



## **Building Sustainable Communities: A Reality Check on Performance of Fishermen's Cooperative Societies in Tripura, India**

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### **Authors' contributions**

*This paper is an outcome of collaborative work among all authors. Author CP designed the study, managed the literature searches, performed the primary survey and wrote the first draft of the manuscript. Author AS guided in formulating conceptual framework and wrote the protocol. Authors ADU and PP managed the analyses of the study. Authors PB and YJS assisted in preparing the survey schedule. All authors read and approved the final manuscript.*

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### **ABSTRACT**

The study was conducted in two purposively selected districts of Indian north-eastern state of Tripura viz. West Tripura and Gomati, during September, 2017 to February, 2018 with objective to examine the functional status of fishermen's cooperative societies in the light of financial performance *vis-a-vis* perception of the society members regarding their own societies. While from

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West Tripura district five active societies were pooled through list sampling, those were four in case of Gomati district. Primary data was collected from 189 respondents of which ordinary cooperative members were 169 as chosen through probability proportionate to size (PPS) sampling at 10% level of probability and twenty executive body members. Results revealed that merely 4.28% of the ordinary members were having good to very good level of awareness on their society activities. Though the fishermen's cooperative societies are supposed to offer some common benefits, 87.16% of the ordinary members expressed accrual of little to very little of any such benefits from their societies. Contrarily, 70.77% of cooperative functionaries had expressed accrual of high to very high level of benefits. Analyses of quinquennial trend of business reflected accumulation of a negative value of (-) 2.21 in terms of overall Net Profit Ratio of the studied cooperatives to indicate their sickly business performance. Again, barring only one, all the other remaining societies could not be found satisfactory contextual to quinquennial Efficiency Ratio signifying their incapability to use assets for generating income. As mark of challenge to the basic tenets of cooperative societies that repose faith on mutual-help, a meagre 8.84% of the ordinary members were detected to have their regular participation in various functional domains of cooperative societies. Garrett ranking identified 'casual approach towards timely disbursement of dividend/share of profit etc.', 'lack of transparency in fund management', and 'inadequate water area before hand for culture and fishing activity' to be the three topmost perceived deterring factors on the functional performance of societies in order of importance.

*Keywords: Fishermen's cooperative society; performance; perception; participation; benefits; Tripura.*

## 1. INTRODUCTION

Co-operation signifies working together. In this light, cooperative society is conceived as an assembly of those people who are desirous of working together with some common economic objective. This voluntary association of persons are seen as a fundamentally different type of enterprise in terms of ownership, control and purpose [1,2,3]. Unlike other firms and organizations, co-operatives are guided by internationally recognized co-operative principles and values which, among other things, require that those be democratically governed, work on the principle of self-help and mutual help, make equitable contribution to the capital required, and emphasize distribution of members' share over profit [4,5]. An agricultural cooperative, also known as a farmers' cooperative or farmers' cooperative society, is a business enterprise jointly formed, owned, capitalized, patronized, and democratically controlled by farmers, fishermen, or other operators to meet their pressing needs [6]. Precisely, thus, co-operatives are those development tools that promote social empowerments with due attainment of economic goals [7].

Being purposed for the advancement of common pursuits in life, the basis for development and growth of the modern cooperative movement was put down in 1844 in the form of Rochdale Society of Equitable Pioneers in England to pave the way in subsequent formation of countless

successors over the continents [8]. It is being proclaimed that over 100 million jobs around the world have been created by cooperatives [9]. Further, various studies conducted across the world on the role performance of cooperatives in bettering the community well-being through poverty reduction have established the importance of these people's organizations [10,11,12].

Co-operative movement in India, in its modern form, started in the year 1904 with the advent of Co-operative Credit Societies Act on 25<sup>th</sup> March, 1904 [8]. And the fishery co-operative movement in the country began subsequently in 1913 when the first fishermen's society was set up in Maharashtra in the name of 'Karla Machhimar Co-operative Society' [13]. Contextual to the small-scale fisheries sector, cooperatives are regarded to be a way of maximizing long-term community benefits to deal with the threats of fisheries mismanagement, livelihood insecurity and poverty, which are harsh realities for many of the world's small-scale fishers [14]. Under Indian context, majority of the fishermen communities are expressed to be socio-economically backward and are among the weakest sections of the community. Hence, for them the fishermen's cooperatives are viewed to be the most appropriate enabling organization to assist in overcoming many of their difficulties in the quest for improving the livelihood on sustainable basis and strengthening their socio-economic status [15,16,17].

In congruity with such outlook, and under the endowment in the forms of ponds, lakes, floodplain wet lands, reservoirs and mini-barrages for pursuing culture fisheries, the journey of fishermen's cooperative societies in the Indian north eastern state of Tripura began in 1950's. Then after, with an exception of a period of lag during 1960's, during the decades between 1970's and 1980's, the process of growth of those societies attained the peak [18]. Now, in the look for arriving at the targeted enhancement of average domestic fish productivity by the state up to 3000 kg/ha/year by 2020 from that of 2700 kg/ha/annum in 2015-16 [19], the 145 fishermen's co-operative societies here are assumed to play a formidable catalytic role, of course, along with supporting the livelihood of more than 19,307 of their members [18] and conservation of fish biodiversity in the state [20]. Therefore, as the institutional shield to ably drive social self-help of the members and their due empowerment in dealing with the problems of socio-economic marginalization, the fishermen's cooperative societies are not only to remain commercially vibrant but functionally responsive as well. It was in this backdrop, a research effort was put forward to examine the functional status of fishermen's cooperative societies in the light of financial performance of the selected fishermen's cooperative societies *vis-a-vis* perception of the society members themselves with regard to their own societies.

## 2. METHODOLOGY

### 2.1 Logical Framework

The adopted seventh principle of co-operative movement is 'Concern for Community'. Those are typically portrayed as business enterprises operating in the social and solidarity economy. Exemplifying collective rather than individual ownership, co-operatives are considered as bottom-up organizations with the distinctive purpose of addressing member and community needs. The words like 'mutuality', 'self-help', 'benefit sharing' etc. remains critically intertwined with the cooperative societies to succeed. Therefore, as the third engine of growth besides public and private sector [21], remaining sensitized about purpose and scope of own cooperatives as well as involvement and participation by the maximum possible members in identifying opportunities and strategic actions by taking recourse to the principle of collective wisdom should be the building block for a functionally worthy cooperative. Moreover,

alongside achieving the business goal of earning profit, the cooperatives are also mandated with sharing a logical proportion of that profit among the members without prejudice so as to enable them in excelling quality of their lives. Keeping such exposition in view and on being purposed at assessing the functional wellness of cooperative societies, hence, along with keeping provision for gauging 'financial performance of the cooperatives', the methodological construct of present study also included 'extent of members' awareness on cooperative's functional activities', 'extent of members' participation in various functional activities of societies', 'perception on benefits derived from the cooperatives', and 'members' perception on weaknesses of cooperative'.

### 2.2 Research Setting

The *ex post facto* study was conducted during September, 2017 to February, 2018 in the two purposively selected districts of Indian north-eastern state of Tripura viz. West Tripura and Gomati. The criteria behind such selection was based on the fact that among all the eight constituent districts of the state, Gomati and West Tripura were appeared to be among the forerunners in terms of existence of active registered fishermen's cooperative societies therein.

### 2.3 Sampling

In terms of the number of existing active fishermen's cooperative societies, while West Tripura district was having 19 such, 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 four. Thus, altogether nine fishermen's cooperative societies were selected for carrying out the study. Having completed the process of selection of societies, respondents for conducting primary survey were selected from each of all those societies through employing probability proportionate to size (PPS) sampling at 10 per cent level of probability. And the number of so selected respondents was 169. Further, in order to make the study more comprehensive, 20 numbers of executive body members of the chosen cooperative societies were also selected for personal interview. Thus, the sample size of the respondents for collection of primary data finally stood out to be 189.

## 2.4 Data Collection

Data was collected from both primary and secondary sources. Primary data was collected through personal interview of the sample respondents by separately employing pre-tested structured interview schedules for the ordinary society members as well as the members of the executive body. Accumulation of secondary data was made by way of taking the help of relevant published reports and documents available in the public domain as well as audited annual balance sheets of the identified fishermen's cooperative societies.

## 2.5 Method of Analysis

In accordance with the specific requirements to draw logical conclusion, analyses and interpretations of collected data were done in the following manner:

### 2.5.1 Extent of awareness on cooperative activities

For measuring the extent of awareness of the members on various functional activities being performed by their respective societies, thirteen indicative statements were identified through review of relevant literatures and consultation with the experts and scored against a five-point scale. The response scores assigned against each of the statements were 1, 2, 3, 4, and 5 for 'very poor', 'poor', 'fair', 'good' and 'very good' respectively. Then, based upon the actually obtained gross awareness scores as cumulatively resulted with respect to each of the five rating criteria for a given category of respondent, awareness index (expressed in percentage) against each of those rating criteria was computed in the following manner:

$$\text{Awareness index} = (\text{Total obtained score} / \text{Maximum obtainable score}) \times 100$$

Where, obtained score meant the summated score obtained from all the constituent statements for the entire population under a given category of respondents.

### 2.5.2 Perception on benefits derived from the cooperatives

In order to determine perceived level of benefits derived from their respective societies, both by the ordinary members as well as the functionaries, thirteen indicative statements were

identified and those were then rated against a five-point rating criteria 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. Now, based upon the actually obtained gross benefit perception scores as cumulatively resulted with respect to each of those five rating criteria for a given category of respondent, benefit perception index (expressed in percentage) for each of those rating criteria was computed in the following manner:

$$\text{Benefit perception index} = (\text{Obtained score against a particular rating criterion} / \text{Maximum obtainable score under that particular criterion}) \times 100$$

Where, obtained score meant the summated score obtained from all the constituent statements under each rating criterion for the entire population of a given category of respondents.

### 2.5.3 Financial performance of the cooperatives

For analysing the financial performance of selected cooperative societies, secondary data on their balance sheets for the five financial years (2011-12 to 2015-16) were recorded and analyses of key financial ratios like Gross Profit Ratio (GPR), Net Profit Ratio (NPR) and Efficiency Ratio (ER) were determined [22,23]. The average of the ratios for said five years was estimated to visualize the long term business performance of the societies.

The Gross Profit Ratio (GPR) was determined in terms of percentage in the following manner:

$$\text{GPR} = (\text{Gross profit} / \text{Net sales}) \times 100$$

The Net Profit Ratio (NPR) was computed in terms of percentage in the following manner:

$$\text{NPR} = (\text{Net profit} / \text{Net sales}) \times 100$$

The Efficiency Ratio (ER) of operation of the cooperative societies was determined in the following manner by way of relating the annual total sales with that of the final inventory at the end of that particular year:

$$\text{ER} = \text{Total sales} / \text{Ending inventory}$$

#### 2.5.4 Perception on extent of participation in cooperative activities

For the purpose of measurability, based on discussion with the experts and sharing with the non-sample fisher folk, four major domains of activities were identified with each of those being consisted 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). However, in case of three cooperatives, one additional domain of activity in the form of fish seed production was observed, which was inclusive of ten sub-activities. All such sub-activities were rated through a 4-point scale namely 'regular participation', 'occasional participation', 'rare participation', and 'no participation' with the assigned score values being 4, 3, 2 and 1 respectively. The overall participation score of an individual respondent for six cooperatives was determined by summing up the obtained score values with respect to all the twenty six selected sub-activities under four dimensions. On the contrary, for the respondents remaining attached to three cooperatives, which were performing one additional domain of activity in the form of fish seed production, their individual overall participation score was determined by summing up the obtained score values with respect to all the thirty six sub-activities under five dimensions. Therefore, all those major activity domain wise participation index (expressed in percentage) of the members as well as the functionaries was computed against each of the four rating criteria by using the following formula:

$$\text{Activity domain wise participation index} = \frac{\text{(Obtained score from a particular domain against a given rating criterion / Maximum obtainable score from that particular domain against same criterion)} \times 100$$

Where, obtained score meant the summated score obtained under each rating criterion combining all the sub-activities of a given activity domain.

Further, The overall extent of participation in terms of all the activity domains of the cooperatives was determined by computing the overall participation index (expressed in percentage) in the following manner:

$$\text{Overall participation index} = \frac{\text{(Obtained score combining all activity domains / Maximum obtainable score from all those domains)} \times 100$$

Where, obtained score meant the summated score obtained combining all sub-activities under all of the identified major domain of activities.

#### 2.5.5 Perceived weaknesses of cooperative

Ranking, as an expression of respondents' assigned priority about their feeling against a set of structured statements with respect to weaknesses of their respective cooperative, was done for classifying the responses in order of perceived importance. For the purpose, Garrett ranking technique was employed [24]. The respondents were asked to rank altogether eighteen weakness linked statements to reflect the domains of management, infrastructure, financial and marketing. The orders of respondents' assigned merit were converted into ranks by using the following formula:

$$\text{Percentage Position} = 100 (R_{ij} - 0.5) / N_j$$

Where,

$$R_{ij} = \text{Rank given for } i^{\text{th}} \text{ item by } j^{\text{th}} \text{ individual}$$

$$N_j = \text{Number of items ranked by } j^{\text{th}} \text{ individual}$$

The percentage position of each rank thus obtained, was converted into scores by referring to the Garrett's table [24]. Then for each weakness statement the scores of individual respondents were added together and divided by the total number of respondents for whom the scores were added. These mean scores for all such weakness statements were arranged in the order of their ranks and inferences were drawn on that basis.

### 3. RESULTS AND DISCUSSION

#### 3.1 Extent of Members' Awareness on Cooperative's Functional Activities

Contextual to the extent of awareness on cooperative activities by both the members as well as functionaries of cooperative societies on the basis of worked out awareness indices, it was observed that majority (58.22%) of the society members were having very poor level of awareness on the activities related to their cooperative societies followed by 21.57 per cent of them who were placed under poor level of

**Table 1. Awareness on cooperative activities**

Category	Maximum obtainable score		Obtained score		Awareness index (%)	
	Members	Functionaries	Members	Functionaries	Members	Functionaries
Very Poor	2197	260	1279	46	58.22	17.69
Poor	4394	520	948	66	21.57	12.69
Fair	6591	780	1050	240	15.93	30.77
Good	8788	1040	324	208	3.69	20.00
Very Good	10985	1300	65	245	0.59	18.85

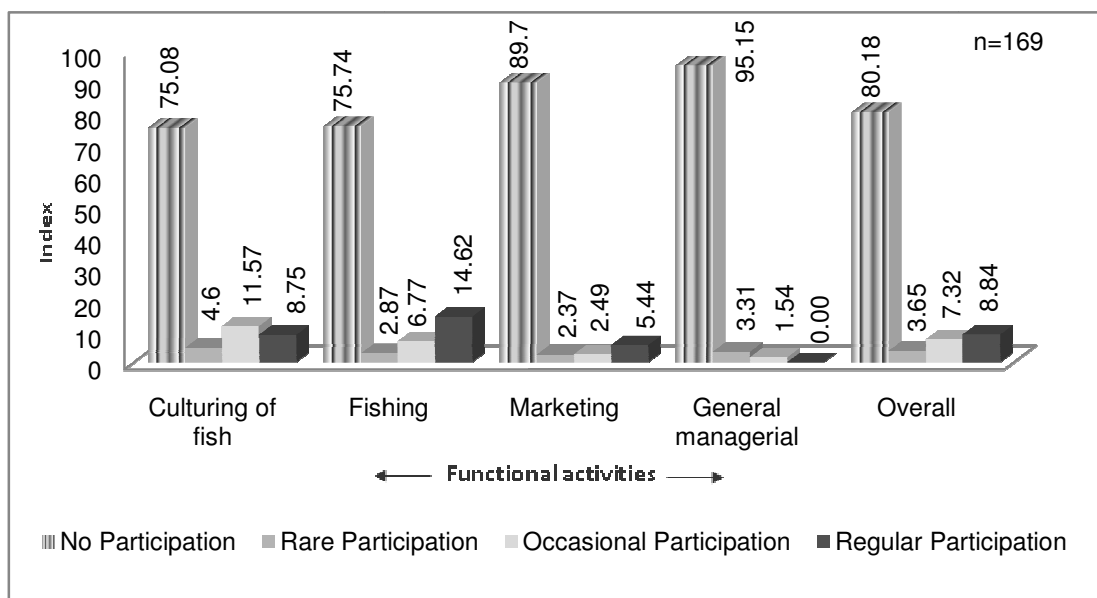
awareness, 15.93 per cent under fair awareness level and only 3.69 per cent were having good level of awareness. Further, only a meagre 0.59 per cent of them were found to have very good level of awareness on their society activities (Table 1).

On the contrary, it got transpired from the same table that while 17.69 per cent of the functionaries were having very poor level of awareness on the activities related to their cooperative societies, 12.69 per cent of them were placed under poor awareness level, 30.77 per cent under fair awareness level, 20.00 per cent under good awareness level and 18.85 per cent were having very good level of awareness on their society activities. Thus, there existed marked variation between the members and their functionary counterpart with respect to their extent of awareness regarding functional activities of respective societies with which they were belonging to. In the other way around, it might further be interpreted that there existed a

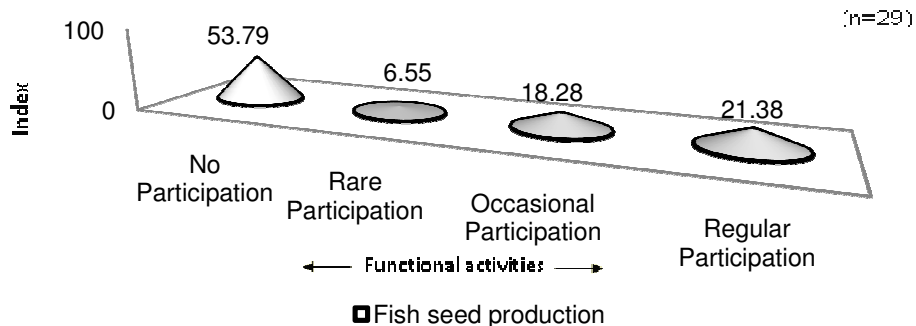
distinct lapse on the part of the functionaries, who had been holding the formal portfolios as executive body members, in information empowerment among the ordinary members of the societies.

**3.2 Extent of Participation in Various Functional Activities of Societies**

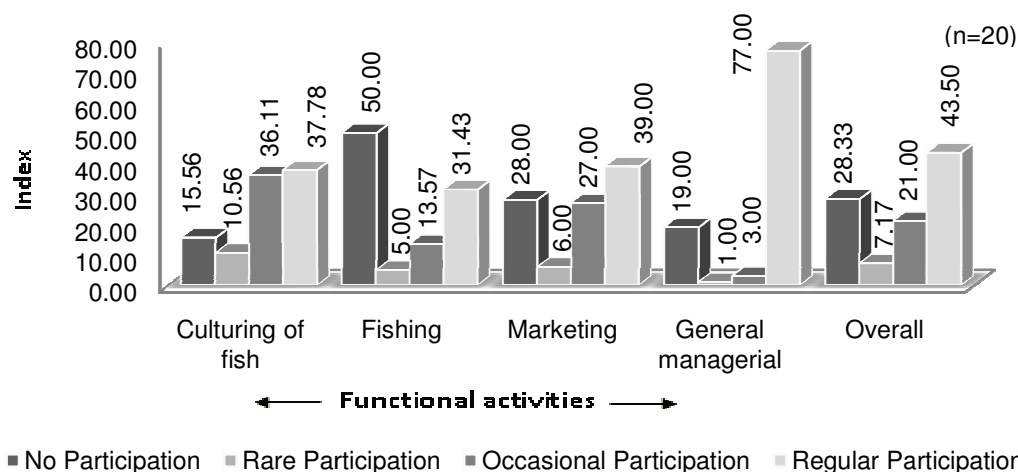
Fig. 1 transpired ordinary members’ participation in functional activities of their respective societies. Herein, the participation index bars signifying ‘no participation’ stood high in cases of all of the identified major activity domains. While in case of culturing of fish as one of the major activities, 75.08 per cent of the respondents were expressive of their ‘no participation’ in any sub-activity, such levels of ‘no participation’ were found to be 75.74 per cent, 89.70 per cent, and an overwhelmingly high of 95.15 per cent with respect to the activity domains of fishing, marketing and general managerial activities,



**Fig. 1. Ordinary members’ participation in functional activities of their societies**



**Fig. 2. Ordinary members' participation in fish seed production of their societies**



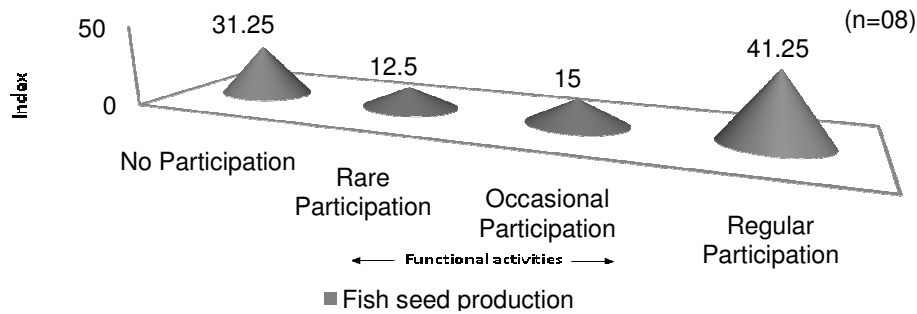
**Fig. 3. Functionaries' participation in functional activities of their cooperatives societies**

respectively. And as the resultant effect, the overall participation level of the ordinary society members figured out to be 80.18 per cent, which was nonetheless very high. Even, cumulative percentage share of 'rare' and 'occasional' participation of the members, combining all the activity domains, appeared to be 10.97 per cent and thus leaving a skimpy proportion of 8.84 per cent, who were expressive of their 'regular participation' in the functional activities of their societies.

Further, for three of the societies which had one additional domain of activity in the form of fish seed production, the level of participation of their ordinary members to that particular activity was also documented (Fig. 2). And in that count, again the proportional representation of 'no participation' was highest (53.79%), which was followed in descending order by regular participation (21.38%), occasional participation (18.28%) and rare participation (6.55%).

In terms of extent of participation of functionaries in various functional activities of cooperative societies, the participation index, as got presented through Fig. 3 signified almost a reverse scenario compared to those of the ordinary members. Here, the functionaries were responsive of their higher extent of 'regular participation' in each and every functional activity domains viz. culturing of fish (37.78%), fishing (31.43%), marketing (39.00%) and general managerial activity (77.00%). Consequently, their overall participation index stood out to be 43.50 per cent.

Once again, for the three cooperatives having additional activity of fish seed production, perception of the functionaries in terms of their participation on that count indicated that 41.25 per cent of them had their 'regular participation' as against 15.00 per cent, 12.50 per cent and 31.25 per cent in cases of 'occasional participation', 'rare participation' and 'no participation', respectively (Fig. 4).



**Fig. 4. Functionaries’ participation in fish seed production of their cooperative societies**

**Table 2. Perceived level of benefits as derived from the cooperatives**

Category	Maximum obtainable score		Obtained score		Benefit perception index (%)	
	Members	Functionaries	Members	Functionaries	Members	Functionaries
Very little benefit	2197	260	1646	21	74.92	8.08
Little benefit	4394	520	538	44	12.24	8.46
Moderate benefit	6591	780	432	98	6.55	12.69
High benefit	8788	1040	244	256	2.79	24.62
Very High benefit	10985	1300	385	600	3.5	46.15

**Table 3. Quinquennial trend of business of fishermen's cooperative society under study**

Cooperative society <sup>+</sup>	Gross profit (Rs.)	Net sales (Rs.)	Total operating expenses (Rs.)	Net profit (Rs.)	Ending inventory (Rs.)	GPR*	NPR*	ER*
Bagbari MSS <sup>+</sup> Ltd.	-887.6	18411.6	19499.2	858.0	14761.4	-5.20	4.21	1.39
Gandhigram MSS <sup>+</sup> Ltd.	211.0	40780.4	48358.8	-11666.2	18920.4	0.52	-28.61	2.16
P. Narayanpur MSS <sup>+</sup> Ltd.	10886.4	42944.0	39738.8	5151.2	18282.4	25.35	12.00	2.35
Pandavpur MSS <sup>+</sup> Ltd.	1951.524	71764.4	70172.6	90.8	25704.82	2.72	0.13	2.79
Agartala MSS <sup>+</sup> Ltd.	88669.0	573081.0	560826.0	-15734	468020.73	15.47	-2.75	0.12
Bagma MSS <sup>+</sup> Ltd.	42076.0	70361.5	140636.0	304.0	6334.0	59.80	0.43	11.11
Rani Rashmani MSS <sup>+</sup> Ltd.	6012.75	31780.75	42167.75	-3145.6	7664.75	18.92	-9.90	4.15
Nutan Bazar MSS <sup>+</sup> Ltd.	129265.4	345018.4	344052.2	14673.99	199000.0	37.47	4.25	1.73
Udaipur MSS <sup>+</sup> Ltd.	75773.0	113382.5	192642.5	-19397.5	100100.0	66.83	-17.11	0.64
<b>Overall</b>	<b>353957.474</b>	<b>1307524.55</b>	<b>1458093.9</b>	<b>-28865.31</b>	<b>858788.5</b>	<b>27.07</b>	<b>-2.21</b>	<b>1.52</b>

Note: + MSS stands for Matsyajibi Samabay Samiti (Fishermen's Cooperative Society)

\*GPR=Gross Profit Ratio, NPR= Net Profit Ratio, ER= Efficiency Ratio



**Table 4. Garrett ranking of factors influencing weaknesses of the cooperatives**

Sl. no.	Factors	Total Score	Rank	Percentage
1.	Insufficient activity planning	7843	IX	5.17
2.	Inadequate staffing	6968	XIII	4.59
3.	Casual approach towards timely disbursement of dividend/ share of profit etc. to the members	13489	I	8.89
4.	Reluctance towards collective wisdom based decision making on ways and means of future growth and development	6915	XIV	4.56
5.	Lack of transparency in fund management	12205	II	8.04
6.	Inadequacy in office space	9500	VII	6.26
7.	Inadequate fishing equipments	7472	XI	4.92
8.	Lack of proper pond embankment	11131	IV	7.33
9.	Inadequate water area before hand for culture and fishing activity	11760	III	7.75
10.	Unavailability of fish feed	7453	X	4.91
11.	Inadequate reserve fund	9759	VI	6.43
12.	Lack of financial support from the government	9761	VI	6.43
13.	Inadequate working capital	9010	VIII	5.94
14.	Unsatisfactory economic performance	10392	V	6.85
15.	Increasing liabilities	7358	XII	4.85
16.	Lack of market intelligence support	2872	XVII	1.89
17.	Producer's share is less in consumer's rupee	4702	XV	3.10
18.	Unfair charges and lack of open auction in the market	3182	XVI	2.10
		151772		

Though in cases of both Fig. 1 and Fig. 2, occurrences of high levels of 'no participation' in operational activities of the societies for the ordinary members is apparent, there might still be an obvious question as to why in case of the activities pertaining to fish seed production (Fig. 2), participation by those category of members have appeared to be relatively lot more than that of the domain pertaining to ordinary functional activities (Fig. 1). Now, in the light of very nature of those two sets of activity domains, it needs be clarified that in case of ordinary functional activities of the societies much of the sub-activities there under pertains to discharging of administrative vis-a-vis managerial responsibilities in which the functionaries prefer in not giving much access to their submissive ordinary members counterpart by way of being driven by their vested interest. On the contrary, for the activity domain of fish seed production, a good number of associated sub-activities demand frequent involvement of physical labour for which the functionaries, as an emerging neo-elite class, are to utilize the physical services of the ordinary members in many counts. And offering of such explanation perhaps justifying further as to why the wilful participation of the functionaries in the society activities is being found to be much more compared to the ordinary members. In fine, the very issue of ordinary

members' participation in different functional domains of fishermen's cooperative societies are being perceived to be regulated by the aforementioned neo elitism-driven functionaries and, in the eventuality, to cause an unfortunate departure for the societies under study in the sense of reposed faith of the cooperative movement on self-help and mutual-help.

### 3.3 Perceived Level of Benefits as Derived from the Cooperatives

Table 2 presented the worked out benefit perception indices for both the ordinary members as well as functionaries. It became apparent there from that majority of the members (74.92%) were getting very little of benefits, followed by 12.24 per cent of them getting little benefits, 6.55 per cent moderate benefits and 2.79 per cent were getting high level of benefits. It also got revealed that only small proportion of the member beneficiaries (3.5%) were of the perception of getting very high level of benefits.

Contrarily, the benefit perception indices contextual to the functionaries (Table 2) signified that only 8.08 per cent of them were getting very little benefits, 8.46 per cent getting little benefits and 12.69 per cent were indicative of getting moderate benefits. Interestingly, almost in a

reverse manner, while for 24.62 per cent from the functionaries the perception was favouring receipt of high level of benefits, 46.15 per cent were having the perception of getting very high level of benefits from their respective cooperative societies. The reverse opinion on deriving benefits from the cooperatives signified that the basic principles and values of the cooperatives such as economic participation, fulfilling the economic aspiration and economic equity could not be made satisfied by the management of the cooperatives.

### **3.4 Financial Performance of Fishermen's Cooperative Societies**

Despite the fact that 'a profit ratio of at least 9 per cent of net sale is considered to be ideal range' [22], it got reflected that overall gross profit ratio (GPR) combining all nine fishermen's cooperatives under study had been 27.07 to indicate registering of higher profit margins by them. However, in terms of individual society wise perusal, whereas the GPR for six societies were noted to be greater than the threshold value of 9, those were less than that value in case of three societies of West Tripura district viz. Bagbari MSS Ltd., Gandhigram MSS Ltd. and Pandavpur MSS Ltd. (Table 3). And such revelation called for taking of appropriate corrective steps by the management of those societies so as to increase their GPR to healthier levels. Pretty interestingly, despite impressive attainment of such overall GPR (27.07) combining all societies, on the issue of overall net profit ratio (NPR) those cooperatives reflected accrual of a negative value of (-) 2.21, which was falling far short of the accepted ideal range of 0.5-1.0 [22] to that effect.

Apart from such poor state of affairs in terms of overall NPR, on individual basis also some of the surveyed societies like Gandhigram MSS Ltd., Udaipur MSS Ltd. Rani Rashmani MSS Ltd. and Agartala MSS\* Ltd. were found to be having their NPR lower than the ideal range of 0.5-1.0 to indicate inefficient management of the affairs of business therein. And such revelations strongly urge upon enhancement of the overall efficiency of business by the societies through compulsory reduction of operational vis-a-vis overhead expenses. Else, in spite of impressive GPR, the NPR bound to remain poor or even negative as indicator of sickly business performance and as the consequence, the poor common members will continue to accrue low or no financial benefit in the form of dividend etc. from their societies.

Further, in order to measure the societies' ability to use their assets for generating income, the overall efficiency ratio (ER), combining all the nine fishermen's cooperative societies, was also worked out. Here again, the estimated ER value was found to be only 1.52 which was much lower than the expected ideal range of efficiency ratio which should be 9-12 times of the ending inventory [22]. Leaving aside such overall unsatisfactory level of ER, when individual societies were estimated separately in terms of ER, barring only one (*Bagma Matsyajibi Samajkalyan Society Ltd.* of Gomati district) with 11.11 quinquennial average value, the cases of all the eight other societies could not be found satisfactory (Table 3).

### **3.5 Weaknesses of Cooperative Societies as Perceived by the Members**

In terms of perusal of Table 4, revealing ranking position of the factors perceived by the ordinary society members as deterring the performance of their respective societies, 'casual approach towards timely disbursement of dividend/share of profit etc. to the members' appeared to be the most alluring one (percentage position:8.89) to stimulate the performance related weakness of the cooperatives. And in descending order, up to next four ranks, were the factors like 'lack of transparency in fund management' (percentage position: 8.04), 'inadequate water area before hand for culture and fishing activity' (percentage position: 7.75), 'lack of proper pond embankment' (percentage position: 7.33), and 'unsatisfactory economic performance' (percentage position: 6.85). Now, the nature of weaknesses, as emerged out through the perception of the ordinary member respondents, clearly reflected that those were relating to management/infrastructural/economic inadequacies of the societies to again 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.

## **4. CONCLUSION**

The functional performance of fishermen's cooperative societies under study had been far from satisfactory, both from the business point of view as well as the judgmental point of view of the members themselves in contrast to the adopted seventh principle of co-operative movement i.e. 'Concern for Community', self-

help, benefit sharing etc. as an yardstick for the cooperative societies to succeed and thus perform as an effective institutional shield in excelling quality of lives of the society members.

## 5. RECOMMENDATION

In the face of detected functional insufficiency of the fishermen's cooperative societies in Tripura, it is being strongly advocated to undertake careful performance audit of the societies in a time bound manner by way of engaging external professional agencies. And contextual to rendering of substantial assistance in a regular manner from the governmental side in the forms of managerial subsidy, share capital support, training etc., while conducting such exercises, those agencies should be vested with the mandate to amass and analyze the views and opinions of the ordinary members also.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Brown L, Hicks E. Stakeholder engagement in the design of social accounting and reporting tools. In: Laurie M, (Ed). Social Accounting for Social Economy Organizations: Accounting for Social Value. University of Toronto Press, Toronto, Canada; 2013.
2. Novkovic S. Defining the co-operative difference. *Journal of Socio-Economics*. 2008;37:2168–77.
3. Spear R. Reasserting the co-operative advantage project: Overview. *Journal of Co-operative Studies*. 2000;33(2):95–101.
4. Institute of Chartered Accountants of India. Handbook on Cooperative Society and Non-Profit Organisations. Publication Department: ICAI (New Delhi). 2013;1-9.
5. Bezabih E. Cooperative movement in Ethiopia: Workshop on perspectives for cooperatives in Eastern Africa, October 2-3, Uganda; 2012.
6. Igben MS, Eyo EO. Agricultural economics: An introduction to basic concepts and principles. Uyo (Nigeria): Best Print Business Press. 2002;228–235.
7. Zeuli K. The role of cooperatives in community development. Bulletin No. 3. University of Wisconsin, Center for Cooperatives; 2002.
8. Samantaray PC. Hundred years of cooperative movement: Emerging issues and challenges. *Orissa Review*. 2004;7-12.
9. Allahdadi F. The contribution of agricultural cooperatives in poverty reduction: A case study of Marvdosht, Iran. *Journal of American Science*. 2011;1(77):22–26.
10. Simmons R, Birchall J. The role of co-operatives in poverty reduction: Network perspectives. *Journal of Behavioral and Experimental Economics (Formerly The Journal of Socio-Economics)*. Elsevier. 2008;37(6):2131-2140. Available: <https://ideas.repec.org/a/eee/soceco/v37y2008i6p2131-2140.html> (Accessed 01 October 2018)
11. Birchall J, Ketilson LH. Resilience of the cooperative business model in times of crisis. International Labour Office, Sustainable Enterprise Programme. Geneva: ILO; 2009. Available: [www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---emp\\_ent/documents/publication/wcms\\_108416.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_108416.pdf) (Accessed 01 October 2018)
12. Zeuli KA, Cropp R. Cooperatives: Principles and practices in the 21<sup>st</sup> Century. University of Wisconsin, Madison, WI; 2004.
13. Tyagi LK, Bisht AS, Pal Amar, Lal KK. Functioning of fishing cooperative societies in selected States of India. *Journal of Community Mobilization and Sustainable Development*. 2013;8(1):90-93.
14. Ostrom E. Governing the commons: The evolution of institutions for collective action. Cambridge University Press, New York; 1990.
15. Chandrasekhar BS. Fishery co-operative societies in India: Problems and prospects. *GJRA - Global Journal for Research Analysis*. 2014;7(3):92-93.
16. Kumar V, Wankhede KG, Gena HC. Role of cooperatives in improving livelihood of farmers on sustainable basis. *American Journal of Educational Research*. 2015;3(10):1258-1266.
17. Haldar PK, Saha S. An insight into the performance of fishermen co-operative societies in Tripura. *International Journal of Advance Research and Innovative Ideas in Education*. 2015;1(5):879-889.
18. Pegu C, Sarkar A, Biswas P, Upadhyay AD, Pal P, Singh YJ. Members' perception

- towards fishermen's cooperative societies: A study in Tripura. *Int. J. of Agriculture Sciences*. 2018;10(10):6104-6108.
19. Anonymous. Mandate of the Department of Fisheries, Government of Tripura. Available:<http://fisheries.tripura.gov.in/program.htm> (Accessed 27 February 2017)
  20. Upadhyay AD, Sinha M, Roy AK, Dhanze JR, Pandey DK. Evaluation of performance of primary fisheries cooperative societies (MSS) of Tripura. *Economic Affairs*. 2013;58(3):271-284.
  21. Othman Azmah, Kari Fatimah, Jani Rohana, Hamdan Rosita. Factors influencing cooperative membership and share increment: An application of the logistic regression analysis in the Malaysian cooperatives. *World Review of Business Research*. 2012;2(5):24-35.
  22. Nair SR, Pandey SK, Arpita S, Shyam SS. An evaluation of the business performance of fishery cooperative societies in Vasai Taluka of Thane district Maharashtra. *India Cooperative Review*. 2007;44(3):224-233. Available:<http://eprints.cmfri.org.in/id/eprint/7943> (Accessed 01 March 2017)
  23. Patel DK. An empirical study of profitability analysis in cooperative societies in Kaprada Taluka. *Scholarly Research Journal of Interdisciplinary Studies*. 2014;II/XIII:1666-1677.
  24. Garrett HE, Woodworth RS. *Statistics in psychology and education*. Bombay, Vakils, Feffer and Simons Pvt. Ltd.; 1969.

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