

A Study on Exploitation of Seafood Resources

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ABSTRACT

Fishing is one of the oldest Occupations of mankind even today. Kerala which is situated on the southwest coast of India is richly endowed in fishing resources having ten percent of the Indian Coastline. Kerala is blessed with a coastline of 590 Kms. The maximum utilization is only in 50m depth which is around 22 Km from the Coastline. The continental Shelf area of Kerala is 39139sq.km. It is bounded by Karnataka state in the North, Tamilnadu state in the east, Arabian Sea in the west consisting of rich marine flora and fauna and Indian Ocean towards South. Kerala has the area from shore upto 30m line in the sea along the coast from kollencode in the south to paravoor (pozhiikkara), a length of 78 km is called the first zone. The area upto 20 m lines in the sea along the coast line from Paravoor in the south to Manjeswar in the north for a length of 512 km is called the second zone. Among the Arabian Sea States of India, Kerala occupies the prominent position in owning a good number of fishing vessels, Freezing plants and peeling Sheds. The need for the present study is to understand the impact of Exploitation of Seafood Resources.

Key Words: Aquaculture, Capture Fisheries, Exploitation, Marine Products, Overfishing.

1. INTRODUCTION

Fishing is one of the oldest occupations of mankind even today. Fisheries are the major contributors for the food security of the coastal region. Fishing provides not only occupation to enormous people but is also a rich provider of immense food. Fisheries has been recognized as a powerful income and employment generator as it stimulates growth of a number of subsidiary industries and is a source of cheap and nutritious food for internal consumption besides being a foreign exchange earner. Marine fisheries generate good employment and incomes for a large section of backward and economically weaker Coastal Community. Kerala which is situated on the southwest coast of India is richly endowed in fishing resources having ten percent of the Indian Coastline. The state's total geographical area is 38863 sq.km i.e.1.18% of the total geographical area of the country. The continental Shelf area of Kerala is 39139sq.km. It is bounded by Karnataka state in the North, Tamilnadu state in the east, Arabian Sea in the west consisting rich marine flora and fauna and Indian Ocean towards South. Kerala has the area from shore upto 30m line in the sea along the coast from kollencode in the south to paravoor (pozhiikkara), a length of 78 km is called the first zone. The area upto 20 m lines in the sea along the coast line from Paravoor in the south to Manjeswar in the north for a length of 512 km is called the second zone. The state of Kerala is one of the main seafood exporting maritime states in India and is considered as the hub of Indian Seafood processing and Export Industry. Marine Products Industry in Kerala is mainly export oriented. Kerala produces about nineteen percent of the fisheries output and seventeen percent value of the marine products exports from India. There is good demand for fishery products in foreign markets. The utilization of fish in frozen, iced or canned form purely depends on the preferences of the consumers in the domestic

as well as international markets. The exploitation of marine fishery resources is heavily dependent on its utilization pattern and the mode of utilization of different varieties determines the demand and price which influences the production of these resources. Kerala has 44 rivers with a total length of 3200 kms and a water spread of 85,000 ha, 30 extensive interconnected backwaters and estuaries with a water spread of 243,000 ha, 30 reservoirs with an area of 30,000 ha and a large number of ponds and tanks which provide an excellent opportunity for augmenting the production through culture for export. Kerala is strategically located in the transnational corridor. It has excellent infrastructure with well connected network of roadways, three International airports, railways, one major Seaport with container Terminal located at Cochin and there are other minor ports. Cochin is the main port through which seafood from Kerala leaves for export markets and Trivandrum is a minor exit point for seafood exports in Kerala.

Kerala was one of the first earliest states in India to enact the Marine Fishing Regulation Act (1980) for enforcing regulatory measures for restricting the number of fishing crafts and to ban the use of destructive nets. Fishery resources of Kerala contribute around 3% to the state's economy and provide a means of livelihood directly to fishermen and their dependants and indirectly to people who work in allied areas like fish trade, fish peeling, fish processing, transportation and ice manufacturing. The fishing communities of Kerala also depend on seafood exports for their livelihood. There is 220 fish landing centers distributed over 335 fishing villages in Kerala. Cochin, Sakthikulangara and Neendakara are the major fishing harbours in Kerala. Munambam, Moplabay, Chombal, Kayamkulam are medium harbours. Ponnani, Thalai, Muthalappozhy etc are other fishing harbours in Kerala.

The fish catches from the Kerala coast include more than 300 different species. Marine fish production of Kerala amounts to 20% of the total landings comprising high value items like penaeid shrimp, cephalopods (squid, cuttlefish and octopus) and varieties of fin fishes, crabs, lobsters etc. The main exported species of marine fish produced and landed in Kerala coast are Oil Sardine, Mackerel, Ribbon fish and Prawns/Shrimps. The commercially important species account to forty only. The high value species among the fish catches is still a few. Prominent among them are seer fish, Pomfret and Prawn. Ribbon fishes are also now a target group and nearly 60-70 percent of the landings in frozen form are exported to China, Japan and other South East Asian Countries. Molluscs, Demersal Fin Fishes and Crustaceans are the most sellable item in the International Market. Frozen Shrimp, Frozen Fish, Frozen cuttlefish, frozen Squid, Dried items, live items and Chilled items are the various marine products exported from Kerala. Aquaculture and Mariculture are the other fish farming techniques adopted in Kerala.

The Kerala Coast is characterized by a wide diversity in fishing craft and gear. The fishing fleet can be broadly categorized into the mechanized and artisanal sectors based on the size of the boats and the extent of mechanization. The artisanal sector can be further divided into the motorized and non-motorized sectors. The use of certain types of craft and gear are limited to certain areas of the Kerala Coast. There is monsoon Trawl ban in Kerala for 45 days from 15th June to 29th July every year which has been in force from 1980 onwards. Kerala has tremendous potential for the development of marine product export sector with all the requisite natural endowments for building a strong and vibrant fisheries economy in tune with the national strategy but has not taken full advantage of expanding Seafood Export trade with other Countries because of several bottlenecks such as the raw material scarcity, dwindling catch quantities coupled with the overcapacity in the fishing fleet, increase in operating costs of the vessels as the fuel prices increase and only some portion of the marine resources are tapped

from the state. Marine Exports from Kerala will depend upon world's demand and supply conditions.

2. STATEMENT OF THE PROBLEM

The exponential growth in human population has led to an overexploitation of marine living resources to meet growing demand for food. Overexploitation or overfishing is the removal of marine living resources to levels that cannot sustain viable populations. Ultimately, overexploitation can lead to resource depletion and put a number of threatened and endangered species at risk for extinction. Humans exploit over 400 species as food resources from the marine environment. Exploitation technology is becoming so advanced that many marine species are threatened to extinction. Fishing fleets are two to three times as large as needed to take present day catches of fish. The use of modern techniques to facilitate harvesting, transport and storage has accelerated this trend. It is estimated that over 25% of all the fish stocks are either overexploited or depleted and 52% are fully exploited.

3. OBJECTIVES OF THE STUDY

- To understand the impact of exploitation of Fisheries resources.

METHODOLOGY

The study is descriptive in nature.

EFFECTS OF OVER EXPLOITATION

All fishing activities, if not conducted in a sustainable non-destructive manner, can lead to overexploitation of marine living resources. Overexploitation of marine resources has major impacts on marine systems as a whole, but target species are generally the most impacted. Trawling for demersal species is having a major effect on the habitat for species other than target species. It has been estimated that all of the sea bed is trawled over at least twice per year and the gear is getting heavier over time. Trawls have destroyed long-lived species of molluscs. The best example of overexploitation of a marine resource is overfishing. 53% of the fisheries are fully exploited, and 32% are overexploited, depleted, or recovering from depletion. Most of the top ten marine fisheries, accounting for about 30% of all capture fisheries production are fully exploited. Humans have caused the population decline of hundreds of species by overfishing or overharvesting them. When certain species of animals are considered especially tasty, or are considered a delicacy, the demand for those species goes up. It means that those species are overharvested or overfished without regard to population numbers. Two examples of fish species which have been overfished are bluefin tuna and sharks. Bluefin tuna are prized for their meat and sharks are harvested for their fins to make shark fin soup.

4. SUGGESTIONS

Fishing techniques may be altered to minimize by catch and reduce impacts on marine habitats. A turtle excluder Device (TED) allows sea turtles and others to escape from shrimp trawls. Avoiding fishing in spawning grounds may allow fish stocks to rebuild by giving adults a chance to reproduce. Creating awareness of overfishing and effective measures can be effective in fisheries management. Improving awareness of regulations can improve compliance.

Creating public awareness of environmental impacts of fishing can lead to fishermen voluntarily engaging in practices such as catch and release.

5. CONCLUSION

The presence of a top-predator is vital to overall marine environment. If proper balance is not maintained among the species, it may adversely affect the food chain and the marine ecosystem which in turn affects the mankind.

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