

ORIGINAL RESEARCH ARTICLE

Studies on the Fish Resources in Vettar River, Vettar Estuary and Nagapattinam Coastal Area, Tamilnadu , India

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ABSTRACT

The present study was carried out to the fish Resources in Vettar Estuary, Vettar River and Nagapattinam Coastal area(2011-2012). The variation of fish seen as sharks Rays, Eal, Cat fishes oil sardines, Lessers Sardines, Anchovies, Clupids, perches, Red mullets, Ribbon fish, carangids, pomfiets, Mack ends, Tunnies, Soles, Seers, Mugils, pencil prawns, Non-pencil prawns Lobsters, Crabs, Shrimp, cephalopods, Derepanes and Blisters observed in the landing.

Key words: Sharks, Rays, Eal, Cat fish, Nagapattinam coastal area.

1. INTRODUCTION

Though the fish marketing system in Tamil Nadu has been slowly transforming itself from a primitive to a modern stage with increased facilities in transportation, communication and to lesser extent storage and processing. It can be fully developed for catering to the needs of the all out effort for developing both capture and culture fisheries. On the one hand the pronominal glut in the catch of some or other species and the consequent drastic fall in prices still continuing at many small landing centers. On the other hand there has been a continuous increase in fish prices during recent years mainly due to increase in demand as against more or less in stagnant annual production (Prabhahar, C.*et.al.*,2012).

A number of species which were not allowed to enter the market channel in earlier years have already entered into the commercial list. The continuous increase in fish price without any consideration in catch level indicates that there has been a definite increase in the demand for fish. In spite of all these, a bumper catch during a particular reason never helps the fishermen to get higher income and a very low catch in against the interest of both consumers and producers. Such chronic problems inherent in our fish marketing system could be solved through the

formulation of a marketing policy based on the proper understanding on the prevailing marketing structure and its various complicated facets. The studies in the fish marketing even at a micro level, essentially help formulation and adaptation of such a marketing policy. The present study on fish marketing was carried out in the Nagapattinam region of Tamil Nadu (Singaravelu and Nedumaran, 2012).

In the first channel, cycle vendors or head load, fish directly from the landing centre (producer) and sell to consumer either at a market place or at door step of houses and hotels. In all other channels wholesalers are also involved. In some cases commission agents are involved both at landing centers or consumer markets and sometimes at both centers. Usually commission agents are engaged by wholesalers to purchase as well as to dispose the consignments. These agents get some percentage of fish value (usually 5 to 10%) from the wholesalers Nandakumar *et al.* (2001). They usually do not take the ownership of the lots. However the commission agents make some investments to bridge the time gap between payments by retailers to wholesalers. In fish marketing the transaction is mostly done on credit basis. The retailers make the payments after one

or two days and at certain places after a week. Depending upon the personal relationship between agent and retailer, those payments will be sometimes delayed. But the agents have to make payments to wholesaler within the allowed time period of time. In such circumstances the agent has to pay from his own pocket. For this type of investment the agent gets a margin from the retailer in addition to his commission from wholesaler which usually reflects upon the retail price (Gauraha *et al.*, 2005).

The intermediaries or middlemen play very important role in marketing. They incur different levels of marketing channels. The method of disposal of fish is by auction. As soon as the boat reaches the harbor the catch is handed over to the auctioneer and it is his responsibility to auction the fish and make payments to the boat owner. He gets a commission usually about 5% for his service. Some of auctioneers advance loans to boat owners to get the write of auctioning and if the loan is comparatively bigger amount, he gets a higher commission of about 10%. The packing is done in bamboo basket or plastic boxes by putting fish and ice almost in equal proportion in alternate layers. Then the packed baskets or boxes will be loaded in the truck or tempos to carry towards the distant markets. Auto vans are mostly used for transportation to nearby markets and cycles for street vending or house to house selling (Rao, 1983).

2. MATERIALS AND METHODS

Nagapattinam is one of the important maritime districts of Tamilnadu. It was carved out in theist while Thanjavur District on October 1891. The district is bounded by the Bay of Bengal in the east, Palk straight in the south, Thiruvarur and Thanjavur Districts in the west and the Cuddalore district in the North. The district spreadover 2715.83 sq.km. Nagapattinam landing Centre has been selected as the primary fish markets for the observation, since it records maximum landings of marine fish in the Nagapattinam coast and its supply is mainly confined to the town and sub urban areas. Similarly among the wholesale fish markets of Nagapattinam in Akkaraipettai and Keechankuppam dominates in terms of quantity of arrivals in the number of retail purchases. Maximum quantity of fish from Akkaraipettai and Keechankuppam landing centres is also channeled to this whole sale market which exports to various districts and states of Tamilnadu, Kerala and Andhra Pradesh. Data on

landing centre prices, whole sale and retail prices of different varieties of fish were collected by the following marketing channels, the information on cost of sorting, packing and transportation was also collected at different stages.

3. RESULTS

The identified species in the bulk catch were sharks, skates, rays, eels, cat fishes, oil sardines, lesser sardines, anchovies, clupeids, perches, red mullets, sciaenids, ribbon fish, caranx, leiognathus, pomfrets, mackerels, seers, tunnies, soles, mugils, penaeid prawn, non-penaeid prawns, crabs, drepanes, balistes, lobsters and cephalopods. Thus, Nagapattinam coastal area is known to have rich resources of pelagic, demersal, crustacean and molluscan fisheries. The bulk catch was classified under four major groups namely pelagic, demersal, crustaceans, molluscs and miscellaneous. These groups of fishes have contributed 48%, 14%, 20%, 15% and 03% respectively to the total landing. The major groups of exploited pelagic fin fishes were found to be clupeids, scomberoids, carangids, sciaenids, stromatoids *etc.* The oil sardine *Sardinella longiceps* was major species in the pelagic fish landing. The lesser sardines such as *Sardinella fimbriata* and *Sardinella gibbosa* were also found more. *Sillago attu* and *Sillago sihama* were available in considerable quantity in both seasons. Ribbon fishes were found available throughout the study period. Demersal fishery constituted about 40 to 50 tons per trip which was 18% of the total landing. Shark and skates were found available throughout the study period. Rays were found to be dominant among the elascobranchs. The crustaceans occupy a prime importance among the commercially significant marine food organisms. The estimated landing of crustacean resources was found to be 90 tones constituting nearly 20% of the total marine production in Nagapattinam. The penaeid prawns were landed maximum and non-penaeid prawns became second place. Lobsters constituted lesser quantity however sand lobsters. *Thenus orientalis* contributed to a higher percentage. Nearly 12.5% of the total fish landing contributed by molluscan resources.

The landing centre is linked with the main roads. The marketing process is not separable from the production process. Marketing is a chain of processes carried out to link the producers with consumers. Fishes have to be assembled before distributing to the consumers and also industrial units as landed fishes scattered in various places.

The catches disposed immediately by auction method at which assemblers in general, wholesalers, commission agents and retailers, bid. Auction was carried out in two places such as open sea-shore and harbor proper, which appeared to be a dominant mode of purchase for those who sell general varieties in the interior and local markets whereas the economic varieties such as prawns, lobsters and shrimps disposed to the agencies or wholesalers by weight. The fish traders preferred to sale in fresh form as only fresh fish would fetch good price. The delayed landings and unsold fishes disposed either as dried or salt-cured. The consumers of this area are familiar with the general varieties of fish than economic varieties. Usually price depends upon the time of fish landing and a day of selling when boats reach the shore early in the morning, traders could fetch better price and the prices offered would be low when boats arrive late in the afternoon. The main function of marketing is the bridge the gap between the original producers and the final users. The retailers, both cycle vendors and head-load retailers bought fishes from wholesaler and they disposed them to the ultimate consumers. The auctioneers got 2 or 3% commission on the value of fish auctioned. Some of the infra structural facilities such as repair yard, auction hall, lorries centre, berthing yard, ice plants, boat building centre and fishery training centre appeared good however slip way did not functioning. Cold storage facilities were in adequate.

DISCUSSION

Fisheries sector plays an important role in Indian economy. The fish landing in Nagapattinam depends upon the length of the coast, geographical and oceanographically factors such as the nature of the coast, characteristics of the continental shelf and the availability of fish resources. Nagapattinam coast has enough fishery potential and many varieties of fish are caught having a good economic value. The fishermen here area using both non-mechanized and mechanized boat for intensive fishing. For the recent years the developmental strategy in marine fishing focuses attention on mechanization of traditional crafts to Fibre Reinforced Plastic boats (FRP) and Beach Landing Crafts (BLC) which in turn strengthening their usual fishing profession. Nearly 28 varieties of species are identified in the landings namely Sharks, Sketes, Rays, Eel, Catfishes, Oil Sardines, Lesser Sardines, Anchouves. Clupeids, Perches, Red Mulletts Ribbon Fish, Caranx, Leiognathus,

Pomfrets, Mackerels, Tunas, Soles, Seers, Mugils, Penaeid Prawns, Non-penaeid Prawns, Lobsters, Crabs, Cephalopods, Drepanes and Balisted Gauraha *et al.*, 2005).

Fishing supports the livelihood of nearly 2.0 million people in India. Proper fishing technology is highly essential for better fish production. Later the bulk catch has to be immediately disposed either by auction or through fish traders Yohannan *et al.* (2000). The general varieties of fish are auctioned whereas the economic varieties are disposed by weight. The auctioned general varieties of fish then transported to distant markets through tempos, autos and Lorries (Srinivasa *et al.*, 2008). The economic varieties, big sized fishes and dried fishes are disposed on the spot in cash to the agencies and wholesalers. Usually the agencies prefer to sale the fish as fresh condition than as dried so that the consumers in and around Nagapattinam varieties than economic varieties. The main function of marketing is to bridge the gap between the producers and the final users. The channel structure is depending upon the market variables like market geography and market size; product variables like perishable, bulk and weight of fresh fish and middlemen variables like availability of middlemen, cost services *etc* (Singaravelu and Nedumaran, 2012).

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