Some Aspects of Fish Marketing in Shyamnagar, (Sundarban Area) Bangladesh

Zahangir Alam¹, Dr. Abhijit Pakira²

¹PhD Scholar, Department of Business Administration, The University of Burdwan, West Bengal, India.
²Assistant Professor, Department of Business Administration, The University of Burdwan, West Bengal, India.

ABSTRACT
The current study is focused on Sundarbans's fish marketing aspects, taking into account some inefficiencies, economic characteristics of marketing activities, and existing marketing systems. In Shyamnagar, a huge number of people depend on fish distribution and marketing networks for their livelihoods. Fish marketing is virtually entirely a private sector domain. Local merchants, agents/suppliers, wholesalers, and retailers are just a few of the intermediaries in the market chains that connect producers with the consumers. The daily supply of fish at the Shyamnagar upazila fish Market, kalbari fish market and Nwabeki fish market in Shyamnagar was estimated to be 15-16, 18-19 and 12-13 tons, respectively, based on a sample of 60 dealers from the three major markets in the upazila. Almost all of the fish (80%) is imported from Sundarbans and the surrounding areas and just 20% of the seafood is produced locally. According to estimates, carps make up 40% of the fish sold in marketplaces. 13% hilsa, 10% catfish, 7% native small fish, 10% prawns and shrimp, 7% tilapia, and 13% other species, including small chingri (shrimp) are the other aspects. Fish prices are influenced by market dynamics, species quality, size, and weight; it has been discovered that the cost per kilogram of carp rises with size. In three markets, every trader generated a sizable profit.

Keywords: marketing channel, Fish marketing, profit margin, Sundarbans.

Introduction
The consumption of food, nutrition, employment, and export all significantly depend on the fishing sector. The industry employs 1.4 million people and accounts for more than 5% of Bangladesh's GDP and 9% of its export revenue.
Given that fish and fishery products are extensively traded commodities, fish production is a crucial aspect of the marketing process. According to estimates, Bangladesh produced 1.78 million tons of fish overall in 2003–04, of which 1.4 million tons (or 79%) and 0.38 million tons (or 21%) came from inland and coastal waterways, respectively (BBS, 2005). The remaining 3% of the production is sold externally for export, leaving around 97% for home use. The domestic market is far larger, more diverse, and more complicated than the export market in terms of volume, value, and employment. Many individuals working in the domestic fish marketing chain, including farmers, processors, merchants, intermediates, day laborers, and transporters, are below the poverty line (Ahamed, et. al., 1993; Islam, 1996 and DFID, 2000)
In Bangladesh, only the private sector is in charge of fish marketing. The distribution route for tiny native fish species has three layers of markets or marketing systems. These marketplaces for consumers are primary, secondary/higher secondary, and final. Fish collectors generally known as mahajans or aratdar purchase fish from the catchers, with the aid of local brokers who obtain a profit margin or commission from the mahajans. However, the most significant marketing challenges tend to arise in the rural villages which lack of transport, ice, inadequate road amenities and where the farmers are in a particularly weak position in respect to intermediaries (Rahman, 1997). (Rahman, 1997). Additionally, by establishing an absurd artificial pricing regime through intermediaries at various levels, the middlemen have created a new marketing chain based on the excessive exploitation of the fish farming communities. As a result, prices are high and the marketing margin is frequently big, which causes frustration among customers, farmers, fishers, and underprivileged traders. In Bangladesh's rural markets, fresh fish is mostly sold in close proximity to homes. The fish, which aren't sold fresh, are typically utilized to make goods that are dried and fermented. The longest exposure of fish to high temperatures causes a quality loss of 35%, which is followed by harsh handling and severe pressure at 25%. The goal of the current study is to discover marketing inefficiencies that negatively affect farmers, fishers, and underprivileged dealers by looking at the current marketing systems.

MATERIALS AND METHODS
Shyamnagar City, with its three main markets— Shyamnagar upazila fish Market, kalbari fish market and Nwabeki fish market — was the subject of the research. Both the wholesale and retail fish markets are located in Shyamnagar upazila fish Market, kalbari fish market and Nwabeki fish market.

From October through March of 2023, a total of six (06) months were used to collect the data. A collection of techniques known as Participatory Rapid Appraisal (PRA) is used to gather data from rural communities in an interactive way (Chambers, 1992). Focus Group Discussions (FGD) were done with fish farmers and fishermen as a PRA method for this study in order to gain an understanding of the distribution and marketing systems for fish, as well as marketing challenges. A total of 10 FGD sessions (5 in each market) with group sizes ranging from 6 to 12 were performed.

Key informants such as university professors, school teachers, local leaders, people in positions of both private and public service, and relevant GO & NGO officers and personnel were all interviewed in cross-check interviews.

Using Microsoft Excel software, data was coded and put into a database system from numerous sources. To confirm the correctness of the data recorded, data sheets from each stage of the survey were verified with the original data sheets.

RESULTS
Infrastructure of Fish Market
A situation with several buyers and sellers might be used to describe the market structure. While there are 10 to 15 wholesalers or aratdar and 25 to 30 retailers in Shyamnagar upazila fish Market there are 20 to 25 aratdar and 10 to 15 shops in kalbari fish market there are 22 to 27 aratdar and 13 to 18 shops in Nwabeki fish market. Numerous people collaborate everyday with the dealers. The largest full fish market in the Shyamnagar region. Shyamnagar upazila fish Market is conducted every morning from 6 am to 10 am, while kalbari fish market is open daily from 8 am to 9 pm, Nwabeki fish market is open daily from 8 am to 11 am. Due to a larger consumer base, trade in Shyamnagar upazila fish Market lasts longer.
Additionally, it appears that the Shyamnagar upazila fish Market is located in the city's heart, with three sizable residential neighbourhoods immediately surrounding it and housing a significant portion of Shyamnagar's population. These three marketplaces' infrastructure is still in disrepair. In general, the facilities are not sufficient for handling very perishable goods like fish. Quality and pricing are impacted by a lack of preservation facilities and ice availability.

**Fish Distribution Channel**

In the fish trade's distribution chain, three layers of market or marketing systems may be seen. These marketplaces for consumer goods include primary, secondary/higher secondary, and final.

**Primary market**

This is the marketing location in the rural region, at the point of catching. Fish catchers are purchased by fish collectors, also known as mahajans or aratdars, with the aid of neighborhood brokers known as dalals, who get a profit margin or commission from the mahajans. The catcher/farmer or nearby merchants may also sell some of the catch locally. Sometimes fish sellers and fishermen skip these steps and sell their catch straight to secondary markets.

**Secondary market**

The fish are transported by the collector from the primary market to the landing locations, which are often the closest upzila market or another location with good access to rivers, roads, and rail networks. Here, the mahajans sell the fish to beparies, or wholesalers, typically with the aid of aratdars, or commission brokers. By road, rail, or boat, the beparies deliver the fish to the closest city or town markets. These marketplaces serve as the primary distribution points where, once more with the aid of aratdars, the beparies sell the fish to paikars, a different group of distributors.

**Final consuming markets**

The paikar sells the fish to the retailers after acquiring it from the higher secondary market. There are two distribution channels: the urban retailers sell the fish in the urban markets in fixed booths or go out and sell them at the residential neighbourhoods with the fish on their heads or in tricycle vans. Others, the merchants, transport the fish to rural or peri-urban areas.

Fish is sold in Bangladesh through a variety of venues and platforms. Both the wholesale and retail markets suffer from a lack of marketing infrastructure. The majority of the time, the storage and transit facilities are subpar. The presence of a significant number of intermediaries and commission brokers lessens the benefits to fish growers (Ahmed et al. 1993, Mazid 1994). The majority of the fish in the Shyamnagar upazila fish Market (30%) was collected from various localities adjacent to Shyamnagar City, with the remaining (70%) the Sundarbans region. In the kalbari fish market and Nwabeki fish market, local traders and suppliers brought fish to wholesale markets where prices are determined in a competitive market situation. Local vendors are typically situated in marketplaces that are close to agricultural or fishing villages. It indicates that local tradesmen originally settled on the neighborhood settlement. Agents or suppliers transport fish from isolated villages to wholesalers in market hubs for a 1–5% charge. Retailers purchase from wholesalers before selling to final consumers. In kalbari fish market and Nwabeki fish market, a retail fish dealer sold an average of 40 to 50 kilograms of fish per day, whereas in Shyamnagar upazila fish Market, a merchant sold an average of 70 to 80 kilograms per
day. Between merchants and marketers, there is a significant difference in the volume of fish sold. Due to rising population, there is an increase in demand in new markets.

Figure 1. General Flow chart for marketing channel of fish

Species Sold in Shyamnagar upazila fish

Figure 2. Flow chart for marketing channel of fish in two markets

**Species Sold in Shyamnagar upazila fish Market, kalbari fish market and Nwabeki fish market**

It was estimated that Indian carps, hilsa, catfish, vetki (Koral) tilapia, tiny indigenous species, prawn and shrimp, small shrimp, and other fish and seafoods made up nearly half of the fish sold in three marketplaces.

**Price of Fish**

The government and trade associations do not have any price regulations. Different methods, including open bidding, haggling, and whispering, are used to determine prices. Only in the wholesale market are
open bidding processes held. Competition between prospective bidders determines the price. The bids are vociferously declared by the auctioneer (commission agents) in front of the buyer. The current study discovered that wholesalers were often charged 2 to 5% of the sale price by auctioneers. As almost 50% of the market and a considerable difference were seen over the research period, a price trend for carps may be identified. Due of their flavor and costly price, native carp are preferred over alien carp. Low-income individuals purchase exotic carps such the silver carp, grass carp, and mrigal. The cost of other species fluctuated periodically. And changed in a zigzag pattern as a result of its seasonal availability.

Figure 3. Percent (%) of fish sold in Shyamnagar upazila fish Market.

Figure 4. Percent (%) of fish sold in kalbari fish market.
Profit margin
According to the findings of the current study, primary producers only receive 40–45% of the retail market pricing for their goods. The percentage of retail pricing that belonged to fishermen or fish growers fluctuated greatly according on the expense of shipping, icing, and market leaseholders. The quality or weight loss accounted for 5–10% of the total, while the middlemen received 35–40%. The remaining 20–25% went toward shipping, preservation, icing, and other costs.

Constraints
Because there is never enough fish to meet demand, there is little to no effort made to raise the standard of fish sold. Fish of any size are therefore sold on the market despite the dealers' major issues, which include significant losses, waste, and low prices. Following harvest, all fish are carried by a variety of routes, including by road, rail, bus, and boat/launch, primarily utilizing bamboo baskets. The primary causes of quality loss are poor use of ice, physical handling, contamination, loading and unloading at various stages of transit, exposure to high temperatures for an extended period of time, and actors' ignorance of quality-related issues.

Every year, a considerable amount of fish is wasted due to inadequate transportation, storage, and preservation facilities. Although there haven't been any comprehensive studies done in the past, the data that are now accessible indicate that significant post-harvest losses occur during various phases of handling, shipping, and preservation. According to BOBP (1985), around 30% of fish are marketed fresh (uniced) upon landing, 40% are marketed iced, 20% are sun dried, and the remaining fish are either frozen, salted, smoked, or turned into fish meal. Several marketing chains, including the primary, secondary, higher secondary, and consumer markets, are used to promote fresh fish (Coulter and Disney 1987).
If handling and storage conditions are excellent, it takes 7-9 days to move fish from the landing point to distant locations by rail, road, and water, which is less than the typical shelf-life of tropical species (Uddin and Das 1994). Most post-harvest losses are likely caused by physical handling, poor and delayed chilling, prolonged exposure to high temperatures, contamination, and a lack of education about personal hygiene and sanitation.

**Concluding Recommendation**
The magnitude of the marketing margin, which creates a significant difference between the farm price and consumer level of pricing, is a frequent measure of marketing effectiveness. Following are some particular recommendations for enhancing the current marketing system that affects food, nutrition, and export earnings: (a) Facilities for transportation, storage, and shipment, (b) the construction of a large ice plant close to the cultural ground, and (c) the introduction of contemporary wholesaling and retailing facilities (d) the availability of public and private finance help; and (e) the development of the markets’ and landing centers’ sanitary conditions. It is crucial to remember that the current fish marketing system can only be improved through public-private partnerships.

**References**
8. DOF. Brief on department of fisheries Bangladesh. Department of Fisheries (DOF), Ministry of Fisheries and Livestock, Dhaka, Bangladesh. 2007-2008.