



Investigation on Fish Marketing Pattern in Mymensingh

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Abstract

An investigation was carried out on fish marketing system of Mymensingh town to find out different marketing channels, fish trading, marketing cost and margins of fish at different levels. The investigation was conducted from October, 2010 to September, 2011 in sixteen markets of Mymensingh town. In Mymensingh town a large number of people were involved in the fish marketing channel as bepari, aratdar, paiker and retailer. Paiker and bepari bought fish from producer and finally sold fish to retailer through aratdar. In the study area it was estimated that total marketing cost of fish for aratdar was Tk. 1.32, paiker, Tk. 6.05, and retailer, Tk. 1.83 per kg of fish. Cost item of fish for different intermediaries was Tk. 10.49 total. The highest marketing costs (Tk. 6.05) were for paiker because they had paid higher aratdari commission and higher transportation cost. Average Net profit was Tk. 3.19 for paikers at peak period and Tk. 3.36 at lean period, for aratdars Tk. 1.60 at peak period and Tk. 1.75 lean period and for retailers Tk. 5.06 at peak period and Tk. 6.24 at lean period per kg of fish. Ilish (*Tenualosa ilisha*) had high demand to consumers and available in the market with approximate price of Tk. 250 to Tk. 300 per piece.

Key words: Marketing system, Marketing costs, Margins

Introduction

Mymensingh is one of the districts of Dhaka division. The district covers an area of around 4,363 square kilometers with several small valleys between high forests. The city of Mymensingh stands on the bank of old Brahmaputra River. A number of fish markets and fish landing centers are situated around the town. Fishes from different localities are regularly coming to the town through different transport systems for consumption of the town dwellers and other people. Some marine fishes (iced or dried), prawns are also regularly landing in this town. To make fish available to consumers at the right time and in the right place requires an effective marketing system (Bahadur *et al.*, 2004). A number of intermediaries are involved in fish marketing system to transport fish from farmers to consumers. Fish marketing is the act of buying or selling fish or fishery products. Preserving, transporting and marketing are three important links in the chain of fish production and consumption connecting the producer, broker, wholesaler, retailer and consumer. Fish harvesting and marketing become profitable only when the fishery products are delivered in a wholesome condition and at a price acceptable to the consumers. According to Alam *et al.* (2010) almost all fish trades internally move through the private sector where a large number of people are dealing with fish distribution and marketing system. The market chain from producers to retailers goes onward through a number of intermediaries: Traders, Brokers, Aratdars, Wholesalers, Mahajans and Dadondars Fish marketing is almost entirely a function of the private

sector and operates through a complex system of village markets (Hat), township markets (Bazar), assembly centers, major urban wholesale and retail markets. There is a corresponding network of personnel, from buyers who may be hat traders or agents of bigger bazar fish merchants (Bepari/Mahajan) to wholesale market commission agents (Aratdar/Paikar) who effectively control the whole system. The fishermen are compelled to hand over their catches to the trader/middleman (Aratdar/Paikar) at a price determined by the latter. The middleman is not just a trader in fish. He is often an owner of capital like boat, net, etc., which he leases out to fishermen. He may be a fisherman himself owning and operating boat, gear, employing fishermen on a fixed wage as hired labourers and enjoying unearned income depriving the actual fishermen of the benefit of their labour and production. The exploitation of the fishermen is mainly due to the monopolistic set up of the fish trade.

Mymensingh region is recognized as the fisheries zone of our country. Many varieties of freshwater fish (139 species) are available in Mymensingh district (Chandra, 2009). Marine fish species are also found abundantly in this town. Marketing system of Mymensingh is yet to be understood as there is no previous information on this aspect. Therefore, the present investigation was initiated to evaluate the existing marketing system of fish, to estimate marketing costs and margins at different levels, to analyze the price variation of fish at lean and peak period and to identify problems to suggest for the improvement fish marketing system.

Places and sources of fish in the markets in Mymensingh town

From different parts of Mymensingh, particularly from different Upazilas fishes are transported to Mymensingh town. Some marine fishes are coming here from other parts of the country and even from other countries.

They are Sadar Upazilla- Trishal, Bhaluka, Muktagachha (Satarasi bazaar) Phulpur, Gouripur, Fulbaria, Churkhai, Netrokona, Mohanganj, Purbadhala, Khaliaghuri, Durgapur, Kendua, Kolmakanda, Barhatta, Atpara, Jaria, Jamalpur, Kishoreganj, Bhairab (Kuliarchar), Tarail. They are also coming from Khulna, Satkhira, Dhaka, Jatrabari, Gajipur, Jhinedah, Chittagong, Jessore, Bogra and other country such as India, Myanmar etc.

From Mymensingh region these fishes are collected from Rivers, Beels and Haors. They are-**Rivers** : Old Brahmaputra, Jhunai, Aiman, Gharata nadi, Sutia, Narasunda, Bothi, Nitai, Haf mora, Kongsha, Jaira River, Khaira River, Silai, Kharmeni. Rangshagang, Gangina, Dhala, Mogra, Teorkhali, Jamuna, Khiru, Nageshwari, Banar, Bajua, Piyain, Jadhukata, Bhugi River, Someswari, Manu. **Beels**: Forfora Beel, Koray Beel, Rajdola Beel, Sagar dighi Beel, Chechra Beel, Borbila Beel, Sanni Beel, Dubachechua Beel, Charia Beel, Kailine Beel, Sinni Beel, Dolai Beel, Chora Beel, Kaila Beel, Cuetka Beel, Chehna Beel, Diga Beel, Gagla Beel, Bhawal Beel, Kuri beel. **Haors**: Kolimar Haor, Baram Haor, Banka Haor, Habibpur Haor, Maker Haor, Makalkandi Haor, Ghulduba Haor, Etna Haor, Sania Haor, Kawadighi Haor, Khaliaghuri Haor, Oail Haor, Alir Haor, Kanglar Haor, Balai Haor, Sonir Haor, Matia Haor, Dubriar Haor, Chayer Haor, Kangaler Haor, Maijeil Haor, Damrir Haor, Panger Haor, Kanamaiya Haor, Ubdakhali Haor, Balai Haor, Bara Haor, Gurmar Haor.

Sources of finance for traders

Traders have different sources of finance for marketing (Table 1).

Table 1. Source of finance for Aratdar, Paiker and Retailers

Traders	Different Source			Total (%)
	Own fund (%)	Relative (%)	Others (%)	
Aratdar	95	4	1	100
Paiker	90	-	10	100
Retailers	80	5	15	100

Marketing cost

In fish marketing, the cost of fish is not same at different stages in the marketing process. This might fluctuate from producer to consumer by the involvement of various intermediaries.

Marketing cost of producer

The total marketing cost of producers of study area was Tk.0.91 per kg of fish. Table 2 revealed that the highest cost item of producers of study area was transportation, which accounted for 39.56 percent of total cost. The second highest cost was due to loading and unloading of fish (23.07%). The other cost items of producer of study areas in descending order were market toll (16.48%), personal expenses (12.09%) and grading (8.79%). Producers do not bear any storage cost.

Marketing cost of aratdar

The Aratdars was the commission agents who performed the function of marketing arrangement for selling fish of producers and Paikars. For performing these functions they had to incur some costs. The total marketing cost of Aratdar was estimated at Tk. 1.32 per kg of fish. Wages and salary of employee was the highest cost item comprising 37.80 percent of the total marketing cost. The next highest cost item was personal expenses cost, which accounted for 23.06 percent of the total marketing cost. The other cost items in descending order were market toll (15.69%), telephone bill (11.72%), rent and electricity (7.94%) and security (3.79%) shown in Fig. 2.

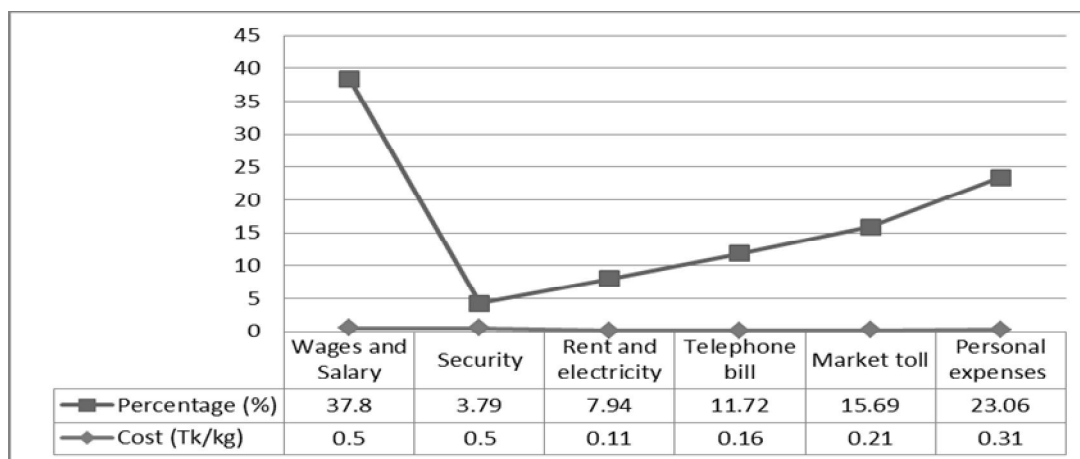


Fig. 2. Marketing cost of aratdar

Marketing cost of paiker

Paikers mainly purchased fish from local Arat center and sold to the Paikers through Aratdar at terminal markets and others markets. They performed mainly exchange function of buying and selling. The total marketing cost of Paiker was calculated at TK.6.052 per kg of fish. Aratdars commission was the highest

cost item comprising 48.83 % of the total marketing cost. The second highest cost item was transportation cost, which was 13.25 % of total marketing cost. The other cost items in descending order were personal expenses (9%), wastage (7%), wage and salary (3.57%), telephone bill (3%), market toll (2.54%), packaging materials (2%), loading and unloading (2.57%), and grading (1.09%) (Fig. 3).

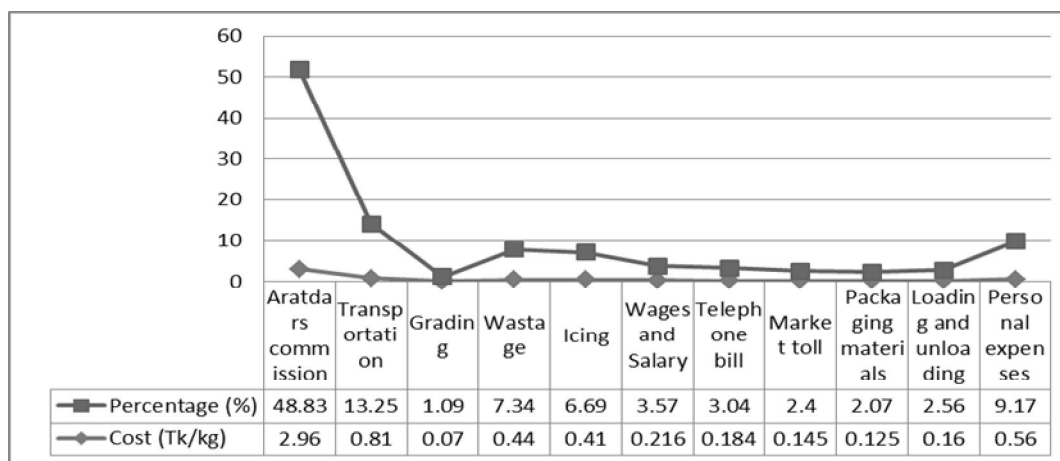


Fig. 3. Marketing cost of paiker

Marketing cost of retailer

The Retailers generally purchased fish from the producer and Paikars through Aratdars and sold to the consumers at different markets. The total marketing cost of Retailer was estimated at Tk. 1.828 per kg of fish. Wastage was the highest cost item comprising 22.15 % of the total marketing cost. The second

highest cost component was the personal expenses, which accounted for 20 % of total marketing cost. The other cost items in descending order were transportation (14%), icing (16.68%), market tolls and packaging materials (8.48%) and rent and electricity (6.84%) shown in Fig. 4 and the total marketing cost of different intermediaries shown in Table 2.

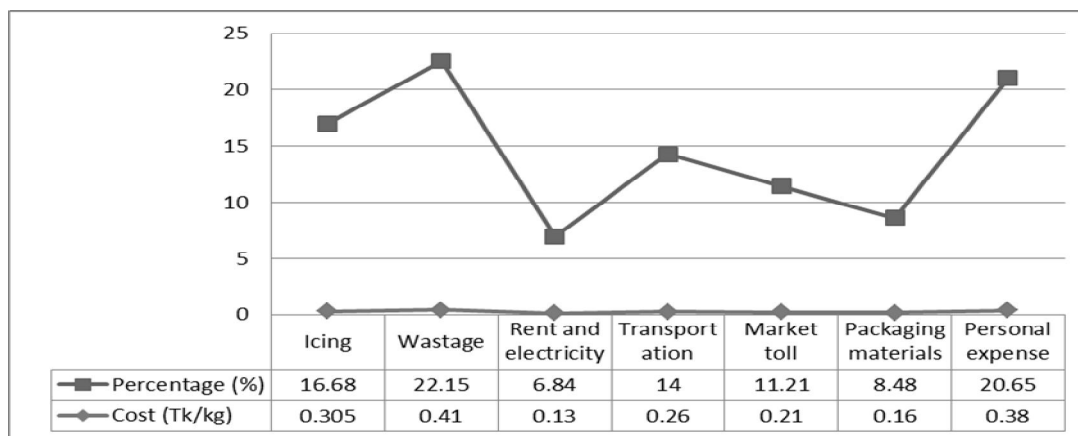


Fig. 4. Marketing cost of retailer

Table 2. Total marketing cost of fish for different intermediaries (Tk/kg)

Cost items	Producer	Aratdar	Paiker	Retailer	Total	(%)
Aratdars commission	-	-	2.96	-	2.96	28.22
Transportation	0.36	-	0.81	0.26	1.43	13.63
Security	-	0.5	-	-	0.5	4.77
Wastage	-	-	0.44	0.41	0.85	8.10
Icing	-	-	0.41	0.31	0.72	6.86
Wages and Salary	-	0.50	0.22	-	0.72	6.86
Market toll	0.15	0.21	0.15	0.21	0.72	6.86
Rent and electricity	-	0.11	-	0.13	0.24	2.29
Packaging materials	0.15	0.15	1.43
Loading and unloading	0.21	-	0.16	-	0.37	3.53
Telephone bill	-	0.16	0.18	-	0.34	3.24
Grading	0.08	-	0.06	-	0.14	1.33
Personal expenses	0.11	0.31	0.55	0.38	1.35	12.87
Total	0.91	1.79	5.94	1.85	10.49	100

Marketing margin of paiker

The marketing margins of Paiker for different types of fishes presented in Table 3. In the peak period, the average gross margin and net margin of Paiker were estimated at Tk.9.24 and Tk.3.19 per kg of fish respectively. In the lean period, the average gross

margin and net margin of Paiker were estimated at Tk. 9.45 and Tk. 3.40 per kg of fish respectively. Paiker earned the highest and lowest net margin or profit from Rohu and Silver carp fish respectively in both periods.

Table 3. Profits of Paiker for different types of fishes in peak (Sep-Feb) and lean (Mar-Aug) period

Tk. Per kg of fish (in peak and lean period)			
Fish species	Gross profit Peak / Lean	Marketing cost Peak / Lean	Net profit Peak / Lean
Rohu	15.25 / 15.85	6.05 / 6.05	9.20 / 9.80
Catla	9.95 / 9.95	6.05 / 6.05	3.90 / 3.90
Mrigal	8.75 / 8.75	6.05 / 6.05	2.70 / 2.70
Silver carp	6.60 / 6.80	6.05 / 6.05	0.55 / 0.55
Pangus	6.38 / 6.58	6.05 / 6.05	0.33 / 0.53
Shorputi	8.50 / 8.75	6.05 / 6.05	2.45 / 2.70
Total	55.43 / 56.68	42.36 / 42.36	13.07 / 14.22
Average	9.24 / 9.45	6.05 / 6.05	3.19 / 3.40

Marketing margin of aratdar

In the present study, the estimated profits of Aratdar of different fishes are presented in Table 4. In the peak period, the average gross profit and net profit of

Aratdar were estimated at Tk 2.92 and 1.60 per kg of fish respectively. In the lean period, the average gross profits and net profit of Aratdar were estimated at Tk. 3.07 and Tk.1.75 per kg of fish respectively.

Table 4. Profits of Aratdar for different types of fishes in peak and lean period

Tk. Per kg of fish (in peak and lean period)			
Fish species	Gross profit Peak / Lean	Marketing cost Peak / Lean	Net profit Peak / Lean
Rohu	3.55 / 3.69	1.32 / 1.32	2.23 / 2.37
Catla	3.19 / 3.30	1.32 / 1.32	1.87 / 1.98
Mrigal	3.05 / 3.19	1.32 / 1.32	1.73 / 1.86
Silver carp	2.43 / 2.65	1.32 / 1.32	1.11 / 1.33
Pangus	2.47 / 2.59	1.32 / 1.32	1.14 / 1.27
Shorputi	2.82 / 2.99	1.32 / 1.32	1.50 / 1.66
Total	17.51 / 18.41	9.25 / 9.25	9.58 / 10.47
Average	2.92 / 3.07	1.32 / 1.32	1.60 / 1.75

Marketing margin of retailer

The marketing margins of Retailer for different types of fishes are presented in Table 5. In the peak period, the average gross margin of Retailer was estimated at

Tk.6.89 and Tk.5.06 per kg of fish respectively. In the lean period, the average gross margin and net margin of Retailer were estimated at Tk.8.06 and Tk.6.24 per kg of fish, respectively.

Table 5. Profits of Retailer for different types of fishes in peak and lean period

Tk. Per kg of fish (in peak and lean period)				
Fish species	Gross profit	Peak / Lean	Marketing cost Peak / Lean	Net profit Peak / Lean
Rohu	9.55/10.55		1.83 / 1.83	7.72 / 8.72
Catla	8.10/10.10		1.83 / 1.83	6.27 / 8.27
Silver carp	4.65 / 4.95		1.83 / 1.83	2.82 / 3.12
Pangus	5.30 / 6.30		1.83 / 1.83	3.47 / 4.47
Shorputi	6.25 / 7.50		1.83 / 1.83	4.42 / 5.67
Mrigal	7.50 / 9.00		1.83 / 1.83	5.67 / 7.17
Total	41.35 / 48.40		10.98 / 10.98	30.37 / 37.42
Average	6.89 / 8.06		1.83 / 1.83	5.06 / 6.24

Total marketing cost and margin for intermediaries

The highest marketing cost (Tk. 5.94) was for Paiker because they had paid higher Aratdari commission and higher transportation cost. The net margin was the highest for Retailer and lowest for Aratdars in both peak and lean periods. The retailers earned the highest profit in both periods because of their lower

marketing cost and assuming more risk compared with other intermediaries. Although per unit profit was the lowest for Aratdar, their total profit would be the highest as because they handle the largest quantity of fishes per unit of time compared with other traders. Intermediaries earned more profit in the lean period than peak period (Fig. 5 and 6).

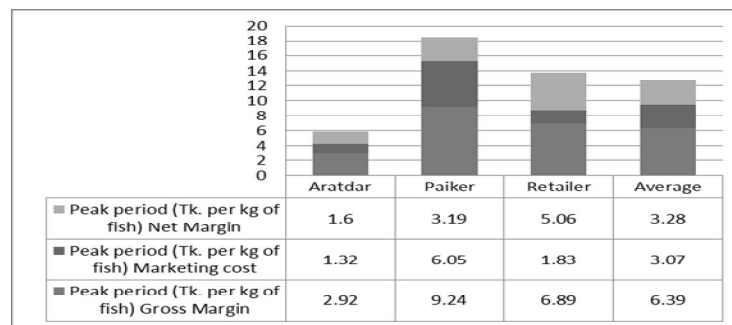


Fig. 5. Gross margin, marketing cost and net profit for intermediaries in peak period.

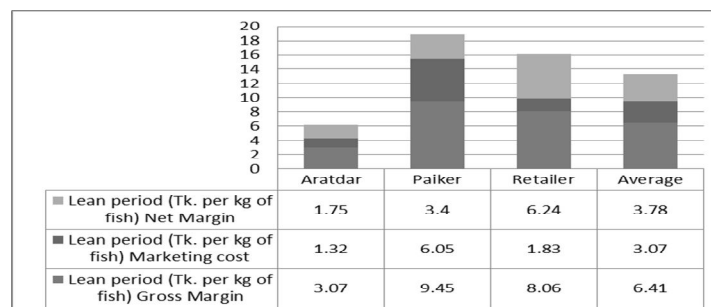


Fig. 6. Gross margin, marketing cost and net profit for intermediaries in Lean period.

Marketing channel of Ilish fish

In Mymensingh town fish market the demand of each is very high. In general the retail price of Ilish is 250 to 300 Tk. per piece depending on the size. Size is a very important factor for fluctuation of fish. In Ilish fish marketing ice is used for marketing. The main source of Ilish in Mymensingh town was Chandpur and Chittagong districts. Mohajons collected the fish from the fishermen who caught fish from sea and river.

In the study area, marketing channel consists of beparies, aratdars, paikers, retailers and consumers. The market chain from farmers to consumers encompasses mainly primary, secondary and retail markets, involving local agents, suppliers, wholesalers and retailers. In Bangladesh, fish marketing is almost exclusively a preserve of the private sector where the livelihoods of a large number of people are associated with fish production and marketing systems (DFID, 1997). Beparies bought fish from primary producer in primary markets that are located in rural areas in Mymensingh district and or other districts. Beparies sell their fish to paikers and retailers through aratdars. The aratdars a commission agent who helps the bepariesto sell their products and usually charges a fixed commission from beparies. Sometime farmer sells directly to paikers and retailers by the help of aratdars. They provide short period storage facilities and also perform the function of grading. They make cash payment to bepariesand supply fish to retailers. Paiker collect fish from arat and some cases from farmers. They transport their fish to others markets and sold to retailer. Retailers were the last traders of fish marketing channel. They had fixed place to sit on the market place. All intermediaries earned higher margin in lean period than peak period because availability of fish is not well and in this case demand of fish is comparatively high and consumer pays higher price for purchasing fish in this period. In India some fisher folk groups and NGO's attempt to market their own fish or produce value added products and become more active in small-scale marketing development activities (King, 1997). Atapattu (1994) noted that fish marketing and distribution system in Sri Lanka is concerned as co operative aspects. However, the most serious marketing difficulties seem to occur in remote countries, with lack of ice, poor transport facilities and where the farmers are in

particularly weak position in relation to intermediaries (DFID, 1997).

Conclusions

On the basis of these findings it can concluded that marketing of fish in the study areas was profitable. Fish are the sources of income for all types of fish traders who involved in fish marketing system. Moreover, a large number of people are involved in the production and marketing of fish. However, the producers and intermediaries could be more benefited financially, if efficient marketing was done. To improve and developed the marketing channel, physical marketing facilities should be increased and unnecessary and unexploited middlemen should be eliminated from the marketing channel.

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