



# FISH PRODUCTION AND MARKETING IN INDIA

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## ABSTRACT

*Fish production and marketing in India is vital sector that plays a significant role in the country's economy and food security. With a vast coastline and numerous inland water bodies, India has immense potential for fish production. The sector provides employment opportunities to millions of people, particularly in coastal and rural areas. However, the sector is undergoing a transformation, with increased adoption of modern technologies and practices to improve productivity and quality. The government has also launched various schemes and initiatives to support the sector. The marketing of fish in India is primarily conducted through traditional fish market, retail shops, and online platforms. With the growth of the e-commerce industry in India, many fish producer and retailers have started using digital platforms to reach a wider audience. However, there is still a need for further investments in technology, infrastructure, and research to enhance the sector's efficiency and profitability. Effective marketing strategies that consider the diverse consumer preference and demand for fish products across different regions in India can also contribute to the sector's growth and development*

**KEY WORDS:** Aquaculture, fish farming, fish markets, fish conservation and sustainability-----

## INTRODUCTION

They are three sectors in the Indian economy, they are; primary economy, secondary economy, and tertiary economy. In terms of operations, the Indian economy is divided into organized and unorganized. While for ownership, it is divided into the public sector and the private sector. The primary sector includes all those activities the end purpose of which consists in exploiting natural resources: agriculture, fishing, forestry, mining, Fishing is an ancient practice that dates back at least to the Upper Palaeolithic period which began about 40,000 years ago. Archaeological features such as shell middens, discarded fish bones and cave painting show that sea foods were important for survival and consumed in significant quantities. Fishery sector occupies an important place in the socio-economic development of the country. "Fisheries is a fast-growing sector in India, which provides nutrition and food security to a large population of the country besides providing income and employment to more than 28 million people. The fisheries and aquaculture production contributes around 1% to India's Gross Domestic Product (GDP) and over 5% to the agricultural GDP. If fish (as a subsistence product for fishing households) is potentially an important source of direct food security, its contribution through both bartering and the generation of incomes derived from labor -wages and fish commercialization, can also make it an important indirect source of food security. Fisheries resources also play a vital role in foreign exchange, contributing to country's GDP. Fisheries resources improve the economic status of fish farmers thereby reducing the level of poverty among fish farming households and in the society at large. Fisheries resources also play a vital role in foreign exchange, contributing to country's GDP. Fisheries resources improve the economic status of fish farmers thereby reducing the level of poverty among fish farming households and in the society at large.

## OBJECTIVITIES

1. To analyse the economics of Fisheries activity and its Significance in Indian economy.
2. To analyse the methods of fish catching. And its cost of production.
3. To analyse the different types of fish produced in west coast.
4. To analyse the Marketing process and cost of marketing of fish in coastal Karnataka
5. To analyse the Role of women in marketing fish.



6. To analyse the problem of fish production and fish marketing and to suggest policy measures to overcome the problems.

### Hypothesis

- H: 1** : Fish production varies with different types of Boats used for fish catching.  
**H: 2** : Perishability is major problems of fish marketing.

### METHODOLOGY

1. Economics of fish production will be analysed in terms of fish production variation in different season,
2. Fish production of different varieties of fish, cost of production,
3. Important components of cost of production, fuel, labour and others.
4. Analysis of marketing will be done on the basis of different market Mechanism, in local, regional, national, and international marketing.
5. The cost of marketing will be analysed like Travel cost, preservation cost, processing cost etc. The study will be based on Secondary data.

### TOOLS OF ANALYSIS

Averages like Mean, Media and standard deviation and such other ratio methods are used for analysing data. Production function technique will be used for analysing the economics of fish production.

### SCOPE AND LIMITATION

The scope of the concepts of fish production and marketing in India is quite broad and includes various aspects such as:

1. Fish production techniques: The method of used for fish farming in India, including traditional methods and modern technologies like aquaculture, need to be understood for effective fish production.
2. Government policies: The government policies in India related to fisheries, such as subsidies and regulations, are important factors that can affect fish production and marketing.
3. 3. Fish processing: Fish processing techniques in India, such as curing, canning, and freezing, play a crucial role in the marketing of Fish.
4. Marketing strategies: The marketing of fish in India involves various strategies such as packing, branding, and distribution.
5. 5. Market trends: Understanding market trends and consumer preference is essential for effective marketing of fish in India.

However, there are also some limitations to the concepts of fish production and marketing in India:

1. Infrastructure: Lack of infrastructure such as cold storage facilities, transport facilities, and processing plants can hinder fish production and marketing in India.
2. Limited resources: The availability of resource like land, water, and feed for fish production is limited in India, which can affect production levels.
3. Environmental issues: Pollution and overfishing can adversely affect fish production and marketing in India.
4. Lack of data: There is a lack of reliable data on fish production and marketing in India, which can make it difficult to assess the market potential and plan production and marketing strategies.
5. 5. Regulatory issues: Regulations related to fishing and marketing can be complex and time-consuming, leading to delays and inefficiencies in the production and marketing process.

### OVERVIEW OF THE INDIAN FISHERIES SECTOR

The Indian fishery sector is an important contributor to the country's economy, providing livelihoods to millions of people and supporting the food and nutritional security of the country. The sector is diverse, encompassing both marine and inland fisheries, and involving a range of stakeholders, from small-scale fishers to large commercial operators. In terms of production, India is one of the largest fish producing countries in the world, with an estimated annual production of around 13.7 million metric tons of fish and fishery products. The marine sector contributes about two-thirds of the total fish production, while the inland sector contributes about one-third. The Indian fishery sector faces a number of challenges including overfishing, habitat degradation, climate change, and competition from cheaper imports. The sector is also characterized by a lack of infrastructure, inadequate access to credit and technology, and limited market opportunities for small-scale fishers. To address these challenges, the Indian government has implemented a range of policies and programs aimed at promoting



sustainable fisheries, improving infrastructure and technology, and supporting the livelihoods of small-scale fishers. These include the national Fisheries Development Board, the Blue Revolution Scheme, and the Sagar Mala Programme. Despite these efforts is still a need for further investment and policy support to ensure the sustainability and competitiveness of the Indian fishery sector, while also protecting the rights and livelihoods of small-scale fishers.

## FISH PRODUCTION IN INDIA

India is one of the largest producers of fish in the world, with a diverse range of aquatic resources such as rivers, canals, ponds, lakes, and coastal waters. The country's fish production is mainly divided into two categories: Marine and Inland.

### MARINE FISHERIES

India has a vast coastline of over 8,000 km, which is home to rich diversity of marine fish species. The major marine fisheries are located along the west and east coasts of India. The west coast of India is more productive in terms marine fish production due to the availability of deeper waters, while the east coast has more shallow water, which support a variety of small and medium-sized fish.

### IN LAND FISHERIES

India has a vast network of rivers, canals, ponds and lakes, which provide a rich source of inland fish. Inland fisheries in India are mainly categorized as reservoir fisheries, riverine fisheries, and aquaculture. Reservoir fisheries are based on the large dams. West Bengal, Andhra Pradesh, Kerala, and Tamil Nadu are some of the major state that contribute to inland fish production in India. West Bengal is known for its production of catfish and freshwater prawns, while Andhra Pradesh is known for its production of freshwater fish such as rohu and Catla.

Apart from this primary sources, India also has a significant fish processing industry that adds value to the fish produced. The processed fish is then exported to several countries worldwide, making India one of the top exporters of fish and fishery products globally. In conclusion, fish production in India comes from a variety of sources, including capture fisheries, inland aquaculture, and marine aquaculture, with a significant contribution from the fish processing industry. These sources provide valuable employment opportunities to millions of people across the country while also contributing to the country's food security and economic growth.

## CHALLENGES FACED BY THE INDIAN FISHERIES SECTOR

The Indian fisheries sector faces several challenges, some of which include:

**Over Fishing:** The Indian fishing industry is facing a challenge of overfishing, which has resulted in the depletion of fish stocks. This has led to a decline in catches and increased competition among fishermen.

**Climate Change:** Climate change has impacted the Indian fishing industry by causing changes in Ocean temperatures, currents and weather patterns. This has affected the availability of fish in certain areas, which has led to decline in catches.

**Poor Infrastructure:** The Indian fishing industry has poor infrastructure, which makes it difficult for fishermen to store, transport, and sell their catch. This has resulted in significant post-harvest losses and reduced profits for fishermen.

**Lack of Technology:** The Indian fishing Industry lacks modern technology, such as sonar and GPS, which can help fishermen locate fish and navigate the sea. This makes it difficult for fishermen to compete with other countries that have more advanced technology.

**Illegal fishing:** Illegal fishing practices, such as bottom trawling, are common in the Indian fishing industry. These Practices damage the ocean floor and reduce the number of fish in the sea.-

**Insufficient Government Support:** The Indian fishing industry has insufficient government support, which has limited its growth and development. The lack of financial and technical support for fishermen has hindered..

**Poor marketing and distribution:** The lack of proper market facilities and channels has resulted in a glut of fish in some areas, while in others, prices are high due to a lack of supply. This has negatively impacted the income of small-scale fisherman.



**Inadequate Research and Development:** The fisheries sector in India lacks proper research and development facilities. This has resulted in lack of understanding of the biology and behaviour of fish species, limiting the Ability to develop sustainable fishing practices

**Limited Access to Credit:** Small-scale fishers and fish farmers face challenges in accessing credit, which Hinders their ability to invest in modern fishing technologies and equipment.

## MARKETING OF FISH IN INDIA

Fish marketing in India is a complex and multifaceted industry that involves various stakeholders, including fishermen, wholesalers, retailers, and consumers. India is the second-largest producer of fish in the world after China, and the fishing industry provides livelihoods for millions of people in coastal areas. The marketing of fish in India takes place through various channels, including traditional markets, auction centres, and direct sales from fishing boats. In addition, the rise of ecommerce platforms has also led to the online sale of fish. Marketing strategies for fish in India typically involve promoting the freshness and quality of the product. Fish is perishable commodity, and therefore, maintaining the quality of the product throughout the supply chain is crucial. Many fishermen and wholesalers use ice to keep the fish fresh during transport. In addition to freshness, price is also an essential factor in fish marketing. In India, the prices of fish vary according to species, size, and location of the catch. Some species, such as Pomfret and Hilsa, are highly sought after and command premium prices. The Indian government has implemented various initiatives to support the marketing of fish and the livelihoods of fishermen. The government has set up auction centres and fish landing centres in coastal areas to facilitate the sale of fish. It has also provided financial assistance to fishermen to upgrade their fishing gear and equipment. Overall, the marketing of fish in India is a dynamic and evolving industry that requires constant adaptation to changing market conditions and consumer preferences. The marketing of fish in India is a significant industry, with a large number of people involved in various aspects of the business. India has a long coastline of over 7500km and a vast network of rivers and water bodies, making it one of the largest producers of fish in the world, here are some key points on the marketing of fish in India: Fishermen and fish farmers are primary producers of fish. They sell their catch to middlemen or traders at the local level, who then transport the fish to wholesale markets in nearby cities. Wholesale markets, also known as fish markets, are the primary points of sale for fish in India. Some of the largest wholesale markets for fish in India are located in Mumbai, Kolkata, and Chennai. Fish is sold in different forms, including fresh, frozen, and dried. The demand for fresh fish is high, and it is sold at a premium in most markets. In recent years, online fish markets have gained popularity in India. These platforms allow consumers to order fish online and have it delivered to their doorstep. The Indian government has implemented various measures to promote the marketing of fish in the country. For instance, the National Fisheries Development Board (NFDB) provides financial assistance to fish farmers and entrepreneurs to set up fish farms and processing units. The marketing of fish in India faces various challenges, including inadequate infrastructure, lack of cold storage facilities, and poor transportation facilities in many areas. Overall, the marketing of fish in India is a significant industry that provides livelihoods to millions of people; however, there is a need for more investment in infrastructure and technology to improve the efficiency of the sector and increase profitability for all stakeholders. Marketing of fish in India is a complex process that involves multiple stakeholders, including fishermen, wholesalers, retailers, and consumers. India is one of the world's largest producers of fish, with a coastline of over 7500km and an extensive network of water bodies. The fish market in India is diverse, with a wide range of fish species being consumed across the country.

The marketing of fish in India can be divided into two broad categories: Traditional and Modern. In the traditional system, fishermen catch fish using traditional methods and sell them in nearby markets or directly to consumers. In the modern system, fish is processed, packaged, and marketed through a network of wholesalers, retailers, and cold storages. The traditional marketing system is still prevalent in many parts of India, particularly in coastal areas. Fishermen catch fish using traditional methods such as nets, hooks, and traps, and sell them in nearby markets. The fish are usually sold fresh or dried, and the prices are determined based on demand and supply. In the modern marketing system, fish is processed, packaged, and marketed through a network of wholesalers and retailers. The fish are usually transported to processing plants, where they are cleaned, filleted, and packaged. The packaged fish is then transported to cold storages, where they are stored at low temperatures to maintain freshness. The fish is then distributed to wholesalers and retailers across the country, who sell it to consumers. The marketing of fish in India faces several challenges, including inadequate infrastructure, lack of cold storages, and poor transportation facilities. Additionally, the fish market in India is highly fragmented, with numerous small players operating in the market. These challenges make it difficult to maintain the quality of fish and ensure timely



delivery to consumers. To overcome these challenges, the government and private players are investing in developing infrastructure and improving the supply chain. Initiatives such as the Pradhan Mantri Matsya Sampada Yojana (PMMSY) aim to modernize the fisheries sector and create employment opportunities. The use of technology, such as online marketplaces and mobile apps, is also gaining popularity, making it easier for consumers to access fresh fish and for fishermen and wholesalers to reach a wider market. The fishing sector in India plays a significant role in the country's economy, as it provides employment to millions of people and contributes to food security.

### **The Government policies and Initiative to promote fishing sector in India**

The Indian government has implemented various policies and initiatives to promote the fishing sector. Some of them are:

**Blue Revolution:** The Blue Revolution is a scheme launched by the Indian government to promote the development of the fisheries sector in the country. The scheme includes various initiatives such as construction of fishing harbours, fish landing centres, and fish farms. The Blue Revolution is a flagship scheme of the Ministry of Fisheries, Animal Husbandry, and Dairying launched in 2015. The scheme aims to increase fish production and productivity through various interventions like enhancing infrastructure, promoting cluster-based farming and providing marketing support.

**National Mission for Protein Supplements (NMPS):** The NMPS was launched in 2017 to provide a nutritional boost to the population, particularly children, by promoting the production and consumption of protein-rich foods like fish. The mission also focuses on creating a market for protein supplements, including fish and other aquatic products.

**National Fishery development Board Portal:** The portal was launched in 2019 to provide a platform for fishermen and fish farmers to connect with buyers and market their products. The portal provides information on market trends, pricing and quality standards, enabling the farmers to make informed decisions.

### **Pradhan Mantri Matsya Sampada Yojana (PMMSY)**

PMMSY is a central sector scheme launched in 2020 with a focus on the sustainable development of the fisheries sector. The scheme aims to increase fish production, promote entrepreneurship, and provide market infrastructure marketing support.

### **Fish Farmers' Development Agencies (FFDAs)**

The government has set up FFDAs in various states to provide technical assistance and financial support to fish farmers.

### **National Scheme of Welfare of Fishermen**

The government provides financial assistance to fishermen for construction of houses, health care education of children, and other welfare activities.

### **Integrated coastal Zone Management (ICZM)**

The ICZM program was launched in 2006 to address the issues related to the coastal ecosystem, including fisheries. The programme aims to promote sustainable development of the coastal zone and conserve the coastal environment. These initiative and policies have helped to promote the growth of the fishing sector in India and provide support to the fishers and fish farmers.

### **National mission for Sustainable Agriculture (NMSA)**

The NMSA promotes sustainable agriculture practice, including sustainable aquaculture, to enhance food security and improve the livelihoods of farmers and fishers.

### **Marine Products Export Development Authority (MPEDA)**

The MPEDA promotes the export of marine products by providing technical and financial assistance to exporters and promoting quality standards.

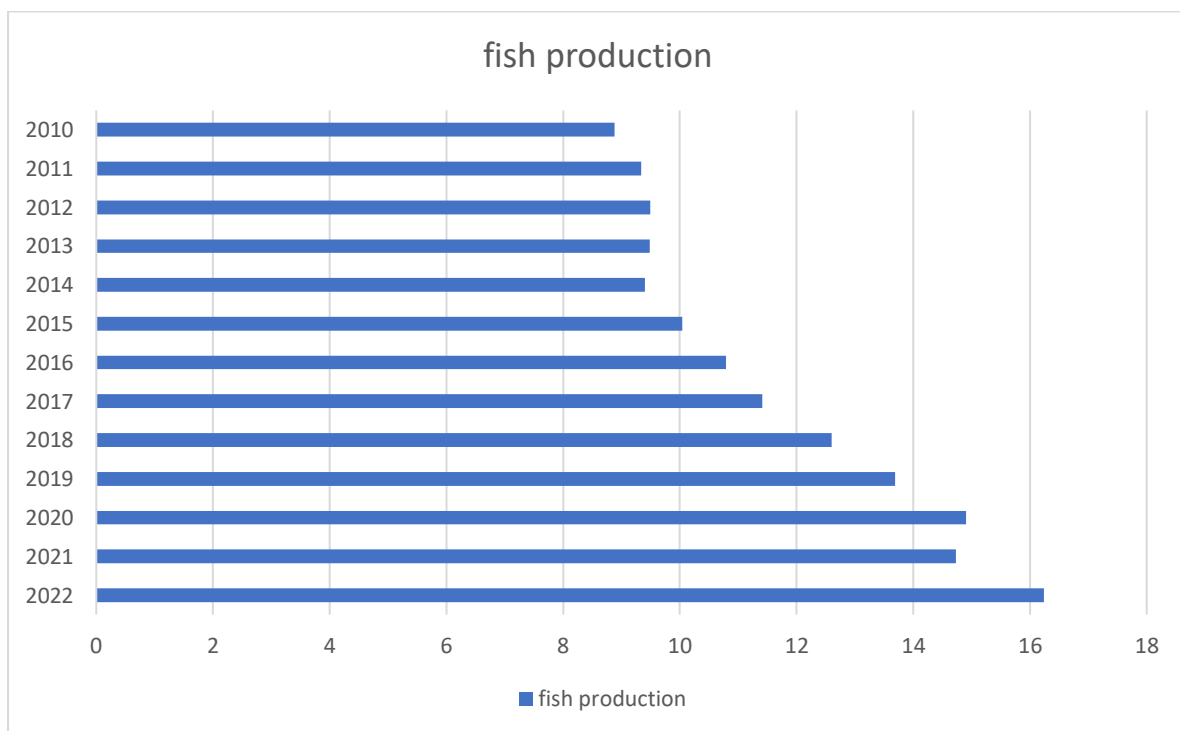
### **Sagarmala**

Launched in 2015, the Sagarmala program aims to promote port-led development in the country. It includes the development of fishing harbours and fish processing units to promote the growth of the fishing sector.



The Fish production data of India in different years

YEAR	Fish Production (in million tonnes)
2010	8.88
2011	9.34
2012	9.49
2013	9.48
2014	9.40
2015	10.04
2016	10.79
2017	11.41
2018	12.60
2019	13.69
2020	14.90
2021	14.73
2022	16.24



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