19.23 percent were in high productivity category (>2500 kg/ha) [6]. Further, revelation from another study was also indicative that many of the existing recorded fishermen's co-operative societies of the state had either become defunct or dormant to cause occurrence of wider variability between them in terms of their productive performances and in many cases gave rise to conflicts among the members as well [7]. Now, in the very context of the fact that as a supposedly institutional shield to usher social self-help of the members and their due empowerment in dealing with the problems of marginalization and poverty, one of the fundamental indicators of assessing the performance and/or success of these fishermen's cooperatives de facto appears to be the members' interpretation and judgement about their own cooperatives. In the backdrop of such consideration, a micro level investigative study was undertaken to examine the functioning of fishermen's cooperative societies in Tripura in the light of perception of the society members themselves.

Methodology

Being among the forerunners in terms of existence of active registered fishermen's cooperative societies in the state of Tripura, the study was conducted during September-December, 2017 in the purposively selected two out of eight districts there viz., West Tripura and Gomati.

While in case of West Tripura district, the number of existing active fishermen's cooperative societies was identified to be 17, those were 18 in case of Gomati district. Out of those, five cooperative societies were pooled through list sampling technique from West Tripura district and in case of Gomati district the pooled number of such societies was three. Thus, altogether eight fishermen's cooperative societies were identified for carrying out the investigative study. Then, by employing probability proportionate to size (PPS) sampling at 10 percent level of probability, a total number of 123 fishermen members were selected as respondents from those eight identified active fishermen's cooperative societies. Primary data was collected through personal interview of the sample respondents by employing structured interview schedule, which was initially prepared in congruity with the ex post facto research design and then finalized after due pre-testing. To determine the perceived level of benefits from their respective societies by the responding society members, thirteen relevant indicative statements were identified and those were then rated against a Likert type 5-point rating criterion namely 'Very High Benefits', 'High Benefits', 'Moderate Benefits', 'Little Benefits', and 'Very Little Benefits' with the assigned score values being 5, 4, 3, 2 and 1 respectively. So, the possible obtainable minimum and maximum score by a respondent was 13 and 65 respectively. Based upon obtained score, the perceived overall benefit score for all the respondents was determined by summing up their obtained score values with respect to each of the five rating criteria and then perception index (expressed in percentage) for each of the rating criteria was computed by using the following formula:

$$\text{Perception index} = \frac{\text{Obtained score against a particular rating criterion}}{\text{Maximum obtainable score under that particular criterion}} \times 100$$

Where, obtained score meant the score obtained for each of the five criteria employed.

As another judgemental indicator of the nature of involvement of members with their respective societies, extent of participation of them in various categories of functional activities in the cooperative societies were measured through a Likert type 4-point rating criterion namely 'Regular Participation', 'Occasional Participation', 'Rare Participation', and 'No Participation' with the assigned score values being 4, 3, 2 and 1 respectively. Now, based upon the fact that all the identified cooperatives were having four major domains of activities and each of those domains were comprising of few sub-activities totalling twenty six in number viz. i) culturing of fish (ten sub-activities); ii) harvesting (seven sub-activities); iii) marketing (five sub-activities); and iv) general managerial activities (five sub-activities); and in case of only three cooperatives, those were having one additional domain of activity in the form of fish seed production which was inclusive of ten sub-activities, all those major activity domain wise participation index (expressed in percentage) of the members was computed against each of the four rating criteria by using the following formula:

$$\text{Participation index} = \frac{\text{Obtained score against a particular rating criterion}}{\text{Maximum obtainable score under that particular criterion}} \times 100$$

Where, obtained score meant the score obtained for each of the four criteria employed.

To find out the existing weaknesses of fishermen's cooperative societies in the perception of their members themselves, preferential ranking technique was firstly employed against nineteen explaining statements distributed over four major weakness domains viz. management (contained five statements), infrastructure (contained five statements), financial (contained five statements) and marketing (contained four statements). Then, for prioritizing those, rank based quotient (RBQ) of each of the preferentially ranked constraints was determined in congruence with the following procedure as suggested by Sabarathnam [8]:

$$RBQ = \frac{fi(n+1 - \text{ith value})}{N \times n} \times 100$$

Where, fi = Number of respondents reporting a particular problem under ith rank

N = Total number of respondents

n = Number of identified problems

Results and Discussion

Socio-personal profile of fishermen's cooperative members: Perusal of the socio personal characteristics of the respondents, as presented through [Table-1], revealed that majority (73.17%) of the selected fishermen's cooperative members were under below poverty line (BPL) category.

Table-1 Socio-personal profile of selected fishermen's cooperative society members

SN	Features	Categories	Frequency	Percentage
1.	BPL card holder	Yes	90	73.17
		No	33	26.83
2.	Age	Young (18 ≤ 35 years)	25	20.33
		Middle (>35 to 45 years)	60	48.78
		Old (> 45 years)	38	30.89
3.	Caste	Scheduled Caste	120	97.56
		Other Backward Community	1	0.81
		General Caste	2	1.63
4.	Family size	Up to 3 members	36	29.27
		4-6 members	75	60.98
		7-9 members	7	5.69
		>9 members	5	4.06
5.	Level of education	No formal education	5	4.06
		Primary	27	21.95
		Middle	49	39.84
		Secondary	22	17.89
		Higher Secondary	15	12.20
		Graduate	5	4.06
6.	Experience in fisheries (yrs)	1-5	21	17.07
		6-10	48	39.02
		11-15	34	27.64
		16-20	00	0.00
		>20	20	16.26
7.	Length of cooperative membership (yrs)	1-5	21	17.07
		6-10	42	34.15
		11-15	31	25.20
		16-20	17	13.82
		>20	12	9.76
8.	Family income (₹/ annum)	< 1,00,000	107	86.99
		>1,00,000 ≤ 2,00,000	16	13.01
9.	Share of fisheries to total income (%)	1-5	100	81.30
		> 5-10	00	0.00
		>10-15	00	0.00
		>15-20	4	3.25
		> 20- 25	00	0.00
		> 25-30	00	0.00
		> 30	19	15.45

Table-2 Perceived level of benefits

Perceived level of benefits as received from the cooperative	Maximum obtainable score	Obtained score	Perception index (%)
Very High benefits	7995	385	4.82
High benefits	6396	240	3.75
Moderate benefits	4797	378	7.88
Little benefits	3198	460	14.38
Very little benefits	1599	1106	69.17

In case of distributive pattern of age, majority of the members (48.78%) were observed to be occupying the middle age group (>35 to 45 years) followed by 30.89 percent of them belonging to the old age group (> 45 years) and 20.33 percent to the young age group (18 ≤ 35 years).

Table-3 Ranking of weaknesses of cooperative societies

SN	Statement	RBQ	Rank
Management			
I	Insufficient activity planning	14.63	XI
II	Inadequate staffing	1.88	XVI
III	Casual approach towards timely disbursement of dividend/ share of profit etc. to the members	36.71	VII
IV	Lack of financial support from the government	3.21	XV
V	Lack of transparency in fund management	60.98	V
Infrastructure			
I	Inadequacy in office space	8.39	XIII
II	Inadequate fishing equipments	29.27	VIII
III	Lack of proper pond embankment	47.33	VI
IV	Inadequate water area before hand for culture and fishing activity	82.41	II
V	Unavailability of fish feed	12.32	XII
Economic			
I	Inadequate reserve fund	66.41	IV
II	Reluctance towards collective wisdom based decision making on future growth and development	72.02	III
III	Inadequate working capital	25.89	IX
IV	Unsatisfactory economic performance	90.24	I
V	Increasing liabilities	3.21	XV
Marketing			
I	Lack of market intelligence support	4.11	XIV
II	Very less producers' share to profit	22.68	X
III	Unfair charges and lack of open auction in the market	4.11	XIV
IV	Poor road connectivity with the markets	0.77	XVII

In terms of caste, large majority (97.56%) of the members were found to be belonging to Scheduled Caste followed by 1.63 percent belong to general caste and the rest 0.81 percent to Other Backward Community. In terms of family size, while majority of the members (60.98%) were having 4-6 members, in descending order 29.27 percent of them were having up to 3 members, 5.69 percent with 7-9 members and rest 4.06 percent with more than 9 members. While 39.84 per cent of the respondents were having their education up to middle (8th standard) level, 21.00 percent of them had educational background up to primary school level, 17.89 percent up to secondary level, 12.20 percent up to higher secondary level and, in very small proportion though, only 4.06 percent were found to be in possession of graduate degree. Further, 4.06 percent of the respondents appeared to have no background of any formal education. Contextual to respondents' experience range in fisheries activities, 17.07 percent were with 1 to 5 years of experience, 39.02 percent had 6 to 10 years of experience, 27.64 percent had 11 to 15 years of experience and remaining 16.26 per cent were noted to have more than 20 years of such experience. About length of cooperative membership, while 13.82 per cent were having their membership range between 1 to 5 years, those were 34.15 percent, 25.20 percent, and 13.82 percent in favour of 5 to 10 years, 11 to 15 years, and 16 to 20 years respectively. Even 9.76 per cent were found to have their cooperative membership for more than 20 years. In terms of annual family income, while 86.99 percent were found to be belonging to low income category (\leq ₹1,00,000/- per annum), remaining 13.01 percent of them were of immediately higher order category (*i.e.*, $>$ ₹1,00,000-2,00,000/- per annum). In case of an overwhelming majority of 81.30 percent of the respondents, the share of income flow from fisheries activities to their total annual income was noted to be merely 1 to 5 percent as against only 3.25 percent cases where the respondents were noted to be in receipt 15 to 20 percent share from fisheries to their annual family income and 15.45 percent of them who could obtain $>$ 30 percent of their annual family income from fisheries. Members' perception regarding receipt of benefits from respective cooperative societies: The revelations of the findings as got presented through the [Table-2] regarding the perception of the responding fishermen's cooperative society members with respect to the benefits they could accrue from their own societies exhibited an altogether sorry figure. While majority of the members had their attachments with the societies that was spanning between 10 to 20 years [Table-1], a very high

proportion of 83.55 percent of them were, nevertheless, expressive of little to very little benefits that they could get in from the societies with which they were being attached to. On the contrary, merely 8.57 percent of them were indicative of having high to very high extent of benefits as members from their cooperatives. In case of 7.88 percent cases, the indication of accrual of moderate benefits by the members could be traced out. In the face of such hopeless perception on the part of the members themselves, the very performances of the fishermen's cooperative societies in Tripura under study might precisely be expressed to be far from satisfactory. And this observation kept conformity with the revelations of Prakash [9] and Chandrashekar [3], who indicated that the overall performance of fishery cooperatives is not encouraging and limited number of those is successful and able to meet expectations of their members. Extent of participation of members in various functional activities of cooperative societies: In terms of extent of participation of members in various functional activities of cooperative societies [Fig-1], the bars signifying 'no participation' stand like high-masts in cases of almost all the identified major activity domains of the cooperative societies. While in case of culturing of fish as one of the major activities, 70.28 percent of the respondents were expressive of their no participation in any sub-activity, such levels of no participation were detected to be 70.5 percent, 87.48 percent, and an overwhelmingly high of 93.66 percent with respect to the activity domains pertaining to harvesting, marketing and general managerial activities, respectively. And as the resultant effect, the overall non-participation level of the responding fishermen's cooperative society members figured out to be 76.12 percent, which was nonetheless very high. Even in cases of cumulative percentage share of rare and occasional participation of the members combining all the activity domains appeared to be 12.58 percent and thus left a meagre proportion of 11.3 percent who were expressive of their regular participation in the functional activities of their respective societies. Further, in case of three of the surveyed cooperative societies, those were found to have been engaged in one additional domain of activities in the form of fish seed production. Therefore, for those cooperative societies, members' level of participation in that activity domain was also documented [Fig-2]. And in that count, again the proportional representation of members' no participation was highest (53.79%), which was followed in descending order by regular participation (20.60%), occasional participation (18.28%) and rare participation (7.24%).

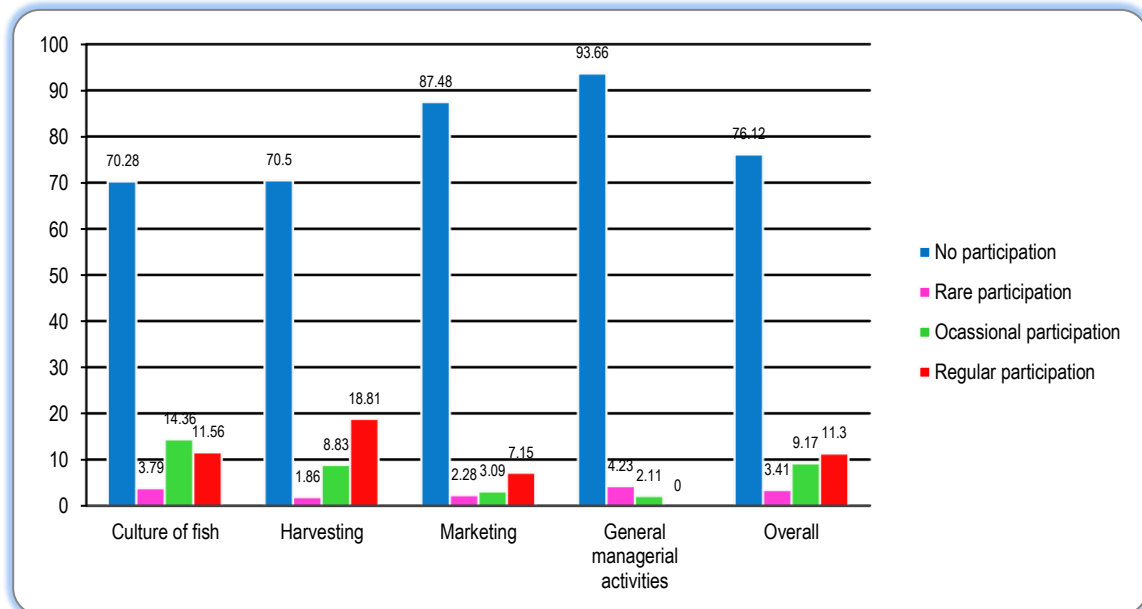


Fig-1 Members' participation in various functional activities of cooperative societies

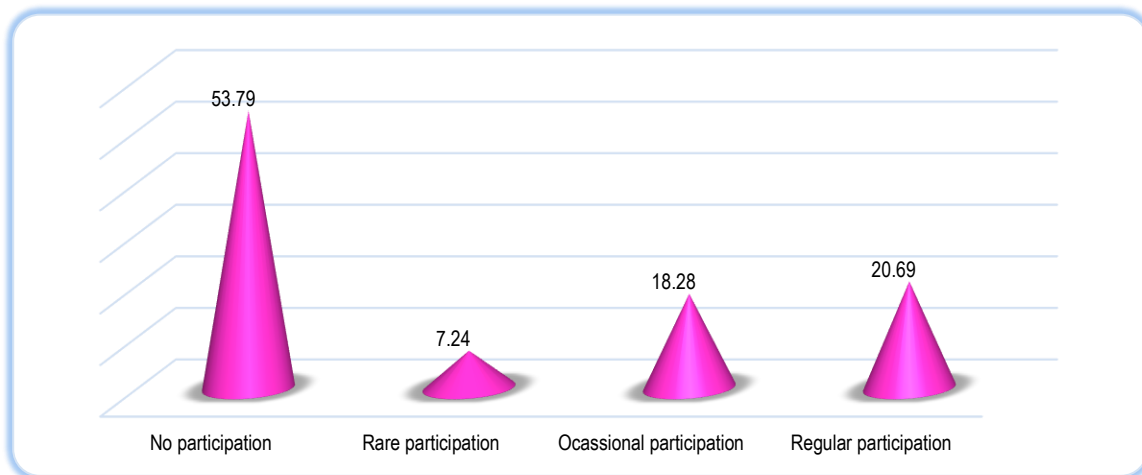


Fig-2 Members' participation in fish seed production activities of cooperative societies

Thus, in the eventuality, the very issue of addressing the basic tenets of cooperative societies which repose faith on self-help and mutual-help to derive some common benefits has been found to be getting grossly unsubstantiated for the present investigative study. Weaknesses of cooperative societies as perceived by the members: Having come across with the deplorable extent of members' perception regarding accrual of benefits from their respective cooperative societies as well as in the matter of participation in various functional activities in one form or the other, an additional effort was then put forward to understand various weaknesses of the cooperative societies under study, so as to better perceive the direct and/or indirect deterring factors associated with the societies' performances. And while doing so in accordance with the perception of the member respondents, various weaknesses were ranked by utilizing preferential ranking technique has got presented in [Table-3]. The table indicated 'unsatisfactory economic performance' to be the prime constraint (RBQ value 90.24). In descending order, the other nine indicated constraints were: 'inadequate water area before hand for culture and fishing activity'(RBQ value82.41), 'reluctance towards collective wisdom based decision making on future growth and development' (RBQ value 72.02), 'inadequate reserve fund'(RBQ value 66.41), 'lack of transparency in fund management' (RBQ value 60.98), 'lack of proper pond embankment'(RBQ value 47.33), 'casual approach towards timely disbursement of dividend/ share of profit etc. to the members (RBQ value 36.71), 'inadequate fishing equipment's' (RBQ value 29.27), 'inadequate working capital'(RBQ value 25.89), and 'very less producers' share to profit'(RBQ value 22.68).Out of those ten prioritized weaknesses, while 'unsatisfactory economic

performance' (Rank-I), 'inadequate reserve fund'(Rank-IV) and 'inadequate working capital'(Rank-IX) emerged out to be economic ones as per perception of the respondents, three of those namely 'reluctance towards collective wisdom based decision making on future growth and development'(Rank-III), 'lack of transparency in fund management'(Rank-V), and 'casual approach towards timely disbursement of dividend/share of profit etc. to the members' (Rank-VII) were indicative of management incompetency of the surveyed societies. Moreover, the prioritized weaknesses like 'inadequate water area before hand for culture and fishing activity'(Rank-II), 'lack of proper pond embankment'(Rank-VI) and 'inadequate fishing equipment's'(Rank-VIII) relating to infrastructural inadequacies were also indirectly reflective of the unseemly functioning of the cooperative management under study. Thus, in no way the performances of surveyed fishermen's cooperative societies might be rated to be of satisfactory levels.

Conclusion

The learning experience gained from the study was very much insistent that despite the high order role expectations to establish themselves as institutional shield for ushering social self-help of the members and their due empowerment in dealing with the problems of marginalization and poverty, the functional upshot of fishermen's cooperative societies in Tripura had been far wanting at least in the judgement of the members themselves. Under such state of functional insufficiency, it has become to be a necessity to relook into the very issue of enhancement of functional performances of the fishermen's cooperative societies being operative in the state.

From that count, both the departments of Fisheries and Cooperation are required to play pro-active roles. Without only remaining restricted to the customary examination of the books of accounts, a beginning should be made through rigorous performance audit including the state of internal management mechanisms of the fishermen's cooperative societies in a time bound manner by way of even involving professional external agencies with one of the mandates to them being to examine the views and opinions of the common members also. This is because for the cooperatives, substantial government assistance is being provided in the forms of managerial subsidy, share capital support, training etc.

Application of research: Findings of the study may facilitate the cooperative sector of the state and relevant state development department in designing effective strategy to address the prevailing constraints and weaknesses of the fishermen's cooperative societies to enhance their productive performance and cause furtherance of income opportunities of the members in the process.

Research Category: Fishermen's Cooperative Societies

Abbreviations:

BPL- Below Poverty Line

RBQ - Rank Based Quotient

Acknowledgement / Funding: Author thankful to College of Fisheries, Lembucherra, Agartala, 799210, Tripura, Central Agricultural University, Iroisemba, Imphal, 795004, Manipur. The authors also duly acknowledge the contribution and inputs of both the members and functionaries of active fishermen's cooperative societies of West Tripura and Gomati districts

Research Guide or Chairperson of research: Professor Dr Atanu Sarkar

University: Central Agricultural University, Iroisemba, Imphal, 795004, Manipur

Author Contributions: All author equally contributed

Author statement: All authors read, reviewed, agree and approved the final manuscript

Conflict of Interest: None

Ethical approval: This article does not contain any studies with animals performed by any of the authors.

References

- [1] Institute of Chartered Accountants of India (2013), 1-9.
- [2] Ostrom E. (1990) *Cambridge University Press, New York*.
- [3] Chandrasekhar B.S. (2014) *Global Journal for Research Analysis*, 7(3), 92-93.
- [4] Anonymous (2014a) *Fisheries Statistics, Government of Tripura, Web. <http://fisheries.tripura.gov.in/program.htm>* (Accessed on February 27, 2017).
- [5] Anonymous (2014b) *Mandate of the Department of Fisheries, Government of Tripura, Web. <http://fisheries.tripura.gov.in/program.htm>* (Accessed on February 27, 2017).
- [6] Haldar P.K. and Saha S. (2015) *International journal of advance research and innovative ideas in education*, 1(5), 879-889.
- [7] Upadhyay A.D., Sinha M., Roy A.K., Dhanze J.R. and Pandey D.K. (2013) *Economic Affairs*, 58(3), 271-284.
- [8] Sabarathnam V.E. (1988) *Manual on field experience training for ARS Scientists. National Academy of Agricultural Research Management, Rajendranagar, Hyderabad 50030*.
- [9] Prakash M. (2000) *Fish coops*, 14(4), 195-198.