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Study on Adaptation of Hygienic Condition Among Fishermen Community of Aurangabad Maharashtra, India

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ABSTRACT

In the present investigation an attempt has made to study hygienic condition of fishermen community in Aurangabad. The data of adaptation of hygienic condition of fishermen were collected through personal interviews of fishermen by creating specific suitable questionnaire for them. Interview held at the fish market. Total 100 fishermen were interviewed for this study. It is observed that the fishermen are suffering from price fluctuation, lack of storage facilities and facing financial crisis, these are the major factors faced by fishermen community. They also expect that the government should established cold storage facilities and provide loan and subsidy without any collateral security from bank, these are the main problems faced by fishermen community.

Key words: Adaptation, Hygienic condition, Fishermen community.

Introduction

Fish is one of the most beneficial foods on the planet. Fish is a rich source of omega-3 fatty acids, vitamins such as vit D and B2, calcium phosphorous and great source of minerals like iodine, zinc, magnesium, potassium. Fish is a great combination of protein and essential nutrients which make fish a good source of food.

A fish market is a market place for selling fish and fish products. It is a place to sell sea food to individual consumers, fish merchant or fishermen. Fish market can be in a range from small fish stall to large fish stall as sea food is quick to spoil, fish market was historically most often found in sea side towns. Since refrigeration and rapid transport become available in the 19th and 20th century fish market can technically be established at any place to make fish available to consumers at the right time

and in the right place requires an effective marketing system.

Types of retail fish sellers in rural market -

- Dry fish sellers
- Preservative fish sellers
- Live fish sellers
- Fresh (Small/large) fish sellers

Fish and fishery play very important role in the socio-economic development of the fishermen. About 500 million peoples worldwide are economically dependent on fisheries. Meanwhile, the freshness of the fish is very important and has become a major issue in the fisheries sector. The quality of the product reaching the final consumer greatly depends on how the fish was handled in on-board vessel, how it was preserved, packaged, and transported (Jacky Singh *et al.*, 2012). Maintaining the hygienic environment in fish markets is highly significant for the proper marketing of high quality and

safe fish and fishery products. Hence, creating awareness and education among the fish marketing personnel about a hygienic condition in a fish market and hygienic handling of fish at marketplace role of extension agencies is utmost important (Shirke *et al.*, 2018).

According to Mahendra Pal (2018), the global fish production was estimated around 174 million metric tones in 2017. India ranks as second largest fish producers in the world and also one of the major sea food exporters in the world as our products have a great reputation globally. He also added that, fish spoils at higher rate than any other types of food.

This survey was held to check the adopt of hygiene practices among the fisherman community of Aurangabad region. Cleaning of fishes and good hygiene in fish market is important for two main reasons, the prevention of food poisoning and the reduction of spoilage.

Methodology

The survey was carried out during 2021 to 2022 to check cleanliness and hygienic condition of fish market of Aurangabad district. A standard questionnaire was prepared to gather information, which includes name, address, age, gender, communities, number of members in family, education, type of crafts, type of net, houses, fishing industry market employment, medical facilities, food consumption and their other source of income etc. other information like fish collection, distribution, hygienic condition were studied.

Results and Discussion

The present study indicates the need of awareness about hygiene and personal care among the fishermen. The lagging infrastructure facilities in the markets are analyzed and studied in this survey.

The overall average age of fishermen ranges from 18 to 70 years of which the highest age of fishermen is from 18 to 30 years (26%) followed by the age range from 30 to 40 years (23%). The age 40 to 50 years is having 21% and the least age of fisherman is from 60 to 70, i.e., 12%.

The males are involved in this occupation is 57% whereas females are involved in 33%. The average size of family members ranges from 3 to 7 members. The highest, i.e. 5 members are found in 34% families, 7 members are found in 24% and 3 members are found in 8% families this shows that the most of the population of fishermen community is having 5 members in their family.

The education status is poor the most of the fisherman are having under metric education i.e. 63% followed by the people having secondary education i.e. 28%. The result, shows that there is great need of awareness about education in fisherman community. The most of the families, i.e.57% are having no other source of income and 43% of families have other source of income.

The adaptation of hygienic condition of fishermen community are shown in Table 1. The overall adaption of ten hygienic practices was measured in the fish market among all the ten hygienic practices such as sorting of fish ((98%), washing of fish (87%), cleaning of deck (18%), personal hygiene (16%) and

Table 1. Extent of adoption of hygienic practices among fishermen (N=10)

Sr. No.	Practices	Adoption percentage	No adoption percentage
1	Cleaning of deck	18%	82%
2	Cleaning of fish hold and accessories	7%	93%
3	Washing of fish	87%	13%
4	Sorting of fish	98%	2%
5	Evisceration and removal of gills and bleeding of big fishes	3%	97%
6	Packaging of fish	0%	100%
7	Icing of fish	0%	100%
8	Personal hygiene	16%	84%
9	Auction hall cleaning	0%	100%
10	Hygienic handling of fish in auction hall	5%	95%
11	Average adaption of all practices put together	23.4%	

Table 2. Infrastructure facilities available at market place.

Sr. No.	Infrastructure Facility	Availability of infrastructural facility
1	Cemented floor	Yes
2	Clean water	No
3	Drainage channel	No
4	Waste disposal facility	No
5	Clean ground condition	No
6	Transportation facility	No
7	Icing facility	Partially available
8	Hygienic toilets	No
9	Electricity	No
10	Proper shed	Yes
11	Overall	Poor condition of infrastructure facilities

hygienic handling of fish in auction hall (5%), Evisceration and removal of gills and bleeding of big fishes (3%) were adopted by the fishermen.

During this survey it is observed that there is lack of infrastructural facilities in the market area. It is found that there is great need of awareness among the fishermen community. It is observed that, lack of education is directly co-related with hygiene. Education is an important factor in changing attitude and motivation of the human being (Alam *et al.*, 2014).

Table 3. Problems perceived by the fishermen (N=100)

Sr. No.	Problems	Percentage (%)
1	Lack of cold storage facility	87%
2	Lack of subsidy on fuel	80%
3	Lack of jetty for unloading fish	42%
4	Lack of transportation facility	33%
5	Insufficient loan	82%
6	Lack of place for fish auctioning	28%
7	Lack of subsidies on fishing gear material	73%

It is analyzed that the major problem perceived by fishermen (Table 3) indicates that there is lack of cold storage facilities (87%) according to majority of fishermen. Whereas, insufficient loan (82%), lack of subsidy on fuel (80%), lack of subsidies on fishing gear material (73%), lack of jetty for unloading fish (42%), lack of transportation facility (33%) and lack of place for fish auctioning (28%) were studied.

Conclusion

It is concluded that the adoption of hygienic prac-

tices followed by fishermen was directly co-related with educational status. It is observed that fishermen require skillful training so they can understand the importance of hygiene, personal care and food safety risks regarding handling fish. The government should establish cold storage facilities and provide loan and subsidy without any collateral security from bank, these are the main problems faced by fishermen community.

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