



ISSN Print: 2664-9926  
 ISSN Online: 2664-9934  
 Impact Factor: RJIF 5.45  
 IJBS 2022; 4(1): 205-208  
[www.biologyjournal.net](http://www.biologyjournal.net)  
 Received: 14-04-2022  
 Accepted: 17-05-2022

**Jadhav Amit**  
 M.F.Sc. Scholar, Department  
 of Aquaculture, Azad  
 Mahavidyalaya, Ausa,  
 Maharashtra, India

**Korde Seema**  
 Associate Professor,  
 Department of Fishery  
 Science, Azad Mahavidyalaya,  
 Ausa, Maharashtra, India

**Pathan Amzad**  
 Associate Professor,  
 Department of Zoology, Azad  
 Mahavidyalaya, Ausa,  
 Maharashtra, India

**Zod Priyanka**  
 M.F.Sc. Scholar, Department  
 of Aquaculture, CAU-College  
 of Fisheries, Dholi, Bihar,  
 India

**Corresponding Author:**  
**Jadhav Amit**  
 M.F.Sc. Scholar, Department  
 of Aquaculture, Azad  
 Mahavidyalaya, Ausa,  
 Maharashtra, India

## Assessment of fish species composition, price and socio-economic conditions of fish vendors community in Ausa fish market in Latur district of Maharashtra

**Jadhav Amit, Korde Seema, Pathan Amzad and Zod Priyanka**

**DOI:** <https://doi.org/10.33545/26649926.2022.v4.i1c.107>

### Abstract

An effective fish marketing system is necessary to the expansion of fish production as well as the development of the fishing sector in terms of economy and infrastructure. The survey was necessary because of blackness of the necessary comprehensive information on fish markets, trade, and threats to regulations of consumer safety. Ausa fish markets were selected as study area which were situated in Ausa tehsil of Latur district. The data were collected for a period of six month from January 2022 to June 2022. Thursday in each week of month were selected to collect data in a month. Data collection methods can be divided into two steps. These are questionnaire interview with fish traders, focus group discussion with intermediaries. In the overall research period, Pabda ( $192.6 \pm 23.73$ ) was the most valued fish in the finfish category and Prawn ( $380.5 \pm 10.86$ ) gained maximum price in the shellfish category and at the first position in both categories too. In present study, out of total vendors selling fishes in market, 62% were male and only 38% population where female hence market was dominated by male population. For the development of fish marketing systems, basic facilities like as a clean water supply, sanitary facilities, a sufficient drainage system, icing, flooring, etc., should be ensured. The findings of the research reveal that fish sellers know nothing about sanitation and cleanliness.

**Keywords:** Ausa fish market, market survey, socio-economic status, fishermen status

### Introduction

The fisheries industry is considered to be a major source of income because it both promotes the expansion of a variety of associated industries and supplies low-cost, nutritious food. It has a significant impact on the socioeconomic lives of thousands of individuals who are either directly or indirectly involved in it since it provides job and money to millions of rural farmers, especially women. Carp farming accounts for more than 80% of all aquaculture production in India, the two terms are often used interchangeably and considered as Carp Country. The majority of carps raised in the nation are indigenous Indian Major Carps (IMC), which include the *Catla catla*, *Labeo rohita*, and *Cirrhinus mrigala* species (Chand *et al.*, 2018)<sup>[2]</sup>.

Marketing is the connecting link between the producers and consumers. An effective marketing system is necessary to make products, being available to consumers at the right time and in the right place (Kumar *et al.*, 2010)<sup>[6]</sup>. An effective fish marketing system is necessary to the expansion of fish production as well as the development of the fishing sector in terms of economy and infrastructure. Fish marketing is highly unorganized in India in which retail fish markets are scaled-down versions of wholesale fish markets, with differences in size, fish quality, dealer density, facilities, consumer proximity, etc. Additionally, the retail markets present a negative scenario. Most vendors sell fish on the side of the road without maintaining it for quality or hygiene, and without providing access to drinking water, shelter, or platforms for fish dressing (Hoshino *et al.*, 2021)<sup>[4]</sup>.

Policy makers have gained a prominent interest of domestic unorganized fish retail due to poor quality and hygienic conditions, which directly threatens consumer safety (Mugaonkar *et al.*, 2011)<sup>[8]</sup>. Fish marketing systems are traditional, complex and less competitive, but is said to play a vital role in connecting the fisherman and fish consumers (ArulJothi, K *et al.*, 2013)<sup>[1]</sup>.

The survey was necessary because of blackness of the necessary comprehensive information on fish markets, trade, and threats to regulations of consumer safety.

**Material and Methods**

Latur district is a part of Maharashtra's Marathwada region in the southern part, which is geographically located in the Deccan plateau between 17°52' and 18°50' North and 76°18' and 79°12' east. It is typically 631 meters (2,070 feet) above mean sea level on the Balaghat plateau. Latur District has vast water resources, including rivers, reservoirs, barrages, lakes, and ponds and from which fishermen takes fish production and sells to the nearby market. The fisheries available in the Latur district were culture fisheries from ponds and capture fisheries from lakes.

**Study area**

Ausa fish markets were selected as study area which were situated in Ausa tehsil of Latur district.

**Methodology**

The data were collected for a period of six month from January 2022 to June 2022. Thursday in each week of month were selected to collect data in a month. Data collection methods can be divided into 2 steps. These are questionnaire interview with fish traders, focus group discussion with intermediaries.

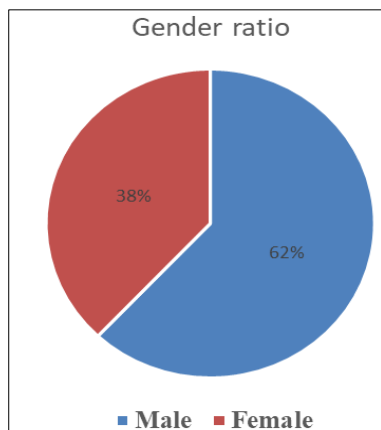
For questionnaire survey, fish traders were selected through simple random sampling method. Interviews were conducted at the market centre during marketing time. Traders took part in interview together with their fish selling activities as a result there was a scope to observe the marketing activities. The fish traders in market asked for information on species, supply, price, distribution network, transport services, etc.

**Result**

The Ausa fish market comprises of only freshwater fishes because Latur district has only freshwater resources and availability of marine water fishes were none due to unfeasibility of transport from coastal districts as well as absence of efficient market chain.

In the overall research period, Pabda (192.6±23.73) was the most valued fish in the finfish category and Prawn (380.5±10.86) gained maximum price in the shellfish category and at the first position in both categories too.

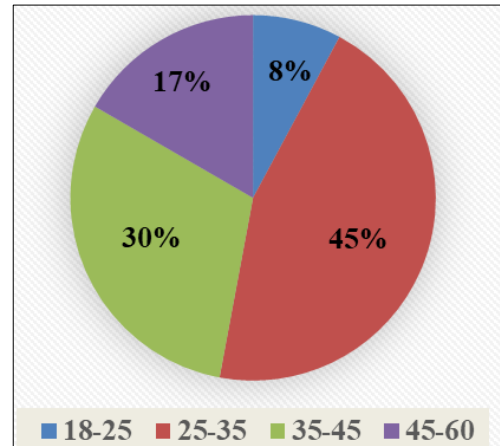
Cypriniformes was the most abundant fish order for selling in the market followed by Siluriform (25%), cichiliformes(18%) and other contributes (14%) along with Decapoda contributed 4% only. It was observed that consumers most preferred indigenous fishes available in market.



**Fig 1:-** Average price of fishes in Ausa fish market

The Gender Equality Index (GEI) is a measure used by the UNDP in the Human Development Report to examine the status of gender equality as it influences human development in six core domains (power, money, knowledge, work, health, and time) (Lawrence, 2022) [7]. In present study, out of total vendors selling fishes in market, 62% were male and only 38% population where female hence market was dominated by male population.

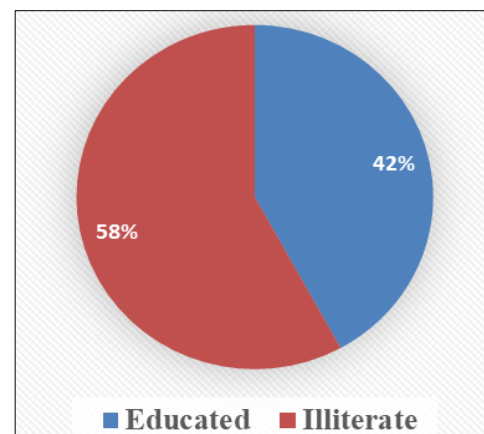
**Age class and distribution**



**Fig 2:** Age class and distribution

Age class and distribution of fish vendors present in fish market were studied during the study period and it was observed that 8% of the total vendors were between the ages of 18 -25, while the majority 45% were between 25-35 age class. 30% of vendors were in the 35–45 age group and it was found that 17% of the vendors were between the ages of 45-60.

**Level of Education and Literacy**



**Fig 3:** Literacy Ratio

The level of literacy is an accurate indicator of sociocultural and economic development and essential for the elimination of poverty and mental isolation and the promotion of pleasant and peaceful relations for the freedom of demographic processes (Koltay, 2022) [5]. Out of all the sellers in the fish market, it was found that 58% were illiterate, and 42% were literate, of which 5% had graduated, 31% had completed their matriculation, and 64% had not completed it. This revealed that the majority of the vendors were illiterate.

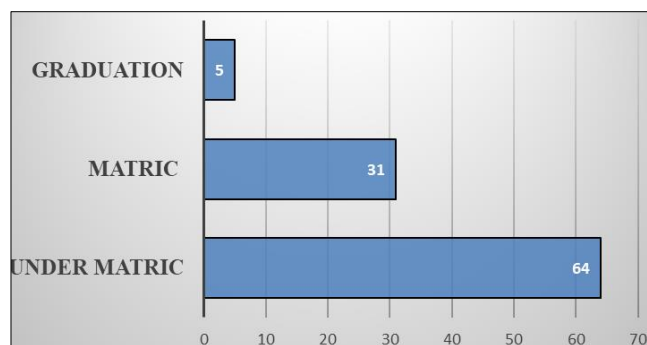


Fig 4: Level of education

### Use of Mobile phones

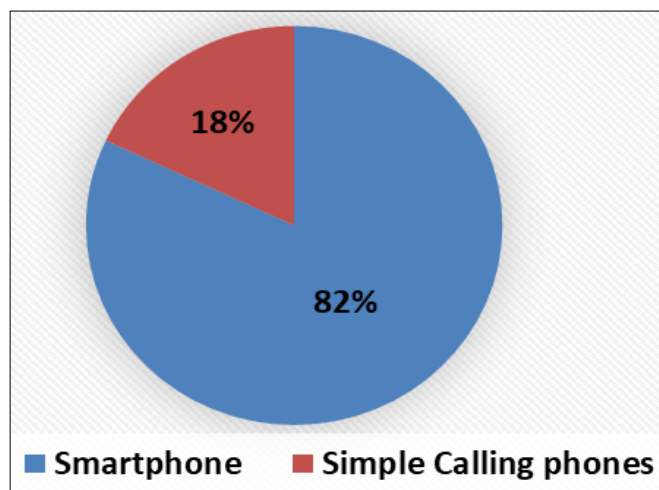


Fig 5: Use of Mobile phones

### Fish Preservation process and ice availability

Fish degrades easily after being caught due to the high tropical temperatures that accelerate the activities of bacteria, enzymes, and the chemical oxidation of fat in the fish. Fish begin to autolyze immediately after they die, and subsequently, digestive juices penetrate the flesh and begin to putrefy it. If a suitable preservation method adopts to maintain the freshness of fish from harvesting to the market, then these products fetch the maximum price (El-Hay, 2022) [3].

When bringing fish to the market in gunny bags without utilizing ice, the vendors in the AUSA fish market lack knowledge of the preservation procedure and highlighted the lack of ice availability in the fish market.

### Availability of Platforms for selling fishes

It was observed that there were no platforms available for selling fish; instead, gunny bags were spread out along the side of the road. Most vendors sell fish on the side of the road without maintaining it for quality or hygiene.

### Packaging material at time of selling

Due to a lack of knowledge regarding the drawbacks of plastic on environment, fish vendors often sell their products in plastic bags.

### Fish waste management

The AUSA Fish Market does not have a fish waste management facility, after removing the head and scales, the seller throws the garbage into the gutter.

### Discussion

Domestic fish markets of India can be divided into two types i.e., wholesale and retail markets. Wholesale markets should have facilities for carrier vehicle parking, space for loading/unloading, ice plants, washrooms etc. Retail markets are often crowded places, mostly on pavements or within closed boundaries with poor hygienic condition. Two main categories of fish retailers have been encountered-market based retailers and retailers like fish vendors and haulers.

Retail sells are made at stalls in fish markets and door to door to household customers. In the fish marketing system, the auctioneers and suppliers play a crucial role in determining price for fishes (Kumar *et al.*, 2010) [6]. The producers are concentrated in one area and the consumers are widespread that's why establishment of an efficient domestic marketing system becomes extremely important in the field of fisheries (Chand *et al.*, 2018) [2].

According to a recent report by the parliamentary standing committee on agriculture, our nation suffers an annual post-harvest fisheries loss of Rs. 61,000 crores, which results in a significant loss in the community of fishermen's revenue,

### Conclusion

For the development of fish marketing systems, basic facilities like as a clean water supply, sanitary facilities, a sufficient drainage system, icing, flooring, etc., should be ensured. The findings of the research, fish sellers know nothing about sanitation and cleanliness. The cleanliness of the fish markets is also in critical stage. It is needed to provide proper management with regard to the regular upkeep of the market premises from a sanitary and hygienic perspective another factor contributing to fish loss and deterioration may be inadequate infrastructure in fish markets.

### Reference

1. ArulJothi KN, Irusappan S, Amarnath G, Chandrasekaran SK, SAB Harishankar M, Babu JvAD. Study on Wholesale Fish Market of Surat, Gujarat. *IJSR - International Journal of Scientific Research*. 2013;2(12):63-65. <https://doi.org/10.36106/IJSR>
2. Saravanabavan V, Abeesh P. Environmental health status of fishermen in Mahe district. *Int. J Geogr Geol. Environ* 2020;2(2):95-102.
3. El-Hay MMA. Processing and preparation of fish. *Postharvest and Postmortem Processing of Raw Food Materials: Unit Operations and Processing Equipment in the Food Industry*. 2022; pp.315-342. <https://doi.org/10.1016/B978-0-12-818572-8.00008-5>
4. Hoshino E, Schrobback P, Pascoe S, Curtotti R. Market integration between the major domestic fish markets in Australia. *Fish Res*. 2021; pp. 243, 106085. <https://doi.org/10.1016/J.FISHRES.2021.106085>
5. Koltay T. New literacies in the age of convergence. *Research Data Management and Data Literacies*. 2022; pp. 109-143. <https://doi.org/10.1016/B978-0-12-824475-3.00005-9>
6. Kumar BG, Datta KK, Reddy GVS, Menon M. Marketing System and Efficiency of Indian Major Carps in India. c2010 <https://doi.org/10.3/JQUERY-UIJS>
7. Lawrence RA. Breastfeeding and Return to Work or School. *Breastfeeding*. 2022; pp. 611-627. <https://doi.org/10.1016/B978-0-323-68013-4.00018-3>

8. Mugaonkar PH, Ananthan PS, Samal SS, Debnath B. A Study on Consumer Behaviour at Organized Fish Retail Outlet. *Agricultural Economics Research Review*. 2011;24:133-140.  
<https://doi.org/10.22004/AG.ECON.109511>
9. Chand BG, Banerjee PK, Sowjanya B. Consultants Preferred for the Information by Vegetable Growers in Telangana. *Journal of Krishi Vigyan*. 2018;7:27.  
<https://doi.org/10.5958/2349-4433.2018.00152.6>