



Constraints Faced by the Fish Consumers and Marketing Agents in Tripura

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ABSTRACT

The study was undertaken to identify potential scope for aquaculture in North Eastern state Tripura as most of the water resources are unutilised or underutilised. To provide an overall picture of the potential strengths (S), weaknesses (W), opportunities (O) and threats (T) in aquaculture, SWOT analysis with the participation of farmers carried out for the state. The study also identified the major constraints in developing marketing of fishes and consumer satisfaction. To analyse the constraint faced by the fish consumer, rank based quotient were used. Constraints faced by the consumer were price level and fluctuation (87) followed by availability of fish (76), lack of fresh fish (69), non-availability of preferred fish (67), marketing hygiene (60) etc. Different constraints faced by the marketing functionaries were ranked by using Garrett ranking technique. Major constraint faced by the marketing functionaries of the state are high level of involvement of middlemen followed by high marketing cost, storage facilities and fluctuation in price etc. The study has suggested several measures to be undertaken for overall development of aquaculture sector in the state.

Key words: Garrett Ranking, Rank Based Quotient (RBQ), and SWOT analysis

INTRODUCTION

The small hilly Tripura is one of the north east states of India. The economy of this state is based on agriculture and allied activities in general and particularly, fisheries is considered to be one of the vital sectors for economic development. Fisheries sector in this state has witnessed an impressive growth from a traditional activity to well-developed commercial activity. This is due to the fact that more than 95 per cent population of Tripura consumes fish (Govt. of Tripura, 2009) and unlike other part of NE India, fish is preferred food item for the people of Tripura where rice and fish form the basic diet. The aquaculture sector in Tripura is presently undergoing a transition phase. The State has potential resources in the form of 22,164 ha water area under culture fisheries and 7,879 ha under capture fisheries during 2010-11 (Government of Tripura, 2011a). The fish production during 2010-11 was estimated to be 49,231 mt whereas the requirement for fish was reported to be 45,337 mt during same year. The

local fish producers have comparative advantage in terms of marketing as well as better prices for fresh fish. On the other hand, the outside producers have the advantage of higher productivity at low cost due to economies of scale (Upadhyay, 2008). This study identified the constraints faced by the fish consumer of the state as well as fish marketing personnel in order to provide better serve to the fish consumer. This paper also studied the strength, weakness, opportunity and strength of the fisheries of the state.

MATERIALS AND METHODS

The study was conducted in Tripura. To assessing potentiality of the aquaculture of the state SWOT analysis was carried out. Constraints faced by the fish consumer, 160 fish consumer were randomly surveyed across different fish market of west Tripura, 60 marketing functionaries, 20 from each category *viz.*, retailer, wholesaler and commission agent were surveyed to know the major constraints faced by the marketing functionaries

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Table1. SWOT analysis for assessing the potentiality of aquaculture of the state.

Strength	<p>Availability of unutilized water resources with potential for aquaculture</p> <p>Availability of agricultural and livestock wastes and cheaper fish feed ingredients, location and resource specific aquaculture technologies</p> <p>Accumulation of nutrient rich organic matter in the water bodies from catchments and Involvement of women</p>
Weakness	<p>Poor group organisation among users due to personal disputes</p> <p>Lack of visionary/ capable community leader</p> <p>Unaware of ‘common property resource management’</p> <p>Lack of interest in ‘participatory aquaculture’ due to multiple-ownership</p> <p>Conflict among user groups: agriculture vs. Aquaculture</p> <p>Weak research-extension linkage and poor cooperation among operational agencies, lack of technical awareness and commitment of farmer/ users</p> <p>Poor training facilities at the grass root level, Lack of material input and credit facilities, non-availability of fingerlings in time, high feed cost</p> <p>Lacking fish culture through self-help group or Cooperative society</p> <p>Low water depth in summer and poor marketing facilities</p>
Opportunity	<p>Multiple use management of available nutrient-rich water bodies, utilization of underutilized water resources and waste materials for multi-commodity production at one place in order to enhance the land and water productivity</p> <p>Landless and resource poor farmers will have the opportunity in involving participatory aquaculture, integrated farming, value addition and processing</p> <p>Increased aquatic productivity, social equity, food and employment security, equity in income and environmental sustainability</p>
Threat	<p>Unutilized water bodies will promote water quality deterioration and weed infestation</p> <p>Unemployment, labour migration, food insecurity, reduced per capita income, non-recycling of agricultural and livestock wastes</p> <p>Less opportunity for participatory learning and empowerment of users and women</p>

of different fish market. The data were collected with the help of pre-structured interview schedule. The statistical tools like percentage, Rank Based Quotient (Sabarathnam, 1988) were used for ranking the constraint faced by consumer, Garrett’s ranking technique (Khobragade and Sonawane, 2004) was used to identify the marketing constraints encountered by the market functionaries.

RESULTS AND DISCUSSION

Strength Weakness Opportunity and Threat Analysis (SWOT)

It was observed that though there is potential scope for community aquaculture, most of the water resources are unutilised or underutilised. To provide an overall picture of the potential strengths (S), weaknesses (W), opportunities (O) and threats

Constraints Faced by the Fish Consumers

Table 2. Constraints identified by the fish consumer of Tripura.

Sr. No.	Constraint	RBQ	Rank
1.	Price (price level and fluctuation)	87.88	I
2.	Availability	76.22	II
3.	Lack of fresh fish	69.98	III
4.	Non-availability of preferred sp.	67.54	IV
5.	Lack of hygiene	60.04	V

(T) in aquaculture, SWOT analysis with the participation of farmers carried out for the state. SWOT analysis is presented in Table 1.

Constraints faced by the consumers

Fish consumers identified several problems while buying fishes. Based on their identification constraints are ranked by using Rank Based Quotient (R.B.Q). Major constraints are price (level and fluctuation) followed by availability, lack of fresh fish, non-availability of preferred species and lack of hygiene source (Table 2). The consumers were facing problem while buying fishes from market and due to not getting the fish according to their preference. As a result consumption of fishes may not be up to their willingness of consumption. This section of this study identified those major problems which may help to producers, traders and policy makers or state government for further action.

Constraints faced by the marketing functionaries

The fishermen encountered a larger number marketing related as many as ten constraints that would affect the marketing functionaries namely high marketing cost, higher level of involvement of middlemen, fluctuation in the prices, poor storage, drinking water, facilities, delay in settlement of sale proceeds, lack of market information on price, absence of government marketing cooperatives and high degree of dependency on middlemen for financial support. Garrett technique was applied to rank the constraints faced by fishermen.

Measures to be undertaken for overall development of aquaculture

This section of this paper discusses several suitable measures identified by the respondent for development and improvement in consumption of fish and to fulfil the demand for local fish in the state.

1. Proper management of available water body under fish culture.
2. Tripura has vast water resources but still resources are not yet under fish culture, in this case government should target to enhance the culture area/water area in the state.
3. Government should encourage the scientific fish culture rather than traditional fish culture.
4. Government should give more emphasis on providing training to the capable fish farmers.

Price level and fluctuation

Government should take strong price stabilization method so that price of fish does not fluctuate much in the market. Involvement of middle men in the marketing channel is leading higher price level, so involvement of less middle men is required for consumer point of view.

Maintaining freshness of fish

Freshness is another constraint for the consumers of Tripura. In the state production is less than their demand so they imports from other state and while importing freshness goes off as it takes long time. So their suggestion here is government should emphasis on local fish production by using

Table 3. Marketing constraints encountered by fishermen.

Rank	Marketing Constraint
I	Higher level of involvement of middlemen
II	High marketing cost
III	Fluctuation in the prices
IV	Poor storage
V	Lack of market information on price
VI	Delay in settlement of sale proceeds
VII	Drinking water
VIII	High degree of dependency on middlemen for financial support
IX	Facilities
X	Absence of government marketing cooperatives

Table 4. Garrett's ranking (N=100).

	Constraint									
	1	2	3	4	5	6	7	8	9	10
Sum of score	5906	6253	5876	5589	5178	5075	5289	5332	4972	5235
Frequency of response	84	88	86	83	79	78	80	80	79	80
Mean score	70.30	71.05	68.32	67.33	65.54	65.06	66.11	66.65	62.93	65.43
Order of merit	II	I	III	IV	VII	IX	VI	V	X	VIII

* Scores after transmutation of order of merit

unused water resource of the state, then only this problems can be solve.

Make available of preferred species

Mix culture or poly culture including various fish species may lead to better benefit to farmers as well as consumers to avail heterogeneous preferred fish species. Tripura fish farmers facing problems of good quality seed, so govt. of Tripura should initiate several projects for good quality seed production of several species in order to give uninterrupted fish seed supply to the farmers of the state so that they will able to fulfil the heterogeneous demand of the consumers.

Maintaining hygienic condition:

Consumers are facing problems of unhygienic condition of the fish farmers as well as traders; this is mainly due lack of awareness among the farmers and lack of market infrastructure of the state which does not support the maintenance of hygienic condition. So to maintained hygienic condition of fish, awareness and development of market structure are equally important.

CONCLUSION

Price information or market information in fisheries is relatively in infant stage. Fish price

Constraints Faced by the Fish Consumers

information should be made available through media in order to ensure a fair price both for fishermen and consumer. Fish market infrastructure is the basic need for proper distribution of fish in marketing system. For getting efficient marketing system of fish in the state first need is to develop the market infrastructure. To maintain cleanliness, leasing out to fish marketing societies or self-help groups (SHGs) may be encouraged. The local fish producer have comparative advantages in terms of marketing as well as better prices for fresh fish on the other hand the outside producer advantaged with higher productivity at low cost due to economies of scale.

In order to increase the efficiency of the fish marketing system and to avoid involvement of too many middlemen, a co-operative fish marketing system with minimum support price for at least commercially important varieties of fishes to be introduced and price monitored. It is utmost requirement to developed appropriate pricing method in the market. To avoid large price spread and to ensure a proportional margin of profit to different agents of marketing system, involvement of too many middlemen should be avoided. By avoiding too many middlemen, farmers can get a good percentage of shares in terms consumers price. Local fish marketing efficiency is more than interstate fish marketing, so government should more emphasis on local fish production. Involvement of large number of middlemen is presently affecting and contributing to reduce the producer share in case of interstate fish.

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