

A STUDY OF FISH MARKETING EFFICIENCY IN THOOTHUKUDI DISTRICT OF TAMILNADU

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Abstract

Fish is a perishable product that requires prompt disposal to maintain its quality. In this scenario, various stakeholders are interconnected and take delight in integrating fish into their livelihoods. The fish marketing industry in India is substantial, engaging a considerable number of individuals in diverse facets of the enterprise. The fishermen sell their catch to local intermediaries or traders, who subsequently transport the fish to wholesale markets in adjacent cities. Wholesale markets, commonly referred to as fish markets, serve as the principal venues for fish sales in India. The principal wholesale fish markets in India are situated in Mumbai, Kolkata, and Chennai. Fish is available in various forms, including fresh, frozen, and dried. A significant quantity of undersized and poor market value fish is captured as bycatch, predominantly abandoned at sea during peak fishing seasons. The demand for fresh fish is substantial, and it commands a premium price in the majority of marketplaces. The utilisation of technology, including online marketplaces and mobile applications, is more prevalent, facilitating customer access to fresh fish and enabling fishermen and wholesalers to expand their market reach. The fishing business in India is vital to the nation's economy, offering jobs to millions and enhancing food security. This study examined the efficacy of fish marketing in Thoothukudi district. The study aimed to evaluate the marketing efficiency of fish in Thoothukudi district. The research indicates that the marketing efficiency of fish is 4.01 for retailers and 5.99 for wholesalers. The great efficiency results from a smaller network of middlemen and a reduced marketing profit for them. Furthermore, the marketing efficiency of wholesalers surpasses that of retailers because retailers rely on intermediaries for loans and transportation.

Keywords: marketing of fish, intermediaries, economic return, financial feasibility.

Introduction

The domestic fish marketing system in India is inefficient and outdated, predominantly managed by private traders with several intermediaries between producers and consumers, thereby diminishing the fisherman's portion of the consumer's expenditure. The physical facilities and infrastructure in all categories of fish markets are inadequate (FAO, 2001). Challenges in fish marketing encompass significant perishability and bulkiness of the product, considerable heterogeneity in size and weight among species, elevated storage and transportation costs, lack of assurance regarding quality and quantity of the commodity, low demand elasticity, and substantial price dispersion (Ravindranath, 2008).

The antiquated fish marketing system in India is progressively being replaced by a contemporary framework. Fish marketing is the distribution of fish or fish by-products from producers to consumers. It involves multiple processes necessary to transport fish or fish products from the producer to the consumer (Das et al., 2013). The fundamental aspect of fish marketing is the point at which stakeholders, including farmers, middlemen, and consumers, establish the price of fish for economic gain (Hazarika, 2008). This essay aims to examine the marketing efficiency of fish sales in Thoothukudi District.

Objectives

The main objectives of the study mentioned below:

- 1) To study the financial feasibility of the fish retailers and wholesalers in Thoothukudi District.
- 2) To examine the marketing efficiency in the sale of fish and
- 3) To assess the effect of variation in user's price on the share of the produce

Methodology

To examine the marketing of fish, 120 commission agents, wholesalers, and retailers were surveyed. The chosen respondents were contacted individually, and the necessary data for determining marketing costs and price spread were collected. The field investigation was conducted from April 2022 to July 2022. The employed technique is simply random sampling. Secondary data have been gathered from books, journals, newspapers, the internet, and periodicals. The present study employed statistical tools such as Shepherd's Formula, regression coefficients, and F-value.

Fish Marketing in India

The fish marketing industry in India is intricate and diverse, encompassing multiple players such as fishermen, wholesalers, retailers, and consumers. India ranks as the second-largest fish producer globally, following China, and the fishing sector sustains the livelihoods of millions in coastal regions. In India, fish marketing occurs through multiple routes, such as conventional markets, auction halls, and direct sales from fishing vessels. Furthermore, the proliferation of ecommerce platforms has facilitated the online sale of fish.

Marketing techniques for fish in India generally emphasize the product's freshness and quality. Fish is a perishable item; thus, it is essential to preserve the product's quality throughout the supply chain. Numerous fishermen and distributors utilise ice to preserve the freshness of seafood during transportation. Besides freshness, price is a crucial element in fish marketing. In India, fish prices fluctuate based on species, size, and catch site. Certain species, such Pomfret and Hilsa, are highly sought for and attract elevated prices.

The Indian government has adopted numerous efforts to enhance fish marketing and assist fishermen's livelihoods. The government has established auction and fish landing stations in coastal regions to enhance fish sales and has offered financial support to fishermen for upgrading their gear and equipment. The marketing of fish in India is a dynamic and evolving sector that necessitates continual adaptation to shifting market conditions and consumer preferences. Online fish marketplaces have surged in popularity in India in recent years. These systems enable users to purchase fish online and receive it at their doorstep.

The Indian government has enacted multiple initiatives to enhance fish marketing inside the nation. The marketing of fish in India has numerous problems, such as insufficient infrastructure, a deficiency of cold storage facilities, and inadequate transportation options in several regions (D. Amutha, 2014). The fish marketing industry in India is substantial, supporting the livelihoods of millions. Nonetheless, additional investment in infrastructure and technology is essential to enhance sector efficiency and augment profitability for all stakeholders.

The marketing of fish in India is a multifaceted process involving various players, such as fishermen, wholesalers, merchants, and consumers. India ranks among the world's top fish producers, boasting a coastline over 7,500 kilometres and an enormous network of water bodies. The fish industry in India is varied, featuring an extensive array of fish species consumed nationwide (D. Amutha, 2013). Fish are typically marketed as fresh or dried, with prices dictated by supply and demand dynamics.

In the contemporary marketing framework, fish is processed, packaged, and marketed via a network of wholesalers and retailers. Fish are often conveyed to processing facilities, where they are cleaned, filleted, and packaged. The packaged fish is subsequently transferred to cold storage facilities, where they are preserved at low temperatures to ensure freshness. The fish is subsequently allocated to wholesalers and merchants nationwide, who market it to consumers (D. Amutha., 2015).

A proficient marketing technique is essential for the growth of fish output and the comprehensive advancement of the fishing sector (Kumar & Anjani, 2004). The existence of multiple middlemen affects the interests of both consumers and fishers (Salim, Sekar, and Rajesh, 2004). Farmers assert that a significant challenge in aquaculture is the marketing of fish products. Farmers must be educated to identify feasible solutions due to challenges such as low prices, inadequate transportation, insufficient immediate markets, and considerable post-harvest losses.

Acquiring new skills, strategies, and techniques for information collection and utilisation is essential for good marketing (Ramarao & Sarada, 2015). The prices and demand for fish are steadily increasing in both domestic and international markets. The antiquated fish marketing system in India is progressively being replaced by a contemporary framework. The existence of multiple middlemen affects the interests of both consumers and fishers (Salim, Sekar, and Rajesh, 2004).

Fish marketing is the distribution of fish or fish by-products from producers to consumers. It involves multiple processes necessary to transport fish or fish products from the producer to the consumer (Das et al., 2013). Consumers in affluent countries generally choose seafood goods that are pre-cooked or ready for consumption (Amutha D., 2013). Enhancing our seafood export share will be achievable through product diversification and an emphasis on high-value items (Shinoj & Mathur, 2008).

The principal feature of fish marketing is the juncture at which the relevant parties, including producers and intermediaries or customers, establish the price of fish for economic gain (Hazarika, 2008). Fishermen do not directly sell fish to people in the market. A proficient marketing technique is essential for the growth of fish output and the comprehensive advancement of the fishing sector (Kumar & Anjani, 2004).

Increased emphasis must be directed into fish marketing strategies to enhance the fishing sector in India, given the importance of seafood as a viable source of foreign exchange and an additional protein source for the majority of the local populace. This paper endeavours to examine and elucidate the implementation of several creative marketing techniques within the fisheries sector, aiming to derive insights from successful practices for replication and adaptation in many socio-political and economic contexts nationwide (Amutha D., 2016).

The fisheries sector in India has gained prominence due to changing compositional trends, escalating market dynamics, and technical innovations. The rapid development is greatly supported by policy initiatives, manufacturing techniques, governmental infrastructure investment, and research and outreach efforts in fisheries. The marketing of fish in India encounters numerous problems, such as insufficient infrastructure, a scarcity of cold storage facilities, and inadequate transportation options.

The fish market in India is highly fragmented, comprising numerous tiny operators. These issues hinder the preservation of fish quality and the prompt delivery to consumers. The government and business entities are investing in infrastructure development and supply chain enhancement to address these concerns. Programs like the Pradhan Mantri Matsya Sampada Yojana (PMMSY) seek to modernise the fisheries sector and generate employment opportunities.

Results and Discussion

Table 1. Financial feasibility of fish production

Sl. No	Particulars	Values
1.	Net present value	Rs.2591
2.	Simple rate of returns (%)	(%) 72
3.	Benefit cost ratio (%)	(%) 1.04
4.	Payback period (years)	1.310

Table 1 illustrates the financial viability of fish sellers and wholesalers in Thoothukudi District. The net present value was Rs. 2,591, with a simple rate of return of 72% and a benefit-cost ratio of 1.04, indicating the financial viability of fish production. A payback period of 1.310 years was noted.

Table 2. Marketing efficiency measures

Sl. No	Particulars	Values
1.	Marketing efficiency	2.52
2.	Net marketing efficiency	2.84
3.	Marketing margin (%)	50.35
4.	Carcass recovery of fish ratio (%)	8.5

The observed marketing efficiency and net marketing efficiency were 2.52 and 2.84, respectively, indicating strong performance by the dry fish producers. The marketing margin seen was approximately 50%, attributable to elevated fish selling prices and effective corpse recovery.

Marketing Efficiency

In order to assess the marketing efficiency in the sale of fish, Shepherd's formula is used.

Table 3 Marketing Efficiency of Fish Market

Sl. No	Particulars	Retailers	Wholesalers
1.	Value of fish sold per tonne (in Rs.)	5837.05	6183.72
2.	Marketing cost per tonne (in Rs.)	492.31	537.95
3.	Marketing Efficiency (M.E.)	4.01	5.99

The table indicates that the marketing efficiency of fish is 4.01 for retailers and 5.99 for wholesalers. The high efficiency results from a restricted network of middlemen and a reduced marketing profit for them. Furthermore, the marketing efficiency of wholesalers surpasses that of retailers because retailers rely on intermediaries for loans and transportation.

Effects of Variation in the Consumers' Price on the Share of Producer

To evaluate the impact of price volatility on the share of the product, a regression equation is applied. Table 4 presents the results of the regression analysis.

Table 4

Effects of Variation in Final User's Price on the Share of the Auctioneer

Particulars	Regression Coefficients		R ²	F
	a	b		
Retailers	2.2185	0.3684* (3.569)	0.6128	24.8319
Wholesalers	2.9681	0.4831* (2.105)	0.6847	16.1082

Figures in parentheses are the t-values.

*Indicates that the coefficients are statistically significant at 5 per cent level.

The study indicates that the regression coefficients are both positive and statistically significant at the 5 percent level, suggesting that a 1 percent change in the user's pricing will result in a 0.36 percent gain in the market share of retailers and a 0.48 percent rise for wholesalers. The R² number indicates that around 61 to 68 percent of the volatility in the auctioneer's share is attributable to fluctuations in the user's pricing. Consequently, fluctuations in consumer or user prices substantially impact the auction share.

Summary

A concerted effort has not been undertaken in the marketing of fish relative to its output. Although the fish market is dominated by the unorganised sector, a methodical strategy is essential to enhance its visibility within the economic sphere. India possesses a competitive advantage in global fish production owing to its abundant water resources; a comprehensive strategy is required to provide the fishery sector an attractive investment opportunity.

Fish is a commodity essential for a nation's food and nutritional security and should not be underestimated. Fresh, innovative intellects must enter this area. The fish sector requires enhanced support to accelerate its progress. Food for future will undoubtedly contribute to the advancement of fisheries development in India. Marketing is an endeavour that generates a synergistic impact in the advancement of fisheries, ensuring the protection of all stakeholders who rely on it, either directly or indirectly.

References

1. Amutha D., 2016 Satisfaction of work among the crab farmers in Tuticorin District. A.E. International Journal of Science and Technology 4(3):1-9.
2. Amutha, D., A Study on Fishing in Tuticorin District (January 5, 2013). Available at SSRN: <https://ssrn.com/abstract=2196700> or <http://dx.doi.org/10.2139/ssrn.2196700>.
3. D.Amutha, Quality of Work Life of Fish Processing Women Workers in Tuticorin District, Journal of Social Welfare and Management, Volume 7, Issue 4, October - December 2015, Pages 157-163.
4. D.Amutha, Socio-Economic Study of Vellapatti Village in Tuticorin District, Indian Streams Research Journal, 2013
5. D.Amutha, Struggle for Recognition-A Study of Street Vending in Tuticorin City, Growth of Unorganised Sector in India, 2014.
6. Das, A., Upadhyay, A., Kumar, N. R., Prakash, S., Debnath, B., & Datta, M. (2013). Marketing profile of selected fish markets of Tripura. Agricultural Economics Research Review, 26 (1): 115-120.
7. FAO (2001) Production, Accessibility, Marketing and Consumption Patterns of Freshwater Aquaculture Products in Asia: A Cross-Country Comparison (available online)
8. Hazarika, C. (2008) Extent of post-harvest losses of ginger in Assam – A microlevel analysis. Indian Journal of Agricultural Economics (Conference Issue), 63 (3) : 370.
9. Kumar, Anjani (2004), "Export Performance of Indian Fisheries: Strengths and Challenges Ahead", Economic and Political Weekly, Vol. 39, No.38, September 18, pp. 4264-4270.
10. Ramarao Mopidevi and Sarada Devi K. (2015), primary fish market conditions: an analysis on role of middlemen (nizampatnam port – bay of bengal), International Journal of Management Research & Review/Volume 5/Issue 3, pp. 151-158.
11. Ravindranath, K. (2008) In National Workshop on Development of Strategies for Domestic Marketing of Fish and Fishery Products, College of Fisheries Science, Nellore, India, pp. 43-48.
12. Salim Syam S., C.Sekar, K.Uma and S.R.Rajesh (2004), Export performance of Indian fisheries in the context of globalization, Indian Journal of Agricultural Economics , July-September, 59(3) : 448-464.
13. Shinoj P. and V.C. Mathur (2008), "Comparative Advantage of India in Agricultural Exports vis-à-vis Asia: A Post Reforms Analysis", Agricultural Economics Research Review, Vol.21, No.1, pp.60- 66.