



Study of fish market of Bengali camp in Chandrapur District of Maharashtra, India.

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ABSTRACT

Fish marketing starts with the auction system which is highly unorganized and unregulated in most States of India. There is a strict barrier for the entry of any new professional into it. The transportation and storage of fishes need to be facilitated by creating and maintaining the needed infra-structures such as approach road from pond to main fish market, cold storage, ice factories, etc. Bengali camp fish market is a famous fish market in Chandrapur in Chandrapur District of Maharashtra, India. Its survey was done during February, 2022 in the morning and evening time as a project work of our M.Sc. student. It is a best fish market in this area since from ancient time. In this fish market, fishes and prawns are supplies from Aman nullah dam, Erai dam, Dina dam and Andhra Pradesh fish markets. During the study period, it was observed that, total 11 species of fishes and 1 species of freshwater prawn, *Macrobrachium rosenbergii* was reported. The wholesale fish market opens in the morning time and retail fish market in the evening time. During the study period, it was found that, the infra-structure of fish market was poor and needed to improve it. Hygienic condition was not properly maintained. Cold storage facilities should be developing.

Key words: Fish market, Bengali camp, Chandrapur.

INTRODUCTION

Fish marketing starts with the auction system which is highly unorganized and unregulated in most States of India. There is a strict barrier for entry of any new professional into it. For this purpose, there is a need of regulations to ensure that fishermen get better during auctioning process (Kumar *et al.* (2008). As the fisheries sector is recognized as a powerful income generator. On one hand, it stimulates the growth of a number of subsidiary industries and on another hand, it provides cheap and nutritious food to the society. It plays an important role in socio-economic life of thousands of people directly or indirectly involved in it. Because it provides source of

employment and income to millions of rural farmers, particularly women. According to Chourey *et al.* (2014), the growth of fish production as well as development of fishery sector in terms of economy and infra-structure is highly dependent on an efficient fish marketing system.

India is the third largest producer of fishes and second largest producer of inland fishes in the world. From the beginning of 21st century, the inland fish production in India has increased from 2.85 million tonnes in 2000-01 to 4.86 million tonnes in 2009-10. i.e., an increase in 70%. This expansion is done only due to the research and development activities. Now, aquaculture in India has moved from a traditional activity to a well-developed industry. Unlike conventional marketing system of agricultural products, fish marketing is characterized by heterogeneous nature of the products with respect to species, size, weight, taste, keeping quality and price. The market price of fish is determined by freshness, species and availability of fishes in the market. The major problems in fish marketing system is that, it includes high perishability and bulkiness of fish, high cost of storage and transportation, no guarantee of quality and quantity of commodity and high price spread (Das *et al.*, 2013).

The marketing system and structure is one of the main circumstances of socio-economic condition of the local people and production system of any area. There is a chain of various systems involved in marketing system. Fish production is a necessary part of the marketing system. Small scale fisheries supply around 50% of all global fish catches and are responsible for 90% of the employment in fisheries sector which represents nearly 10 million people world-wide in the harvest and post-harvest sector. (Teh *et al.*, 2011).

In order to survey of a fish market of Bengali camp, Chandrapur, it is necessary to make a brief review of literature. It is as follows: Debnath *et al.* (2019) had made a study of fish market and marketing system in Gazipur District of Bangladesh and concluded that a number of constraints for fish marketing were reported by the retailers. These included lack of storage facilities, poor supply of ice, exploitation of middlemen, lack of money and lack of infra-structure. On this, he had suggested some recommendations. Alosias (2019) had made a pilot survey on retail fish marketing in Juba, South Sudan. This pilot study

assessed retailers motivation towards the fish marketing and the impact of some common major challenges affecting their growth, using non probability sampling method. 40 fish retailers in Konyokoyo and custom markets in Juba were interviewed and observed that all retail fish sellers rely on fish marketing as their only source of income and livelihood. The impacts of some major challenges were noted. Chief among them were fish spoilage due to improper handling and high cost of transportation. Mebrate and Worku (2020) was analyzed the fish market drain of Zeway lake in Central Ethiopia. This study was identified the need for policy interventions by the Ethiopian government to improve the storage and transportation systems as well as render other services like training, in order to improve harvesting and marketing of fish in the study area. Gaidhane *et al.* (2020) was studied the Bhiwapur fish market in Chandrapur, Maharashtra and concluded that the fish market generates direct and indirect employment for so many people. It helps in the betterment of urban economic welfare of people in that particular area. Kirti Kumari and Pravesh Kumar (2022) had made a survey of Sadar Bazar fish market of Munger District in Bihar. This article provides information about various fish faunas and their prices available in the fish market of District Munger. This district has a resource and potential for fish culture. Rohu was the most consumed fish in this area along with Catla, The people prefer to consume fresh fishes rather than stored iced one. Most of the farmers are marginal and have agriculture as a support for income. The women in this district are not much participates in this business and hence, it should be promoted. Vala *et al.* (2020) was studied the fish marketing system in Himmat Nagar, Sabarkantha, Gujarat. In Himmat Nagar, nearly all fish traded within move through the private sector, a large number of people are give and take fish distribution and marketing system. Major available fish species in Himmat Nagar fish market are Indian major carps, Exotic carps, Cat fishes, Hilsa, Pomfret and Shrimp.

A field survey of Bengali camp's fish market in Chandrapur district was done during February, 2022 in the morning time through direct observation and interview with sellers in local language. The objective of the present study was to study the fish market for understanding varieties of fishes and their selling. Also, to study the fish selling turnover per day of the Bengali camp's fish market in Chandrapur.

MATERIAL AND METHODS

Bengali camp fish market is a famous fish market in Chandrapur in Chandrapur District of Maharashtra, It is present on Chandrapur-Ballarshah highway located in Chandrapur city. The study of Bengali camp fish market in Chandrapur was done during February, 2022 through survey of fish market with the help of observations and interview techniques. The study of this fish market was done during morning time (8:00 a.m. to 10:00 a.m.) and evening time (5:00 p.m. to 7:00 p.m.).

Chandrapur district is naturally endowed with good potential of water resources, harbours commercial and non-commercial fishes. Fishermen of this district are much dependent on fisheries for their livelihood. In market, the fishes are supplies from Dina dam, Amal nullah dam, Erai dam and Andhra Pradesh and

Telangana State fish markets. This fish market is a biggest fish market in Chandrapur district. Chandrapur is located in the Eastern part of Maharashtra in the Vidarbha region. This district is also famous for the 'Black gold' called 'Coal'. So many mines are present in this district and nearby area. Plates 1 to 4 are showing the pictures of local fish market of Bengal camp, Chandrapur (Figure 1).

RESULT

In the present study, total 11 species of fishes was observed. These are Indian major carps (Catla, Rohu and Mrigal), Mangur (*Clarius batrachus*), *Wallago attu*, *Ompok pabda*, *Pangasius bocourti*, *Pampus argenteus*, *Channa striata*, *Ornichromis niloticus* and freshwater prawns like *Macrobrachium rosenbergii*. All these fishes are shown in Table 1 along with their local names, class, order, family, genus and species.



Figure 1. Plates 1 to 4 are showing a view of Bengali camp fish market at Chandrapur.

Table 1. Fishes found in Bengali fish market, Chandrapur.

Sr. No.	Scientific name	Local name	Class	Family	Order	Genus	Species
1	<i>Catla catla</i>	Catla	Actinopterygii	Cyprinidae	Cypriniformes	<i>Catla</i>	<i>catla</i>
2	<i>Labeo rohita</i>	Rohu	Actinopterygii	Cyprinidae	Cypriniformes	<i>Labeo</i>	<i>rohita</i>
3	<i>Rita rita</i>	Rita	Actinopterygii	Bagridae	Siluriformes	<i>Rita</i>	<i>rita</i>
4	<i>Clarius batrachus</i>	Mangur	Actinopterygii	Clariidae	Siluriformes	<i>Clarius</i>	<i>batrachus</i>
5	<i>Wallago attu</i>	Shivada	Actinopterygii	Silluridae	Siluriformes	<i>Wallago</i>	<i>attu</i>
6	<i>Ompok pabda</i>	Varnda	Actinopterygii	Silluridae	Siluriformes	<i>Ompok</i>	<i>pabda</i>
7	<i>Pangasius bocourti</i>	Basa	Actinopterygii	Pangasiidae	Siluriformes	<i>Pangasius</i>	<i>bocourti</i>
8	<i>Pampus argenteus</i>	Palpet	Actinopterygii	Stromateidae	Scombriformes	<i>Pampus</i>	<i>argenteus</i>
9	<i>Channa striata</i>	Mural	Actinopterygii	Channidae	Anabantiformes	<i>Channa</i>	<i>striata</i>
10	<i>Oreochromis niloticus</i>	Tepari	Actinopterygii	Cichlidae	Cichliformes	<i>Oreochromis</i>	<i>niloticus</i>
11	<i>Chitala chitala</i>	Chitala	Actinopterygii	Notopteridae	Osteoglossiformes	<i>Chitala</i>	<i>Chitala</i>

DISCUSSION

Fish market is place where the fishes and fish products of commercial importance are subjected to sale. The regulation of fish production and consumption through the sale is known as 'Fish marketing'. The market infra-structure includes whole sale market, retail market and fish retail outlets. An effective market system is that where the fish is available to consumer at right time and at right place.

Husein (2019) was studied the fish marketing system in Nepal. He was observed that the domestic fish market plays a very crucial role in the development fishery sector. The persons involved in fish production and marketing should be trained about the fish harvest, fish handling, fish packing and fish preservation techniques. Murthy *et al.* (2019) was asses the quality assessment and comparison of three different types of fish retail outlets of Navi Mumbai in Maharashtra. They recommended that the monitoring authorities of India need to monitor the quality of fishes in different market at regular intervals and strict action may be taken for sea food safety. Rahman *et al.* (2017) was made a survey of fish marketing system in Deharadon, India. It was estimated that, out of the total supply, 40% was *Labeo rohita*, 20% *Catla catla* and 10% *Clarius batrachus*. The price of fishes depends on market structure, species quality, demand, size and weight of fish species. Deb and Dey (2020) was studied the fish marketing system of some fresh fish species in Hobiganj district of Bangladesh to explore marketing cost and income of wholesalers and retailers in the study area. The study was pointed out that in supply chain, about only 5% customers received fish from fish farmers directly and rest 95% fishes were arrived to the consumers levels through intermediaries. About 60% fish species were come locally and 40% came from different portions of the country. Gomra (2020) was reported that, variable price, the low body weight of fish species may affect the income of fish sellers. Kewat *et al.* (2020) was studied the fish traders and fish markets of Ulhas Nagar and its surrounding cities as a qualitative approach and concluded that, in order to strengthen the profession in fishery sector, fish market and fish traders may be updated and local governing body(s) and Colleges/Institutions may play vital role in this regards, Alam *et al.* (2010) was studied the fish marketing system in Swarighat, Dhaka, Bangladesh. Their study was revealed that market structure,

species quality, size and weight have an influence on the price of fish. The price of fish increases per Kg with size and species wise. Joshi *et al.* (2018) was observed the ichthyo-faunal biodiversity of Kharakuva fish market, Veraval, Gujarat. According to him, the price of Shell fishes fetches good values of fin-fishes. Mandal and De (2018) study was deals with the wholesale and retail marketing of different freshwater fishes and their constraints and future prospects in Kolkata during 2015 to 2017. As most of the people in Kolkata are fish eaters. The local fish marketing is very much dominating in nature. The dominating fish species of freshwater includes Catla, Rohu, Mrigal, Tilapia, Koi, Singhi, Mangur, etc. The wholesale and retail fish markets in Kolkata, West Bengal was found them poorer and insufficient. Ahamad *et al.* (2019) was analyzed the fish marketing channel in Mohipur bandor in Bangladesh and recommended that primary markets should be free from the control of stockists to make the market competitive. So that fishermen could receive fair price to increase their sales revenue. Mebrate and Worku (2019) was studied the fish markets, structure, conduct and performance in Lake Zeway, Central Ethiopia. According to him, there were five kinds of fish marketing chains in the study area. The fish market was Oligopolistic in nature which is controlled by a few large wholesalers. The share of margins showed that retailers got the highest margin than that all of the fish market agents in the study area. The study recommended necessary government interventions to make the fish market operation efficiently.

During the study period of present survey, found different varieties of fishes and prawns in the Bengali camp fish market at Chandrapur. Total 11 species of fishes was reported and 1 species of freshwater prawn *Macrobrachium rosenbergii* was noted. Some sun dried aquatic species was also sold in the fish market of Bengali camp, Chandrapur. Catla, Rohu, *Clarius batracus*, Common carp, prawns like *Macrobrachium rosenbergii* are found in abundant. All these fishes are useful as food fishes.

CONCLUSION

From the present study, it may be concluded that ---

1. Bengali camp fish market is a good fish market in Chandrapur District.
2. This wholesale market starts in the morning hours and retail market in the

3. evening time.
4. In Bengal camp fish market, founds a variety of fishes, prawns and other aquatic
5. organisms which are not available in any other fish market.
6. Infra-structure of the fish market is poor and needs its improvement.
7. Hygienic conditions should be maintained in the market.
8. Cold storage facility should be developing.

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Conflict of interest

Authors declare no conflict of interest.

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