

## FISH MARKET AND MARKETING ISSUES IN BANGLADESH

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### ABSTRACT

Bangladesh being a lowland country have rich water resources in and around the country. The total fish production in 1998-99 was 1552 thousands tonnes of which 80% were from inland fisheries and 20% from marine sources. Major portion (97%) of the total harvested fish is marketed internally for domestic consumption. About 50% of the inland fish production are consumed in fresh form due to the strong consumer preference. In terms of volume, value and employment, the domestic fish market in Bangladesh is big. The fish marketing system in Bangladesh is traditional, complex, and less competitive but plays a vital role in connecting the fish producers, and consumers, thus contributing significantly in "value add" process of the fish which otherwise would have been unused or underused and consequently in the earnings of the fisherfolk. Hence this study was conducted to understand the salient feature of fish marketing system in general and three fish marketing areas, urban, suburban and rural fish market of Comilla district in specific and the pond fish marketing system of Bangladesh. Fish marketing is almost entirely managed, financed and controlled by a group of powerful intermediaries who played a big role in fish marketing channel. The marketing infrastructure including cold storage, ice, insulated transport facilities, landing centres and wholesale markets is generally inadequate, unhygienic and in disrepair. They need to be fully developed to reduce the waste, lower the marketing costs, stabilize the prices and over all improve the marketing efficiency.

**Key word:** Marketing intermediaries; Marketing issues; Marketing efficiency

### INTRODUCTION

Fisheries sector plays a significant role in Bangladesh economy by contributing to national income, export earnings, food and nutritional security and employment generation. It is a powerful income generator, promoting a number of subsidiary industries like, development of fish seed industry, fish feed industry, manufacturing of fishing

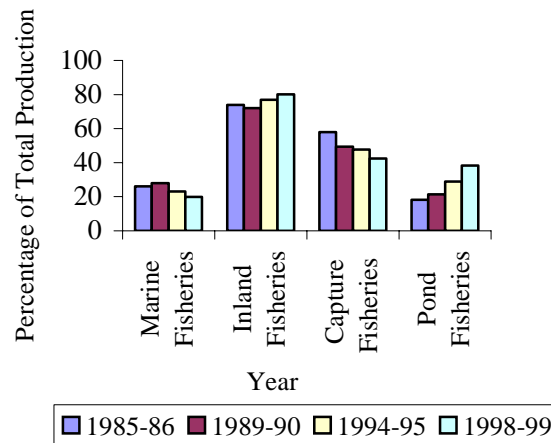


Fig 1: Trends of fish production from different sources of fisheries

Sources: Bangladesh Bureau of Statistics (2000) [1]

gear and traps, establishment of cold storage plants and ice factories, fish processing industry and other related activities. The government of Bangladesh has given emphasis for the development of fisheries sector to increase fish production and there by bridge the gap between its supply and demand. The annual fish production of Bangladesh in 1998-1999 was 1552 thousands tonnes of which 80% was from inland fisheries and 20% from marine fisheries. Of

the inland fisheries 42.33% was from capture fisheries and 38.21%, from fresh water pond culture (Fig: 1). The production trend is increasing by improving the management of culture-based fisheries in ponds and the development of fisheries technology. There is an ample scope for increasing production of culture based fisheries by introducing modern fisheries management techniques and cultural practices.

Fish is a highly perishable commodity and the spoilage start as soon as the fish dies. Therefore an efficient fish marketing system is essential to enable the consumers to get the fresh fish. The fish marketing system including transportation, handling, preserving, packaging, and storing in Bangladesh is yet to be modernized. Usually the marketing margin of fish is high and the prices of fish are high and unstable throughout the year. The fish production centres are located in remote areas in Bangladesh. A well-managed marketing system is necessary, to enhance satisfaction of the consumers and revenue of the pond fish farmers, fishermen and the fish traders. In absence of efficient marketing system, increased pond fish production will result in glutting of local markets with lower prices and wastage of fish causing loss in value adding process and income of fisherfolk. But only a few districts of Bangladesh having the facilities of cold storage, to preserve and transport the fish to other markets. Considering the above facts, the study was conducted to explore markets and marketing channels of fish and clarify its structure. In doing so, fish marketing in urban, suburban, and rural fish markets and pond fish marketing will be studied, by keeping in mind the main features that will improve the marketing channel and connect the producers and consumers directly that enables the supplying of better quality fish in reasonable consumer price but with a better price for the produces as well. For this purpose, first characteristics of marketing system of fish market including marketing channel and market intermediaries will be explored. This will be followed by case studies of rural, urban, suburban fish markets, and pond fish marketing system in Comilla district of Bangladesh.

### **FISH MARKETING IN BANGLADESH**

Fish trading is not new in Bengal of which Bangladesh is a part with rich water resources in and around the country. Most rural peoples caught fish wherever felt needed during a certain period in a year and most of which was used as food and medicine. The leftovers after meeting the household needs were sold to the market through fishermen who in turn sold the fish to wholesale traders, commission agents and retail traders finally reaching the consumers towns and cities. This practice has been continued ever since and forms the core of the marketing system yet today. This section of the paper is designed as to high-light the general features of the fish marketing system in Bangladesh.

#### **Marketing Intermediaries**

In each stage of different marketing channel marketing intermediaries play crucial role in flowing the commodities and bringing the two ends, producers and consumers together for mutual benefit. Here these marketing intermediaries involved in the domestic fish marketing will be explained. In doing so their functions at various stages will be made clear.

*The fishermen:* The fundamental link in the fish marketing chain is the fishermen. Their main job is to catch fish from various fisheries sources like, rivers, *beels*, *haor*, *baor*, pond and floodplains. In open water bodies they catch fish rather freely but in accordance to the community and national norms. In pond water bodies they are either hired or contracted for the catch. Generally, they sell their catch while they are in their boats but often come to the nearest fish market primary or secondary, to sell their consignments.

The *Farias*: The *farias* are small traders who purchase fish mostly from the fishermen and the fish farmers and sell them to the *beparis*. They are part-time local fish traders and are engaged in some other business in addition to fish trading such as operating small size fish farms, working as local agricultural laborers, making and selling fishing gears and traps etc.

The *Beparis*: They are the traditional fish traders, who purchase fish from the *farias* or the fishermen and sell their commodities to the wholesaler or retailers through the *aratdar* or commission agents. *Beparis* are of three types (Islam: 1989) [2]

- They are petty traders, who purchase fish mostly from *farias* and rarely from fishermen coming to the whole sale fish markets for selling their fish. They are seasonal traders who involved in some other business during the off-season.
- They are rich traders who have their own transport. They usually go to the fishing areas to buy fish from the fishermen, and bring them to the business centre and sell it through the *aratdars*.
- They are the local traders who purchase fish from the wholesale markets and sell it to the retailers in the local markets.

The *Dalals*: They are usually landless laborers and small landholders and having a key role in establishing contacts between buyers and sellers. They charge a fixed brokerage fee and or a commission for their services.

The Wholesaler: They are the professional fish traders, purchased fish from the *aratdars* or the local fishermen and also some times from the pond fish farmers. Generally they sold the fishes to the retail traders.

*The Aratdars*: The *aratdars* is a licensed holder commission agent. He has a fixed establishment in fish assembly centres or wholesale fish market and operates between *farias* and *beparis* on the one side and with retailers on the other. He helps the *beparis* or *farias* to sell their fish to the wholesaler or retailer and usually charges a fixed commission. He provides storage facilities for a short of period time and makes the grading and sorting of fish according to market demand. Generally he pay in cash to the *beparis* or suppliers but provides fish to the retailers on credit. He usually hires some laborers and salaried persons to perform loading, unloading, weighing, grading etc. and handles a large volume of fish. The *aratdar* give advance to the *beparis* on the condition that he will sell his fish through them. The advances provided by the *aratdar* are not only commercial but also sometimes extended to cover a non-fishing expense. Raychaudhuri (1980), stated that the advances provided were not only commercial but were sometimes extended to cover a range of non-fishing expenses. Thus the relations between advancer and advance took on more of a patron-client-like character which might have helped further to reduce the various transaction costs associated with supervising the fishers activity and ensuring that he did not sell to other middlemen. Another way of ensuring the advance system worked as agreements among those who advanced the money that they would not take on any fisher who owed money to another one of their kind [3].

They have considerable market powers because of their strong financial position and through advance to *beparis* or fishermen and credit sell to the retailer.

The Retailers: The retailers are the last link in the fish-marketing channel. Generally they procure fish from the *aratdars*/wholesaler on credit and sell it to the consumers. They are small traders and are engaged in some other occupations. Most of the retailers are land less or small farmers having no full time work in their farm. There are some big retailers who sometimes sell their fish to other small retailers or employ 2-3 persons on a daily payment basis for selling their consignments. Most of the retailers have fixed establishment for selling fish

### **Marketing Infrastructure**

The infrastructure facilities for domestic marketing of fish and fishery products are still in very poor shape. In big cities and towns the city corporations and municipalities have established some kind of infrastructure facilities like, space, shade, and *pucca* (concrete) floor etc. but the system has yet to be developed for proper management, cleanliness and upkeep of the facilities. On the other hand virtually there are no such facilities at the village level fish marketing places. In any case such markets can be broadly divided into wholesale market and retail market.

- Wholesale market: Wholesale fish markets essentially located in urban centres and are owned and managed by Municipal Corporation or local traders associations. But they don't have the modern auctioning, weighing, storing and packing facilities and are poorly managed. Usually the wholesaling of fish is held every morning in all-important fishing ports and collection centres. However, wholesaling of fish can also take place any time of the day, during the peak season when the transaction of fish is more frequent.
- Retail Market: Municipal Corporation, local bodies or local governments' own retail markets. The infrastructure facilities both in the rural and urban retail market area are not in good condition with regard to stall, parking, sanitation, water supply, drainage, and management. Usually the retailers sit on in the open places either *kacha* (earthen floor) or *pucca* (concrete floor) floor to sell their fish, the spoilage of fish is very fast in such cases. The urban retail fish markets generally get their fish from distant wholesale market or large assembly centres while village or rural retail fish markets get fish from both wholesale or distribution centres and the nearby fisheries sources like rivers, canals or ponds.

### **Marketing Channel**

It operates unseen marketing intermediaries who play crucial role in fish marketing. Producers' predominating in rural regions and consumers in rural and urban regions has the wings of convergence (collection) and divergence (distribution) marketing channels that connect two ends. Generally, the following four marketing channels are involved in domestic fish marketing, each forming a fish market at respective regions of rural, suburban and urban areas.

- Primary market: Physically this market is always in rural area, near from the producers. Here the ponds fish farmers, and fishermen put their harvests, products, and catch of the day for sale. Here the *Faria*, and the *Dalal* procure fish on behalf of bigger fish traders. They also procure fish directly from the producers like pond fish farmers, often on a contract basis from the pond itself with a lump-sum amount. The *dalals* get commissions from the *aratdars* for their services. *Farias* often sold their goods directly to the rural fish markets. This market functions as convergence wing in the marketing channel. (It also functions as divergence wing of marketing channel for the rural region to some extent as it also has the retailing functions of various goods within the region.)

- Secondary markets: Such markets are located in suburban region and functions relay station between primary market in rural region and tertiary market in urban region and or distribution market in rural, suburban, and urban regions. The fish assembled by the fish traders (*aratdars*) through different marketing sources and places are brought to the nearest fish-selling centre, having good communication facilities by mail, river or road. The collected fish are sold to the next intermediaries, the *beparis*. The *beparis* and the *aratdars* usually control these centres. This would be the secondary market play the role of convergence in the marketing channel, which also have a small outlet of divergence for local consumption as well.
- Tertiary market: These markets are usually located in big metropolitan cities or small town. The *beparis* carries their fish to the nearby town/city fish market and sell them to the wholesaler through the *aratdars*. Generally the wholesaling of fish held in the fish section of the retail markets. Sometimes it also held on the roadsides, when marketing intermediaries have taken delivery of their consignments. From this point the commodities are distributed through the distribution channel to various distribution markets.
- Distribution market: The distribution markets are also located in suburban or urban areas. All three markets mentioned above at each level can function partly as a distribution market. Here the *aratdars* or the wholesalers sell their commodities to the retailers. The retailers ultimately sell their purchase to the final consumers by various ways, like through temporary and fixed stalls in the markets, by hawking on head or by rickshaw vans and just sitting in the open yard on roadside. The retailers also carry their fish to the suburban areas or peripheral villages for selling them to the local consumers.

**Fish Price**

Virtually there is no fish price fixation policy in Bangladesh provided by the government, fisheries cooperatives or by the trade associations. The prices of fish are basically influenced by supply and demand and varies with species and size of fish, season of the year and location (Table: 3). The prices of fish have been increasing faster than the other agricultural commodities in Bangladesh (Fig: 2) and doubled during last ten years.

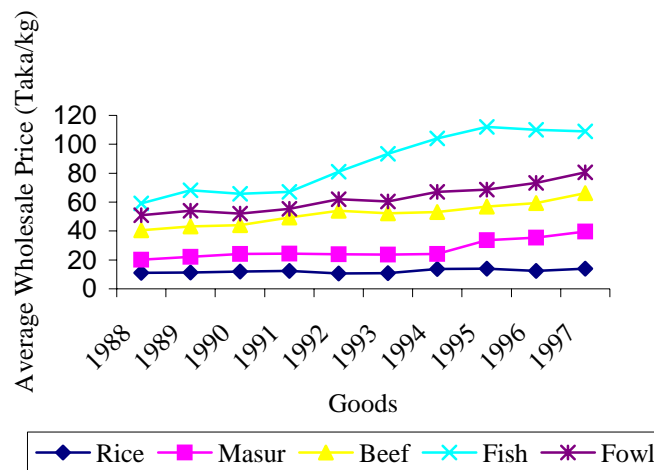


Fig-2: Annual average wholesale prices for fish and other selected consumer goods in Bangladesh  
 Sources: Bangladesh Bureau of Statistics (1998) [4]

Generally the metropolitan cities have relatively higher price than the rural areas and other small cities. The prices of fish in rural market, small towns and nearer to assembly centres are at least 20-25% lower than the prices in capital and other major cities (Tsai and Ali, 1997) [5]. The primary producers hardly get 40-50% of the retail market price prices for their products. Ahmed (1983) conducted a limited scale study related to the marketing of Hilsa (*Hilsha Ilisha*), carps and airbreathing catfishes. He indicated that the primary producers (fishermen/fish farmers) got 50-63% out of consumers' money. Middlemen got between 37-40% while the remaining 12-24% was spent for transportation, preservation and other charges [6]. Hussain (1994) gave an estimate of fishermen's share and marketing margins of marine fisheries products sold in some places of Bangladesh. The primary producers got 60-63% after meeting the marketing costs of 21.7-22.2% and the quality /weight loss of 1.6%. The middlemen on the other hand got the net margin of 13.3% out of consumers' money [7].

The prices of fish are set at each intermediate transfer /sale points except for the initial and terminal points where the products are procured from the fishermen/farmers and sold to the consumers. In each sale points the commission/sale agents provide some kind of services like handling, sorting, auctioning, preservation, packing/repackaging and so on. Different methods are used for fish price fixation and open auction method is widely used at all levels of fish marketing except at the initial and terminal points. The auctioneer gets 4-6% commission on sale value of the commodity and the actual expenses incurred there upon.

### CASE STUDIES

#### Methodology and Objectives of the Study

This study was conducted in Comilla districts of Bangladesh, from which five urban, six suburban and twenty-four rural markets and sixty pond fish farmers were selected. The Comilla district is a progressive district in the sense of its national contribution of pond fish production. There are many big ponds and tanks all over the district. The farmers also adopted modern pond fish culture technology, to increase their production. The data were collected from the market intermediaries, key informant and other personnel involved in the market management. The necessary data and information were collected through a set of closed and open-ended questionnaire. The researcher conducted the field survey. In this study three types of fish markets and rural pond fish farmers were selected: i.) to make an overview of the general features of the different types of fish market, ii.) Analyses the socio-economic characteristics of the fish market intermediaries, iii.) Understand the pond fish marketing system in rural areas and iv.) Understand the problems of pond fish marketing and the factors affecting the efficiency of fish marketing.

#### General Features of the Fish Market

The fish markets usually held on the part of regular or weekly market and are confined in one corner of the market. Many people gather all at once in the market to get the fish and have a huge bargain with the retailers. The urban and suburban markets are usually held on every day early in the morning (with some exception) and usually finished before noon. On the other hand rural markets are held on once or twice in a week in the afternoon which is finished in the evening. The fish assembled in the markets from different sources of fisheries, of which pond fisheries are the major part of the supply in all the market areas (Table: I). In urban and suburban markets fish assembled from various sources of market places like, from distant wholesale market or large assembly centres, on the other hand rural fish markets get their fish from wholesale markets and the nearby fisheries sources like rivers, canals or ponds. Marine sources of fisheries are absent in the rural markets. In very early in the morning the market intermediaries; the fishermen, *farias or beparis* bring their purchase to the urban or suburban market place and sell them through the commission agent the aratdars to the wholesalers or the retailers. And open auctioned is being held by the aratdars to sell the fish.

Table I: Sources of Fish in Sample Market Areas

Market place	Percentage of total fish assembled			
	River and flood plain	Pond	Marine	Others
Urban	20	69	5	4
Suburban	18	75	3	4
Rural	12	78	0	10

Source: Field Survey (2001)

There is no price fixation system in urban, suburban or rural fish market area. Fish price is determined on every market day by the process of supply and demand. Most of the fishes are sold on the basis of eye-estimation. According to Ahmad (1997), weighing machine was rarely used in fish landing centres and retail transactions in the study areas. The weight was usually estimated with eye. Wholesale transaction was done by either eye estimation or weighing, mostly by the later. Both local units of measure (seer) and metric system (kg) were used. Often both systems were used simultaneously at the same market [8].

In some urban and suburban fish markets large carp fishes like, *ruí, catal, mrigal*, silver carp, big head, large *shoal, boal, aire, pungus* etc. are sold on by weight. Live fishes such as *koi, magur*, and *shingi* are kept alive in earthen pails or aluminum disc and are sold on by weight. On the other hand in rural areas almost all types fishes are sold on by eye-estimation according to the size and number. Small fishes such as *puti, kholisha, chela, mola, dela*, etc. are put in lots in bamboo baskets and are sold on by eye-estimation taking small by small amount from the lot in all the markets. In addition to fish and fishery products, a variety of goods both agricultural farm products and non-agricultural products are sale in these markets. Besides the food items, cottage industry and handlooms goods are also sold.

#### Physical Facilities in the Fish Market

A major problem in many fish market has poor infrastructure facilities. In urban and suburban markets, they have some kind of infrastructure facilities like, *pucca* floor, shade and space etc. but the facilities are yet to be

good enough for fish marketing. On the other hand in rural markets there is no such kind of facilities. Table-II and III, indicates the availability of infrastructure and some other basic facilities for efficient fish marketing in urban, suburban and rural areas.

All the surveyed market in urban area having concrete floor and space for fish selling, having ice factory and ice supply facilities for fish preservation which is only 40% and 30% in case of suburban fish market. And none of the rural fish market areas having these facilities causes spoilage of fish very fast. Majority of the fish markets in urban and suburban areas does not have adequate shade, water supply, sanitation and drainage facilities and none of the village markets having these facilities. In rural fish markets very often the retailers sell their fish in open yards or roadside places without having organized market places. In absences of those facilities causes spoilage of fish, make nuisance, and bed smell, which is unhygienic for the people. Most of the dead fishes especially in rural markets are sold in very bad condition, due to the absence of preservation facilities.

Table II: Availability of Physical Facilities in the Fish Market

Facilities available	Frequency Distribution		
	Urban	Suburban	Rural
Having shade for fish selling	40	20	-
Having concrete floor	100	40	-
Having ice factory	100	30	-
Having ice supply facilities	100	100	-
Having water supply facilities	60	30	10
Having sanitation and drainage facilities	40	20	-

Source: Field Survey, 2001

Table III: Percentage Distribution of Fish Market Having Communication Facilities

Facilities	Unit: percentage		
	Urban	Suburban	Rural
Having Banking facilities	60	30	0
Having Telephone facilities	100	50	0
Having Pucca Road Communication	100	50	65
Having Rail Road Communication	100	70	30
Having Waterway Communication	0	30	50

Source: Field Survey, 2001

All the surveyed markets in urban areas having Telephone, *Pucca* road and Railroad communication facilities, which is 50%, 50% and 70% respectively in suburban areas. And in case of rural fish markets 65% and 30% having *Pucca* road and Railroad communication respectively and none of them having telephone and banking facilities.

### Market Intermediaries

Like the other parts of Bangladesh, fish marketing in three selected marketing areas is almost entirely conducted, financed and regulated by traditional and skilled market intermediaries to carry the fish from production places to the final consumers. The intermediaries involved in fish marketing channel in the study are presented in table-IV. The urban markets had an average of 15 *dalals*, 16 *farias*, 85 *beparis*, 15 *aratdars*, 24 wholesalers and 49 retailers and in suburban areas had an average of 18 *dalals*, 11 *farias*, 35 *beparis*, 5 *aratdars*, 15 wholesalers and 35 *retailers*. Incase of rural markets, there is no *beparis*, *aratdars*, and only few *dalals* and wholesaler and had an average of 18 retailers. Most of the *farias*, *beparis*, and retailers do not have trade license in the study areas. *Farias*, *beparis*, and many wholesalers, in most cases do not require any space of their own to do business, therefore entry into the business is very easy.

Table IV: Frequency Distribution of Market Intermediaries Attended in the Market Day

Market Area	Frequency distribution					
	<i>Dalal</i>	<i>Faria</i>	<i>Bepari</i>	<i>Aratdar</i>	Wholesaler	Retailer
Urban	11	16	85	15	24	49
Suburban	8	11	35	5	15	35
Rural	2	0	0	0	3	18

Source: Field Survey (2001)

### Functions Performed by the Market Intermediaries in the Study Areas

The individual intermediaries' sphere of interest may extend from fishing operation to retailing of fish to consumer. In the study areas the market intermediaries undertake the vigorous tasks of assembling, sorting, grading, handling, transporting, auctioning, price-fixing, risk-taking and distribution. The fishermen, *farias*, or the *beparis* are the main intermediaries who perform these functions. The *aratdars* acts as a facilitating agent. Generally they establish temporary shelters and storage facilities for fresh fish traders. They provide advance to fishermen, *farias* or *beparis* for collecting fish for them and also provide light refreshment and market information to the intermediaries. The market intermediaries have to take the liabilities that may arise from fish spoilage and price fluctuation. Ahmad (1997) [9], pointed out that irrespective of the extent of profits earned by the middlemen, in the face of extreme hazards, inadequate physical facilities, poor transportation and price fluctuation, their services are generally considered by marketing expert as the most essential for fish marketing in Bangladesh. Functions performed by the market intermediaries in the Study areas are presented in the following table.

Table V: Market Intermediaries by Nature of Functions Performed in the Study Areas.

Functions performed	% of respondents				
	<i>Faria</i>	<i>Bepari</i>	<i>Aratdar</i>	Wholesaler	Retailer
Assisting buyers and sellers	-	-	100	60.00	-
Buying and selling in the same market	-	25.00	-	45.00	75.00
Buying from one place and selling in another market	78.00	75.00	-	56.00	45.00
Financing sellers and buyers	-	-	100	56.00	-
Providing business premises and temporary storage facilities	-	-	100	24.00	-

Source: Field Survey, 2001.

Multiple answer were allowed

- The *Farias* reported that their major functions was buying fish from different sources in one market and selling their goods either in the same market or in another nearby market to the next intermediaries like wholesaler or the *beparis*.
- The *beparis*: The major function performed by the *beparis* in the study area was that of purchasing fish in one market and selling in another. The *beparis* is usually non-local fish traders who come to the market on market day and buy fish from the *farias* or local fishermen and gathered larger volume of fish for transport it to higher tier market.
- The *aratdars*: They are the auctioneers and whose main task is to negotiate buying and selling between the *beparis* and retailers and are fewer in number compared to other middlemen. They have enough physical facilities in their business premises to keep the goods for grading, sorting and weighing of fish before auction takes place for which they received a commission. Some did financing for the buyers and or sellers.
- The wholesalers: They reported that, they acted as a purchasers and sellers in the same market or in other markets in both the suburban and urban markets. On occasion, they also assisted other buyers and sellers did through some financial help. They usually buy fish from the *aratdars* or the *beparis* and sell it to the local retailers.
- The retailers: In the study areas, the major functions performed by the retailers were to buy fish from the wholesaler or the *aratdars* and sell it to the consumers. The retailers acted as purchasers and sellers in the same markets or in other markets. The rural retailers buy fish from the urban wholesale market and bring it to the rural fish markets for rural consumers.

### Pond Fish Marketing System in the Study area

Being a highly perishable commodity, fish demands efficient marketing system in absence of which the incentives for intensified fish farming may not be fruitful. Nearness to market may be an important consideration in intensive fish farming. Generally the pond fish farmers in the study area do not harvest their fish all at once, and the farmers harvest their crop during the rural market day. However, they also harvest their crop other than the market day whenever necessary and then take it to the nearest suburban or urban fish markets to sale the commodity. The pond fish farmers always kept a part of the catch, for their own household consumption.

The pond fish-marketing channels in urban, suburban and rural fish market in the study areas are presented in the fig 3 and 4. It seems that four types of intermediaries are involved in fish marketing channel, they are local fishermen, *aratdars* or *aratdars* cum wholesalers, retailers. The involvements of fish marketing intermediaries are

varies from place to place and also sources of fisheries. In the study area, urban and suburban fish marketing channel is almost same i.e., three to four types of intermediaries involved like, local fishermen, *aratdars/aratdars* cum wholesalers, retailers but in rural areas usually two types of intermediaries are there such as local fishermen and retailers. Sometimes a third intermediaries are also involved, the local wholesalers.

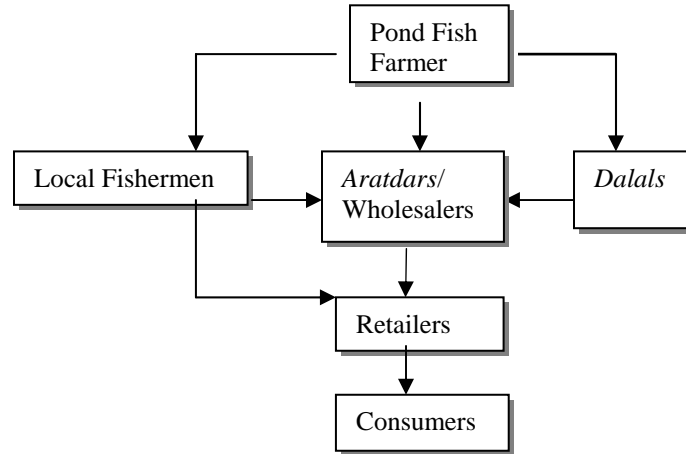


Fig-3: Urban and Suburban Pond Fish Marketing Channel

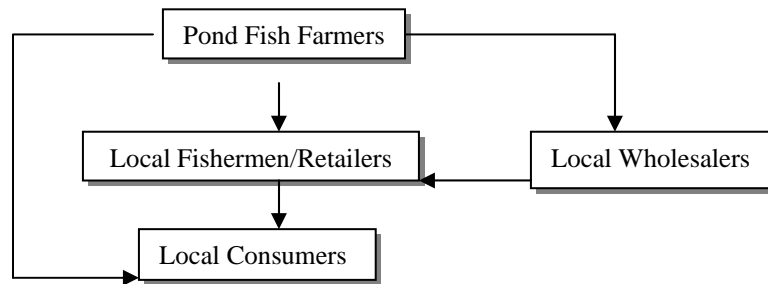


Fig-4: Rural pond fish marketing channel

Figure-5 presented the pond fish-marketing channel used by the fish farmers in the study area. In this study 60 pond fish farmers were interviewed about their fish marketing system. It indicates that majority of the pond fish farmers (55%), have sold their fish through the local fishermen followed by retailers (44%), wholesalers (32%), and directly to the consumers (31%) respectively. Generally the pond fish farmer don't harvest their fish by themselves, they hire the professional local fishermen to harvest their pond fish and sale the catch just after the harvest to the fishermen. Very often the local fishermen purchased fish from the pond owners on credit i.e., they usually paid the price after selling the fish at the market either in rural markets or take it to the near by city centre and sale them through the commission agents like *aratdars* or wholesalers (Fig: 5). Some times (especially in the rural market day) the pond fish farmers' carry their harvest to the nearby local fish market and sale them to the local retailers or directly to consumers (Fig: 5). When the farmers harvest a large amount of fish, they try to take it to the nearby urban or suburban market to get a better price and quick marketing and sale the commodities through the *aratdars* or wholesalers. The *aratdars* took 4-6% commission of the sale value of the commodity and the farmers have to pay the other expenses like *Kulli* charge (carrying cost), grading, sorting, weighing and so on. About 26% of the pond fish farmers have sold their harvest through the *aratdars* in the study area.



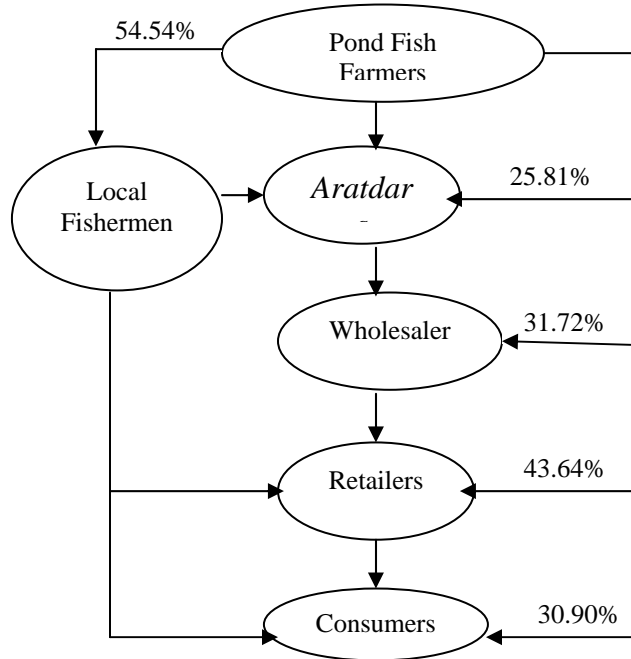


Fig-5: Pond fish marketing channel in the study areas  
 Note: The pond fish farmers used multiple channels  
 Source: Field Survey (2001)

**Problems of Pond Fish Marketing in the Study Area**

Scarcity of fish is a common phenomenon all over Bangladesh and its marketing price is generally beyond the purchasing capacity of the majority of the common people. However, increased production of fish on a large scale will result in glutting of local markets, lower prices and wastage of fish due to the absence of efficient marketing facilities. In the absence of daily markets everywhere in the country the pond fish culturists harvested their fish according to the schedule to the local fishermen or hat day (market hold at a particular place on certain fixed days of the week) so that fish could be taken to the *hat* or a *bazar* (daily market several miles away). Because the amount of fish that can be sold at a hat or small bazar is rather limited. If the fish supply in a local hat or bazar is less than average on a particular day then the pond owner are likely to receive a good price for the fish and consequently more profit; on the other hand if the supply is more than usual then the fish price and profit comes down. Consequently most of the fish produced in remote areas which need good communication facilities to transport the product to urban or suburban fish markets otherwise they have to be consumed in the same locality.

Table VI: Problems of Pond Fish Marketing Mentioned by the Rural Pond Fish Farmers

Nature of Problems	Number of respondents	% of total respondents
Lack of transport facilities	20	33.33
Low fish price in local fish market	30	50
High transport cost	15	25
Problems of local <i>dalal</i>	10	16.66
Security problem	7	11.66
Miscellaneous Problems	26	43.33

Source: Field Survey, 2001  
 Multiple answers were allowed

The pond fish farmers in the study area mentioned that, they are facing numerous problems in marketing their fish, which is presented in the Table-11. It reveals that low fish price or frequent price fluctuation appeared to be the major problem as reported by 50% of the respondents followed by lack of transport facilities (33.33%), high transport cost (25%) to carry to the distant market, illegal payment to the local hoodlums or law enforcing agency (28.33%), which adversely affected their fish marketing and the fish farming. A substantial number of fish farmers reported that some times they trapped by the local *dalals* in the fish market, and have to sell the fish with very low price. Some of the pond fish farmers also reported that lack of outside wholesalers in the local market makes the price low. And also if the farmers directly carry their fish to the market very difficult for them to get a good price, because lack of their bargaining power with the market intermediaries. The pond fish farmers are not be in position to linger on their marketing period due to lack of storage facilities, they have to dispose all of their catch just after harvest.

#### Factor Affecting Fish Marketing Efficiency

Based on the available information (Table: VII), the fish marketing efficiency in the study area influenced by various factors; (i.) lack of proper and adequate marketing facilities like *pucca* floor, shade, water supply and drainage facility, toilets etc. (ii) Poor communications and high transport cost, to carry the fish from remote village to the city centre. Generally the fish are transported by traditional boats, motor launches, trucks, buses, trains, rickshaw, vans and taxi without refrigeration which causes spoilage of fish rendering high marketing cost. (iii) lack of fish preservation facilities such as easy availability of ice, or storage facilities (iv) seasonal price fluctuation i.e., when the fluctuation is too drastic and wide it adversely affects the market, producer, intermediaries and the consumers (v) inconsistent fish supply throughout the year. (vi) lack of financial assistance, especially the *farias or beparis* suffer from this lack of capital because they do not get institutional credit and no other alternative but to depend on the *aratders* for loans on prefixed terms and conditions. (vii) lack of modern fish weighing and grading system in many urban, suburban and almost all rural markets enables some scrupulous traders to exploit the poor intermediaries like *farias, beparis*, and also the pond fish farmers.

Table VII: Problems of Fish Marketing Encountered by the Marketing Intermediaries

Problems	Percentage of total respondents				
	Faria	Bepari	Aratdar	Wholesaler	Retailer
Lack of capital	63	53	-	11	65
Poor communication and High transport cost	74	61	-	-	25
Lack of market Facilities	16	21	-	35	73
Unstable price	51	65	24	33	82
Lack of security	39	46	35	29	56
Lack of storage facilities	-	25	15	43	57
Lack of ice supply facilities	45	46	30	18	73

Source: Field Survey, 2001

Most of the intermediaries cited that, sometimes they have to pay money to the local hoodlums under pressure, illegal payment to the low enforcing agency by the *farias or beparis* when they carrying their goods from remote village to the distant markets, which they realize ultimately from the consumer. It was also learned that there was serious lack of knowledge on the part of the market intermediaries with respect to handling, preserving, transporting and marketing of fish, which causes spoilage of fish.

#### CONCLUSION

The overall objective of this study was to describe the fish marketing system of Bangladesh in general so as to understand the system and its constraints. The above discussion shows that domestic fish marketing of Bangladesh is largely managed, finance and controlled by private sector, consisting of groups of intermediaries (commission agents), where entry of new comers are restricted. The primary producer (fishing and farming communities) has limited bargaining power. There is also evidence of widespread exploitation of farming or fishing community by the marketing intermediaries. Provisions of adequate and easily available credit, development of marketing infrastructure facilities and encouraging participation of primary producer in marketing activities may reduce the level of exploitation.

The fish marketing is mostly traditional, complex and less competitive. The fish marketing system faces various problems including heavy losses and waste and poor quality of fish. Due to the lack of public sector fish marketing organisation the fishermen or pond fish farmer are compelled to hand over their harvest to the

commission agents at a price determined by the latter. Majorities of low-income people who do not have strong purchasing power were the major buyers of low cost fish species. There are different methods used in settings fish prices in markets in the study areas like bargain, auction, and whisper. Bargain is the common methods practice of settings fish prices in retail markets between retailers and the consumers. It is rarely practiced in wholesale markets. When the fishermen, fish farmers or the beparis sell fish to wholesalers or retailers, the price is usually set through auction by an *aratdar*.

There are no separate quality control measures for domestic marketing of fish in Bangladesh. The quality or grade of fish, namely freshness of large fish is roughly assessed by looking at the reddish hue of gills, sinking of eyes, general appearance of fish pressing fingers in different parts of the fish body and sometimes by smelling. Being aware of the desire of consumers, the retailers or the fishermen often put artificial colours on gills or the body of fish and persuade buyers to buy inferior quality of fish by giving a false appearance of freshness to fish. There are also a lack of knowledge on the part of the fishermen, pond fish farmers and other intermediaries, fish traders, with respect to proper handling, preservation, transporting, and marketing of fish causing spoilage of fish and rendering a considerable quantity of fish unsuitable for consumption.

The fish market intermediaries are performing an indispensable role in the marketing of fish and by bridging the gap between the fishermen, fish farmer of remote villages and the consumers, particularly those living in the city centres. However, the efficiency of the market intermediaries is retarded because of various problems they have faced in the process of fish marketing operations. Poor road conditions, lack of quick modes of transport facilities, inadequate cold storage and ice supply facilities, poor marketing infrastructure facilities, harassment by law enforcing agencies and local hoodlums under pressure, unstable market price, lack of market information, all affect their business adversely and increasing their marketing cost.

By developing modern marketing facilities at fish assembly centres, and retail fish markets, increasing cold storage facilities, refrigerated transport vehicles, and adequate supply of ice, increasing competition and providing stability to wholesale and retail markets etc. both the primary producer and consumer interest might be protected.

Here it is important to note that the most of the *farias*, and *beparis* are small or landless farmers who have no access to institutional credit facilities. Therefore they have no other alternative but to depend on the aratdars for loans on pre-fixed conditions, which must be improved through facilitating credit support to them through financial institutions.

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