

## **A Study of Pricing Practices of Marine Fishery in Raigad District**

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### **Abstract:**

*Fishery is a very nutritious human food source, and the fishing industry is the primary source of income in coastal communities. The fishing industry is a significant source of employment in the coastal region. Coastal residents rely on the fishing industry for a living. The Indian fisheries industry contributes significantly to the country's economy. Around 12,89,000 MT of seafood was shipped last year to more than 100 nations around the world. Fishery is the ancestral business of the coastal people, but many fishermen are falling into poverty due to a lack of technical advances, a lack of awareness of current marketing strategies, a lack of finance, and other factors. The fishermen capture the fish, but he does not have the authority to set the price of his catch. There are numerous concerns in regard to fish price. As a result, the researcher attempted to concentrate on the pricing of marine fish in this study. How are fish prices determined in Raigad district landing centers?*

**Key words** - Fishermen, Fish, Price, catch.

### **1. Introduction:**

Raigad, a coastal district in Maharashtra, holds historical and cultural significance as the former capital of Chhatrapati Shivaji Maharaj's Swarajya. In addition to its heritage, Raigad is a prominent tourist destination and a vital hub for marine-based livelihoods. The district's western region lies along the Arabian Sea, where numerous coastal settlements depend heavily on marine fishing as their primary source of income. For generations, fishing has been the traditional occupation of these communities, forming an integral part of their socio-economic identity.

Fish is widely recognized as a highly nutritious food, and the global demand for fish and fish products remains robust. In India, fish is a staple in many non-vegetarian diets, further

driving domestic market demand. However, fish is a perishable commodity with limited shelf life, posing significant challenges for storage and transportation. Despite these limitations, the fishing industry contributes substantially to national development through employment generation, export earnings, and ancillary industries such as boat building, fish marketing, and ice production.

In Maharashtra, and particularly in districts like Raigad, a significant proportion of the fishing community lives below the poverty line. Although they are engaged in a traditional and potentially lucrative occupation, many fishermen struggle to improve their socio-economic status. The community's literacy rate remains low, limiting their access to market information, technological advancements, and government schemes that could enhance productivity and income.

One of the key concerns highlighted in this study is the discrepancy between high market prices for fish and the economic benefits received by the fishermen. While fish sells at relatively high prices in urban markets, it remains unclear whether these prices adequately compensate the producers. In typical commercial practices, the selling price of a product is determined by calculating the cost of production and adding a margin of profit. This study seeks to investigate whether a similar pricing mechanism is applied in the fisheries sector. Specifically, it aims to explore how the market determines the price of fresh fish, what methodology is used, and whether the cost of catching the fish is considered in setting the final selling price.

This research, therefore, focuses on understanding the economic structure of the marine fishing industry in Raigad, with an emphasis on market pricing mechanisms and their implications for local fishermen. By shedding light on these aspects, the study aims to identify gaps and propose strategies that could lead to a more equitable and sustainable fisheries economy in the region.

## **2. Objectives of the study:**

- 1) To study the practice followed to fix the price of marine fish by traditional fishermen.
- 2) To know the awareness regarding pricing practices in the fishermen of Raigad District.

## **3. Methodology:**

The current study is based on secondary data gathered from the internet, newspapers, magazines, and books, among other sources. This research is further backed up by primary data gathered from fishers through discussions and interviews.

## **4. Limitations:**

The current research is limited to marine fresh fish in the Raigad District of Maharashtra. This research focuses solely on the pricing techniques used in the case of fresh fish catch by traditional fishermen. All other components, such as the pricing of prawns, crabs, and other sea-caught seafood, Processing, value addition etc. are omitted.

## **5. Review of Literature:**

A number of studies have been conducted in India and abroad on various dimensions of the fishery business, focusing on marketing, production, pricing, administration, and socio-economic impacts. The following is a thematic review of key research contributions relevant to this study.

B. Ganesh Kumar et al. (2008), in their article “*Domestic Fish Marketing of India – Changing Structure, Performance and Policies*” published in the *Journal of Agricultural Economics Research Review*, explored the changing dynamics of fish marketing in India. The study emphasized the cost of marketing borne by traders, auctioneers, and intermediaries, and examined the role of state governments in policy-making for fish marketing structures.

James O. Bukenya et al. examined the profitability and performance of small fish traders in Uganda in their study titled “*Economics of Fish Marketing in Central Uganda: A Preliminary Analysis*”. This research focused on socio-economic characteristics, operating costs, and marketing-related challenges of small-scale traders, offering valuable insights into market inefficiencies and price distribution.

Swapna Pradhan (2009), in her book “*Retailing Management*”, discussed price as a crucial element of the retail marketing mix. She highlighted that pricing strategies such as cost-oriented, demand-oriented, and competition-oriented approaches influence final price determination. Various tactics like market skimming, penetration pricing, and bundling were also explored in detail.

Rajan Saxena (2009), in his book “*Marketing Management*”, explained pricing as a monetary sacrifice made by the customer and outlined various pricing objectives, including profit maximization, competitive survival, and value perception. He discussed three pricing approaches—cost-oriented, competition-oriented, and customer-oriented—with emphasis on methods like sealed bid pricing and value-based pricing.

Dhrubaranjan Dandapat and Sahidul Islam (2009), in their research article “*A Study of Production, Productivity and Profitability of Fisheries in North 24-Parganas, West Bengal*” (published in the *Journal of Business and Economic Issues*), analyzed recurring and non-

recurring costs in fish farming. Their study concluded that although fisheries support livelihoods, the income generated is insufficient to elevate the standard of living of fishermen. Chongtham Budhi Singh (1972), in his Ph.D. thesis *"Fishing Economics of the Thanga"*, categorized production factors into land, capital, and labor resources. He observed that land (lake areas) was relatively accessible at nominal government fees, while capital was divided into fixed and variable types, and labor had to be hired.

Rajsenan D. (1987), in his doctoral thesis *"Fishing Industry in Kerala: Problems and Potentials"*, investigated the impact of mechanization, resource depletion, and offshore fishing practices. He analyzed their effects on production costs and sustainability and explored how modernization altered traditional fishing patterns.

S. Saburabibi, in the thesis *"Fishery Development Administration in Tamil Nadu: A Study with Reference to Ramnad District"*, detailed the administrative hierarchy within the state's fisheries department, from the Commissioner to Assistant Directors. The study highlighted the role of government plans and financial outlays, particularly under the Five-Year Plans, in fostering the development of the fishery sector.

R. Rammohan (2000), in his thesis *"Fishery Market: A Strategic Enquiry into the Business Environment"*, submitted to Sardar Patel University, examined critical infrastructural and institutional components of the fishery industry. He analyzed factors such as boat-building yards, deep-sea fishing, consumer education, and inland market development. Importantly, he discussed the monopolistic tendencies of traders and advocated for cooperative involvement in marketing and credit systems to empower fishermen.

### **Study Gap:**

According to the aforementioned literature analysis, there has been little research done on the pricing practices used in the case of marine fresh fish. As a result, the researcher attempted to study pricing practices followed in case of marine fresh fish in the Raigad District.

### **6. Pricing Practices:**

In pursuit of profit maximization, businesses typically employ a variety of pricing strategies tailored to their specific goals and market conditions. Rather than relying on a single method, organizations often adopt a hybrid approach mixing and matching different pricing techniques to align with their strategic objectives. Several key factors influence pricing decisions, including fixed and variable production costs, the level of market competition, organizational goals, and the characteristics of target customer segments. These factors collectively shape how prices are set for products and services, ensuring that pricing aligns with both cost structures and market demand. Ultimately, effective pricing practices are not

uniform but are strategically adapted to meet the diverse and evolving needs of businesses in competitive environments.

### **6.1. Cost-Based Pricing**

Cost-based pricing refers to a pricing strategy where the selling price of a product or service is primarily determined by its production cost, with an added margin for profit. This approach ensures that all incurred costs are covered while achieving a desired level of profitability. Common methods under this strategy include:

#### **1. Mark-up Pricing/ Cost-plus Pricing:**

In this method, the selling price is calculated by adding a predetermined profit margin to the total cost of producing the product or service. It is a straightforward approach widely used in retail and service industries.

#### **2. Absorption Cost Pricing / Full-Cost Pricing:**

This method is commonly employed in manufacturing industries. It involves taking into account all types of costs—fixed, variable, and distribution-related—when setting the price. A profit margin is then added to arrive at the final selling price.

#### **3. Target Rate of Return Pricing:**

Similar to absorption costing, this method incorporates all relevant production and operational costs. However, the profit component is determined based on a targeted return on investment (ROI), ensuring that the pricing strategy aligns with the company's financial goals.

#### **4. Marginal Cost Pricing:**

This approach considers only the variable (marginal) costs involved in production. Pricing is then determined based on these costs in conjunction with market demand. It is often used in competitive markets to set prices at a level that covers incremental costs while maximizing sales volume.

### **6.2. Demand-Based Pricing**

Demand-based pricing strategies are formulated by analyzing consumer demand and perceived value. These methods aim to set prices based on what customers are willing to pay rather than solely on costs.

#### **1. What the traffic can bear Pricing:**

This approach involves setting the highest possible price that consumers are willing to pay, irrespective of production costs. It is commonly used when the seller has strong market control or the product is perceived as highly valuable.

#### **2. Skimming Pricing:**

In this strategy, a product is initially introduced at a high price to target consumers willing to pay a premium. Over time, the price is gradually reduced to attract more price-sensitive customers. This method is often used for new, innovative, or technologically advanced products.



### 3. Penetration Pricing:

This method involves launching a product at a low initial price to quickly gain market share and attract a broad customer base. As the product becomes established and demand increases, the price is raised gradually to improve profitability.

### 6.3. Competition-Oriented Pricing:

Competition-oriented pricing focuses on setting prices based on competitors' pricing strategies rather than cost or consumer demand. This approach ensures that products remain competitive in the market.

### 1. Premium Pricing:

Prices are set higher than those of similar products to position the product as superior in quality, exclusivity, or brand value.

### 2. Discounted Pricing:

Products are priced lower than competing offerings to attract cost-conscious consumers and increase market penetration.

### 3. Parity Pricing/ Going Rate Pricing:

The product price is set in alignment with the prevailing market price of similar products. This method helps maintain price consistency within the industry.

### 6.4. Product Line Pricing:

This pricing method is used when a company offers multiple related products within the same category. Each product is priced based on its features, perceived value, and cost of production. Though manufacturing costs may vary slightly, pricing is structured to reflect differences in quality, functionality, or target market positioning across the product line.

### E. Tender Pricing:

Tender pricing is commonly used in bidding situations, such as government or corporate contracts. Under this method, suppliers or service providers submit a competitive bid, often quoting the minimum feasible price required to win the contract while still covering costs and achieving minimal profit.

### 7. Profile of Coastal District of Maharashtra:

Raigad District is a district having highest population of Fishermen in Maharashtra. The Coastal area is also longer than other districts of Maharashtra. The Following table shows the Profile of Coastal District of Maharashtra.

**Table Showing Profile of Coastal District of Maharashtra**

Profile	Thane	Greater Mumbai	Raigad	Ratnagiri	Sindhudurg
Landing Centers	28	18	36	36	34

Fishing Villages	77	,30	168	98	83
Fishermen Families	26,821	9,304	24,026	14,064	7,277
Traditional Fishermen Families	26,331	9,138	20,448	12,541	5,745
BPL Families	4,231	624	5,864	2,089	2,701
Fisherfolk Population	1,21,869	40,953	1,23,574	66,685	33,178

(Source: Marine Fisheries Census 2010 Maharashtra)

With the exception of the number of fishermen families, Raigad District ranks highest across all other categories presented in the referenced table. Notably, Raigad accounts for approximately 32% of Maharashtra's total fishing population. It is also the only district in the state with over 100 recognized fishing villages, underscoring its pivotal role in the marine fishery sector of Maharashtra. While Ratnagiri District has a comparable number of fish landing centers, it supports a significantly smaller population of fishermen. According to the 2010 Fisheries Census, out of 24,026 fishermen households in Raigad, 5,864 were classified as living below the poverty line, with the remaining households above it. These figures highlight the district's substantial contribution to the state's marine fishing activity, while also pointing to ongoing socio-economic challenges within its fishing communities.

## 8. Fish Production of India:

Following table showing Production trend of Marine and Inland fish in India.

**Table No. 2 Showing Year wise fish production of India**

Sr. No.	Year	Fish Production (in lakh tonnes)		
		Marine	Inland	Total
1	1950 -51	5.34	2.18	7.52
2	1960-61	8.80	2.80	11.60
3	1970-71	10.86	6.70	17.56
4	1980-81	15.55	8.87	24.42
5	1990-91	23.00	15.36	38.36

6	1999-00	28.52	28.23	56.75
7	2010-11	32.50	49.81	82.31
8	2011 -12	33.72	52.94	86.66
9	2012-13	33.21	57.19	90.40
10	2013-14	34.43	61.36	95.79
11	2014-15	35.69	66.91	102.60
12	2015-16	36.00	71.62	107.62
13	2016-17	36.25	78.06	114.31
14	2017-18	36.88	89.02	125.90

(Source: Hand book on Fisheries Statistics 2018, Government of India and Report on the working group on Development and management of fisheries and aquaculture XII Five Year plan)

India's fish production has witnessed significant growth over the past several decades. In 1950–51, the total fish production stood at 7.52 lakh tonnes, which saw a marked increase by 1960–61 and continued to grow steadily thereafter. By 2017–18, India's total fish production had reached 125.90 lakh tonnes—approximately 16.75 times higher than the production recorded in 1950–51.

A comparison between marine and inland fish production reveals that inland fisheries have experienced a significantly higher growth rate. Marine fish production increased from 5.34 lakh tonnes in 1950–51 to 36.88 lakh tonnes in 2017–18, representing a 6.91-fold increase. In contrast, inland fish production rose from 2.18 lakh tonnes to 89.02 lakh tonnes during the same period—an impressive 40.84-fold increase. This data highlights that while both sectors have grown substantially, inland fish production has expanded at a considerably faster pace than marine fish production.

## 9. Practices Followed in Raigad District:

The majority of fishermen in Raigad district are either illiterate or possess limited formal education, and they generally lack commercial and financial awareness. As a result, they are often unfamiliar with pricing strategies or methods for determining the market value of their catch. In the district, fishermen do not have the autonomy to set the prices of fish themselves.



Each year, the Government of Maharashtra imposes a fishing ban from June to August—commonly referred to as the "fish holiday" period—to allow for marine resource regeneration. During this time, fishing activities are halted, and fishermen in Raigad are left without work. To manage their livelihood during this idle period, many fishermen borrow money in advance from traders or middlemen. These advances typically carry interest rates ranging from 5% to 10%. Once the fishing season resumes, the borrowed amount is repaid from the proceeds of the catch. In many cases, the trader not only provides financial advances but also supplies fishing nets, ice, and boat fuel.

Due to these financial dependencies, most fishermen are bound to sell their catch to the trader who extended them the loan. As a result, they lose control over price negotiation. In most instances, the auction method is used to determine fish prices at landing centers, with merchants conducting the auction. Some fishermen retain a portion of their catch to sell in local retail markets in order to meet daily operational and household expenses. Typically, this portion is sold directly to consumers by women from the fishermen's families. These fisherwomen shoulder the responsibility of selling the fish in nearby local markets.

In the auction process, the trader deducts a portion of the proceeds toward the loan repayment, and the remaining amount is given to the fishermen. The full advance must be repaid before the end of the fishing season. Regardless of whether a fisherman takes an advance or not, they are generally required to sell their catch through the auction system at the landing site. In some cases, the income earned is insufficient to meet even basic expenses, forcing some fishermen to return home empty-handed.

For non-edible fish, which is primarily used for producing oil and other by-products such as poultry feed, dog feed, etc., the prices are set at predetermined rates. The purchasing company provides these rates to the fishermen, which remain fixed for a period of fifteen days. After this period, the rates are reviewed and adjusted, with a new rate card issued to the fishermen. Fishermen then sell their catch according to the updated rates provided by the company.

#### **10. Impact and Awareness of Pricing Practices in the fishermen of Raigad District:**

Fishermen in Raigad District often lack awareness of market pricing dynamics, which leaves them at a disadvantage when it comes to understanding the value of their catch. They do not have the authority or knowledge to set the price of the fish they catch, and are typically unaware of marketing strategies or industry trends. This lack of commercial acumen stems largely from the widespread illiteracy and lack of formal education among the fishermen in the region, leaving them with little technical understanding of market forces and pricing mechanisms.

For many fishermen in Raigad, their role in the fishing process ends once the fish reaches the landing center. At that point, they believe it is the responsibility of the trader, who has provided them with financial advances, to set the price and manage the sale of the catch. The fishermen are often not involved in any further steps of the marketing or sales process. As a result, they are largely disconnected from the decision-making that determines the selling price of their fish.

This lack of awareness and involvement in pricing is compounded by the fishermen's limited access to information about market trends, innovations, or changes in marketing policies. They are unaware of new technologies, updated fishing practices, or even shifts in consumer demand that could potentially influence the price of their catch. Consequently, they rely heavily on the traders who finance them, selling their fish at the rates set by these traders. As a direct consequence of this system, the fishermen's share of the proceeds from the sale of their fish is often very low. Since the trader's control both the marketing process, fishermen receive only a fraction of the total sale price. This imbalance significantly reduces their income and perpetuates their reliance on traders, further entrenching their vulnerability in the fishing business. This cycle of dependence keeps the fishermen in a disadvantaged position, unable to leverage market knowledge or improve their financial standing.

## **11. Summary & Conclusions:**

Raigad District is the largest in Maharashtra in terms of its fisherfolk population, landing centers, and the number of fishing villages. In industrial sectors, firms or producers determine product prices by factoring in production, administration, and distribution costs, with a set profit margin added on top. These companies typically use scientific methods to establish prices, ensuring profit margins are carefully calculated.

However, in the marine fishing sector of Raigad, the pricing process operates differently. The auction system, commonly used to set fish prices, leaves fishermen unaware of how much they will earn for their catch until the auction ends. Consequently, fishermen lack the authority to set prices for their catch. In cases of low fish yield, the money earned may not cover their regular expenses, leading to financial strain.

During the fishing ban period, fishermen face unemployment with no alternative income sources. This results in their dependence on advances from traders, who subsequently tie them to selling their fish exclusively to these traders. Many fishermen avoid taking loans from nationalized banks due to the complex and lengthy application process, further exacerbating their reliance on traders.

Given these challenges, it is imperative for the government to intervene and regulate fish pricing. Currently, there are no clear regulations to govern fish prices, leaving fishermen vulnerable to market fluctuations beyond their control. Moreover, educating the fishing community about the benefits of loans from nationalized banks would help improve their financial independence and lessen their dependency on traders.

In conclusion, addressing the need for fair pricing practices and improving financial literacy among Raigad District's fishermen would significantly enhance their economic well-being. This would provide them with greater control over their livelihoods and reduce their dependency on traders.

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