

Fish Marketing Environment in India

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ABSTRACT

Fish is a perishable commodity. No doubt production has its own impact on fisheries but without effective marketing, we cannot stable stakeholders' strength and sustain them in the business. So a sound understanding of fish marketing environment is highly required. Fish moves from production centre to consumption table through different hands; starting from commission agents to auctioneers and wholesalers to retailers. Everyone has their own stories and struggles to sustain qualities in fish and define price in products. Consumers at distant always expect a right products according to its perceived value and qualities. In this domain fish marketing environment dwells and fate of fish as a commodity is defined.

Keywords: Fish, Marketing, Agent, Auctioneer, Retailer.

INTRODUCTION

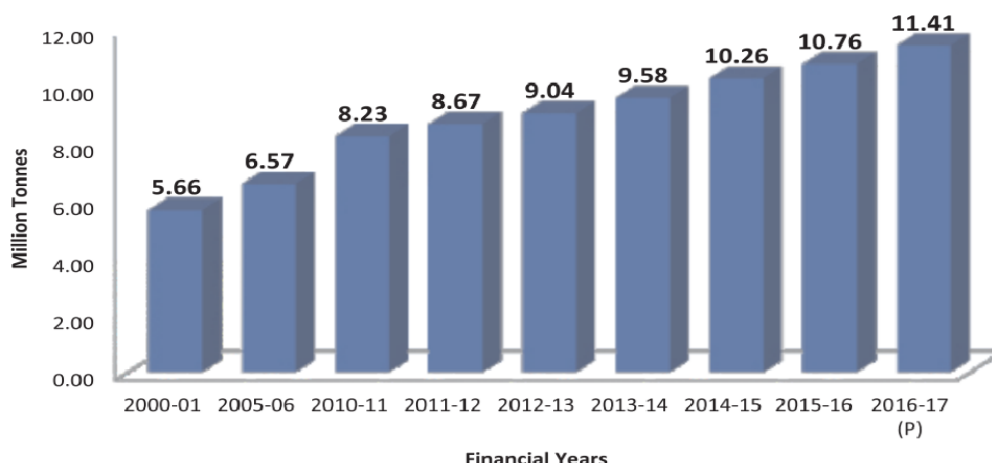
Fish is a perishable commodity that needs immediate disposal for retaining its quality. In that context, different stakeholders are connected with each other and take a pride to integrate fish with their livelihood. Unfortunately about 98 percent of stake holders in this sector under the crunch of informal sector (NSSO, 2007) which impact on their fish delivery process, ease of doing business and price discovery strategy. One side fish is commodities that need to be produced for seeking the interest of food and nutritional security of a country that is thickly populated and demographically dispersed. India has a competitive advantage of producing fisheries but its consumer surplus mainly suits to Inland fish consumption (FAO,

2014). Inland fish market is mainly dominated by aquaculture fishes (Rohu, Catla, Mrigal), and Brackish Water fishes (Shrimp). At the same time, marine fish is dominated by Bombay duck, Cuttle Fish, Ribbon fish, and Small Sciaenid (Gujarat Fishery Statistics, 2010-11). Fish markets are almost equally handled by male and female parts but retailing is managed by female counter part and catching of fish is under the control of male one. Lack of infrastructure, poor market yard, and drudgery of stakeholders make the fish business environment is a challenging one. In this context, the study, 'Fish Marketing Environment in India' is very much pertinent to understand the picturesque of this sector and do microscopic analysis for safeguarding its ultimate stakeholders.

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Glance of Fish Production in India

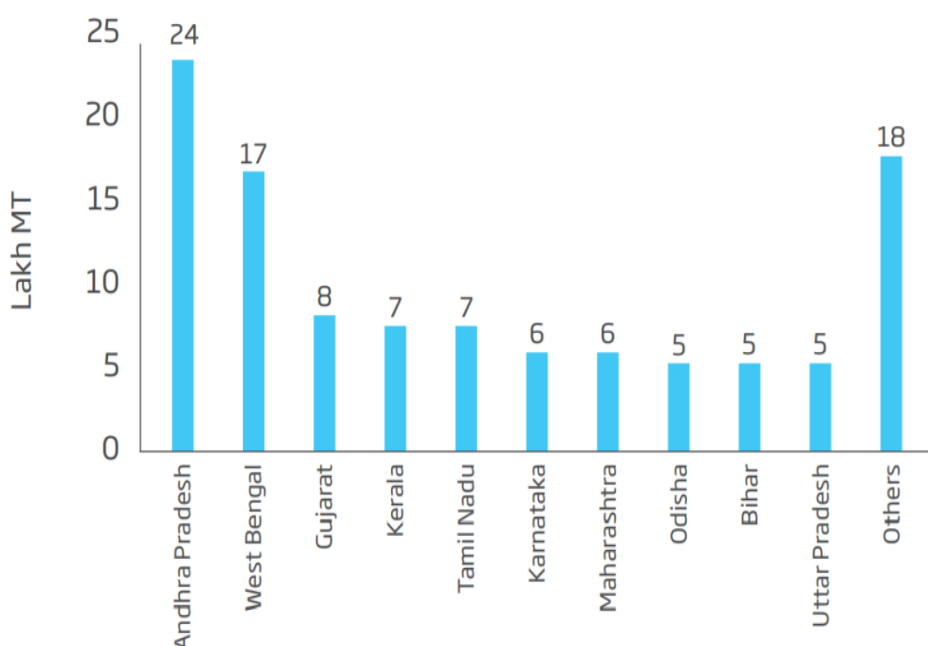
Fish Production



Source: DAHD & F, (2017-18)

Inland fish production in India is increasing day by day may be due to improved consumption pattern or may be due to government supportive measures for sustaining livelihood of Inland fish farmers. India is the second largest in the world after China in Inland fish production and contributes about 64 percent of fish production in total (Hand Book of Fishery Statistics, 2014). Andhra Pradesh is number one in

Inland fish production followed by West Bengal and Gujarat. Inland fish production mainly comes from river, lakes, ponds, tanks, derelicts and brackish water. Marine fish market mainly confined to USA, European Market, China, Japan and Mediterranean Countries (Panigrahy et al., 2017). Marine fish consumption mainly suits to developed countries consumption status (FAO, 2014).



Source: DAHD & F, (2017-18)

Though in total Andhra Pradesh leads in fish production yet Gujarat is number one in marine fish production. Marine fish production completely depends on capture fishes. So maintaining sustainability, fish ban is legally imposed from April to July in different parts of countries for breeding purpose. Gujarat is number one state in India which has longest sea shore of 1600km (Gujarat Fishery Statistics, 2010-11) and it is going to play a major role in future fish production and marketing.

Glance of Fish Market in India

Landing centre

Auctioneer:

Fish market is very much dispersed, unorganized and inefficient one in India

(Kumar et al., 2008). The prices of raw material depend on count per kg. If fish is broken, bend, bruised, deteriorated, black spotted at any manner, it gets almost negligible price. It happens many a times. Besides that the microbial entry deteriorates the quality of the fish as commodities. Open Auction at the landing centre is the most common of selling fish to the buyers. In Northern Part of India, auction side is little bit of away from catchment area as it is narrow and muddy. Where as in Southern India the beach is broad and spacious, so auction is taken place at the site only. Commission agents take 5-10 percent of charges from the fisherman and handed over the duty to the auctioneer for the purpose.



Wholesaler:

The wholesalers buy fish in bulk from auctioneers and sell it to retailers or other traders. Some value addition is carried out by the wholesalers in terms of sorting, grading, cleaning, icing and packing fish before sale. In the case of farmed fish, a wholesaler acts as a commission agent to whom the fisherman sells his produce. The wholesaler assumes the risk of selling the fish and therefore keeps a higher margin as compared to auctioneers. Ice and transportation form the largest share of the wholesaler's costs. Once a wholesaler purchase a bulk of fish after that he transport all fishes in a plastic tub or used thermocol box to the wholesale market by rickshaw, mini

truck etc for selling to retailer or consumer. In wholesale market, the wholesaler having various co-workers with them for handling the raw material. The workers are loaded all the raw material onto the provided space in the wholesale market. Before that first they clean all area were they place draw material and also the raw material are taken out from sea plast & are dip in cold water tub for 1-2 time for removing ice & blood over the raw material then again wash all raw material with portable water and placed in another sea plast which is a big plastic tub. Sea plast is a rectangular structure which having capacity around 1.2 tonnes.



Sorting:

Fish sorting usually involves separating a mixed group of fish into different species, males and females, immature and mature fish, diseased and clean fish, etc. During cleaning,

the caught fish are washed thoroughly in cold, clean water to remove bacteria, slime, blood, faeces, and mud. from the body surface of the fish. It is being done under proper sanitary conditions.



Grading, Weighing and Packaging

The Fishes are grades out according to their size. The graded material is put in another box. For example, Count per kg is 6, it is graded as 100-200; Count per kg is 5, it is graded as 200-300; Count per kg is 3, it is graded as 300-400; Count per kg is 2, it is graded as 400-700; and Count per kg is 1, it is graded as 700 or above.

The weighing is done according to the grades of the Fish. The weighed material is put into stainless steel tray or plastic trays & a slip indicating grades of product with its variety & production code is placed into tray. The setting workers set the pieces in high density polythene sheet. These blocks are then kept in the trolley for freezing.



Freezing:

Freezing means removal of heat from the body. it is preferred to store the fish under lower temperatures. The fishes are chilled in

ice when they are to be stored for a few days. Ice is put inside the body cavity in large fishes. The fishes are arranged in tiers in shelves or boxes and stacked, and should not be dumped

in heaps in cold storage. It is preferred to store at a temperature below 6.6°C to prevent microbial spoilage of fish. The formation of ice to some extent causes damage to the biological material, like growth of crystals of ice ruptures the structural components, releasing the enzymes and precipitation of liquid water and thereby causing precipitation of proteins effecting the change of pH making it more or less dry. Freezing continues to fall with the lowering of temperature. At -5°C to -6°C the entire water in the fish is frozen. The maximum freezing of water is between 1°C and 5°C with different sized crystal formation of ice. Ice formation occurs at a place where heat is extracted and then spread to warmer

areas from where heat is conducted to refrigerating medium. The size of the crystals depends upon the nature of freezing in slow or quick freezing. Large crystals formed in slow freezing, rupture the tissues more since it penetrates the cell wall easily and forms the drip. Drip is the flow of tissue fluids from the frozen fish or muscle during freezing of the fish or muscle. This drip is due to the cell damage caused in freezing. This drip leaches along with soluble protein, vitamins and minerals and gives an undesirable appearance. The formation of drip affects the appearance of the product and results in the loss of weight. Hence, drip is considered as one of the criteria for judging the quality of the frozen products.



<http://nptel.ac.in/courses/120108002/module5/lecture9.pdf>

Packaging section:

The frozen material is un-loaded from the trolley freezer & the blocks are separated and removed the primary packaging material (HDPE). Then material is dip in cold water which having temperature about 1- 2 °C. Glazing time is 15-20 seconds. Glazing is also a protective layer to protect the whole block during dehydration condition & increased the

block weight 3 to 5%. Then this material is filling in HDPE bag. There is different size of polythene bags used for packing of different variety of fishes. Then raw material is weighed for 10 kg electronic weighing balance and placed in master cartons. These master cartons are labeled with production code, date, variety etc.



Cold-storage:

Cold Storage is a special kind of room, the temperature of, which is kept very low with the help of machines and precision instruments. It means to preserve the perishable commodities of food items for a longer period with retention of the original colour, flavour and taste. However, each commodity or item has certain life and they cannot be stored even in a cold storage for indefinite period. Storage beyond certain period may not be economical as well since payment of rent of cold storage increases the cost of the item. Hence, cold storages are used for high value items or when prices crash down due to bumper crop or for such items which are grown during the season but there is a demand round the year or for products like meat, fish or milk products which are quickly perishable. Immediately after packing, cartons are stored in the frozen store of temperature – 18°C or below. Outside of the cold-storage the temperature indicator graph is located. These graphs show the temperature of cold-storage room for each hour. The capacity of the cold-storage room is about 60MT.

**Marketing System**

Though different ways of fish marketing in India exists yet unorganized business environments make the things more fishy than fair. Products moves from production zone to consumer plate through different stakeholders. Tragedy is that fish as a commodity is worthless at production site but a costliest items in the consumers plate. Common marketing Channels in fish looks almost similar and a glance is presented below.

Retailers and Vendors:

Retailers purchased fish from wholesaler. If they do not have enough money to purchase fish then they get the fish for credit and have to pay back on next day. They also get money from the local money lenders at interest rate varying from 10 to 20%. After that they transport the fish from landing centre or wholesale market by auto rickshaw or travel by bus. Numbers of time, it is observed retailers take the fish directly from ponds nearby and sell to the consumers. Vendors being mobile, sell fish directly at the consumer's doorstep. Most fish vendors in India are women. Vendors also carry out value addition by sorting, grading, cleaning and icing fish. They participate in auction directly in some of the states. They are forced to sell all the produce on a given day, as they don't have the capacity to hold or preserve the fish. The major costs to vendors are on ice and transportation.

http://shodhganga.inflibnet.ac.in/bitstream/10603/903/12/12_chapter%205.pdf.

**CONCLUSION**

A Serious effort has not been made on marketing of fishes as compared to its production. Though fish market is under the clutches of unorganized sector yet a systematic approach is needed to make this sector visible in economic domain. India has the competitive advantage in world in fish production due to ample water resources; we need a proper plan to make the fish business environment an alluring sector to invest on. Fish is a

commodity that targets food and nutritional security of a nation should not be under mined. New innovative brains need to come to this sector. Fish as a sector need a better hand to gear up its momentum. Food For future will definitely under the path of fisheries development in India. Marketing is an activities that add synergetic effect in fisheries development in coming days for safeguarding all stakeholders who depend on it directly or indirectly.

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