

**A study of economic variables creating challenges for MPEDA
exporters in Andhra Pradesh**

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Abstract

MPEDA (Marine Products Export Development Authority) is one of the leading export organisations in the country. It exports many products like fish, prawns and other items from our mother country. The present study is mainly focussing on the economic variables creating problems for MPEDA exporters. In this study, the researchers have done the EFA and CFA to understand the most influential economic challenges faced by exporters from Andhra Pradesh. The data was collected from primary sources through a questionnaire. The sample size was 267 and convenience sampling was used. The study identifies the most influencing factors for exporters. This study will help MPEDA, academicians, researchers as well as one who have been doing business under MPEDA and registered exporters.

Subject Classification: 00A99.

Keywords: MPEDA, Marine products, Exports, Exporters problems, Prospects, Primary data.

1. Introduction

Marine products or services contain all varieties of fishery items known as shrimp, shellfish, lobster, crab, fish, shellfish, and numerous other frozen things or component as well as likewise any other products which the authority proclaim to be water item for the goal of this is to export. The aquatic market within India plays a notable purpose in creating a significant demand as well as employment possibilities and beneficial forex incomes. The export items are sent to top countries such as Japan, the USA, European Union as well as likewise South-West Asia. Covid-19 brought many challenges to business and environment (Kumar & Ayedee, 2021).

MPEDA:

The financial welfare of a nation hinges on the sources offered to it and also the requirements of the people to use these sources for the advancement of the economy (Bhatia et al., 2022). The marine environment consisting of the ocean as well as the adjacent coastal area presents chances

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for advancement. Seas create a significant part of the setting and they have an overwhelming influence on income. Post 1900, swift advancements were made in all areas of aquatic science. The establishment of academic institutions and also the launching of explorations of numerous countries as well as, recently, the geophysical investigations in the polar waters have actually led us to realize the fundamental characteristics of oceans as a resource of transport and communication, as a source of food and as a changing factor in the atmosphere of the marine world.

2. Need for the Study

The fishery industry is just one of the glossy industries of India that started with a meagre export of Rs 1030.92 crores in the 19-20th century which had actually grown into a forex gaining with an export buffer of Rs 9245.30 crores in 2019-20. It has supplied job opportunities for more than 10 million fisher individuals directly as well as an equal variety of indirect employment opportunities to several various other stakeholders. It is for that reason critical as well as unavoidable to concentrate our research study on this marine field. In an age of globalization, which depends on a paradigm of export-led development, no nation can make it through without a strong export base. The professional balances have to be fulfilled, inter alia, with the forex earned out of the seafood export. Marine varieties such as shrimps, fish, crabs, squids and also cuttlefish, are the main source on which Indian exports in the fishery field depend. The cultural practices, the biological advancement in the reproduction and spawning methods, the deep-sea angling strategy, the building and construction of ultra-modern crafts and changes in packing techniques, are to be embedded by the Indian exporters in order to enhance the export of seafood, hence, simultaneously keeping a sustainable growth. Export of Marine Products has a number of special problems with huge unpredictability of procurement, large fluctuations of export prices, importing countries' limitations and so forth. There is a dire requirement for the government and various other companies connected to this field to provide active assistance to this sector which offers employment opportunities to numerous down-beaten individuals.

3. Review of Literature

P.V. Dehadrai, in his article, 'Future Concerns in Fishery Research as well as Growth in India', has actually specified Fishery sector has played an essential role in the Indian economy via employment generation, enhanced incomes as well as via earning important forex [1].

M/s. S.Felia as well as Rachael, Andhra Pradesh, in their study, 'Leads of Intensive pet catfish society in Andhra Pradesh' have mentioned that as "the sources prevailing, their over-exploitation by any of the nations can lead to inequalities and also severe exhaustion of varieties. There is, as a result, a brewing need for a typical as well as coordinated fishery development technique for all multinational fisheries- both marine and also inland"[2].

G.N. Mithra in his article, "Green administration of resources for increasing fish manufacturing" has actually specified, "The country can easily increase its fish production by 2020 with boosted bio-technological treatments and hereditary up ranks. Sufficient resources support and also punctual financing can bring in speed up and also faster fish production"[3].

P.S.Rao in his article 'The globe Hunger vis-a-vis fishery Resources' checked out the impediments to climbing food products from land-based sources and describes just how world -wide fish, as well as various other water items, might eliminate scarcity of food around the world over-diminishing productivity from agricultural land manageable small plants [4].

R. Sathiadhas in his study qualified "Mechanization of native crafts with outboard motors in Andhra Pradesh" revealed a major finding that there is not a lot of difference in the overall catch of mechanized and also non-motorized catamarans. Because of motorization, employment possibility is increased given that the motorized catamarans call for 3 to 5 persons instead of just two for the non-motorized units [5].

Sreenivasan (1981) worked with the "Business economics of various sorts of fishing crafts run in Andhra Pradesh". The return on each financial investment of non-powered boats was estimated to be twice that of powered boats. The standard angling crafts classifications created almost seven times the direct work supplied by the mechanized watercraft categories. It was recommended that the added income and work could be acquired by making all angling required like angling nest, fish processing, transportation, markets and usage of bycatch to increase the town poultry systems [6].

Bindhyachal Sine et al, (1987) assessed the business economics of the fish landings of mechanized and also non-mechanized crafts in Visakhapatnam of the Andhra Pradesh Seashore. The samples of mechanized and standard systems were studied to approximate the element of fish production. The returns were estimated by taking into consideration taken care of and variable prices. The mechanized crafts were found to give even more job opportunities for even more anglers [7].

Selvaraj (1988) recognized the fishing seasons for important species of fish teams and approximated the economics of various craft groups in

the picked coastal fishing villages of Kanyakumari. He formulated techniques for the advancement of the fisheries market for the betterment of the fisher people in the Area [8].

Senthilathiban and Selvaraj (1988) executed the economic statement evaluations for various fishing crafts run in the fishing villages of Tirunelveli Area. The highest possible solvency ratio was worked out for the mechanized watercrafts and the most affordable for. The sufficiently positive net worth for all the craft groups showed that their profession was sound and that business remained in a proper solvent condition [9].

Annamalai as well as Kandoran (1990) estimated the economics of motorized typical crafts. The cost of suitable outboard was as sustained as the expense of acquiring a brand-new fishing craft. Besides, there arose the requirement of a few even more sorts of low-cost equipment. The costs as well as returns information for the mechanized standard crafts were assessed and a majority of these fishing trips reported inadequate gross returns even to fulfil the fuel expense [10].

Pazham and Jesi Isabella (1997) carried out research in which they tried to highlight the economic condition of fishermen houses. They did so by examining the source of debt, settlement, assets as well as responsibilities and also the credit score usage behaviour of fishermen. Better, they likewise worked out the arrearage per family in the Catamaran and motorized catamaran markets. The research study also brought out the factors for the poor settlement of financings [11].

Day (1979) studied the demands of fishermen development in Sri Lanka, India, Bangladesh, Pakistan and South Yemen. Improvement in handling, circulation and also advertising of fish, and strengthening of the infrastructural facilities, freezer and also extension services were located to be the urgent needs of them for their socio-economic development [12].

John Kurien (1981) analysed the situations of destitution among anglers. According to his record, inequality in the property holdings among them, exploitation by market middleman and also the routine of excessive costs throughout high catch periods are the 3 major reasons for hardship amongst the angling households [13].

Tendel (1981) researched the functional restraints of artisanal fishermen along the Karnataka coast. The use of bag seines and trawl webs was reported to have actually created major damage to the economy of anglers, particularly those relying on shore-based procedures for their resources. He ended that improvement in the typical equipment would aid the fishermen to get rid of the operational problems [14].

Marie Christine in her write-up "The French Market for Exotic Finfish" presumed that 'Processing the ideal item according to the worldwide top-quality requirements and adopting the right advertising

strategy will attract larger usage of the product among the consumers. Additional to be successful on the international sector, especially European nations, fish and shellfish products needed to be secure, hassle-free, attractive and profitable. Besides Euro nations, Indian fish and shellfish have to pass through right into non-Euro countries [15].

Significant progression in the development of fisheries of a nation is the outcome of synergy for technocrats, researchers, farmers and anglers. The contributing element behind is however the input of a band of determined technocrats with the capability to create a selection of tasks to increase fish manufacturing and also update its use culminating in its domestic and export marketing.

K. Devadasan and also R. Venkatraman in their article on "Fish dish" specified that fish dish is an important animal feed abundant in conveniently absorbable protein and minerals made from blended selections of low-cost fishes which can be incorporated in suitable proportions in pet feeds to enhance their nutritious value [16].

Jinadatharaya and V. S. Vernekar in their post, "Modern method for salt curing" absolutely mentioned that 'Fish is a subject to spoiling product as well as thus from the moment it is reached the time it is consumed, it needs to be protected as well as refined correctly for keep it wholesome [17].

Fisheries Research Institute, Malaysia, in its publication, Naga, categorically divulged that 'Changes in the populace of marine fishes have triggered scientists to analyse as well as access their stocks [18].

Ghafforunisa (2001) in his article "Fish and also Fish Oil for Nutritional Security" specified that 'Fish is the least expensive source of high-quality healthy protein. Fish has quickly absorbable healthy protein containing all the vital amino acids in a well-balanced state. The regarded health benefits of consuming fish have actually activated a general shift in demand from meat to fish rather on a global basis. The scenario has very little variation in the Indian context additionally [19].

Gopakumar (2000) in his article on "Fishery Research in India" visualized that 'To feed the population, even at the present level of fish consumption of 4 kg per person, assuming 56 per cent of Indians are fish eaters, it is estimated that the country will have to produce at least 0.2 million tonnes of fish per annum [20].

Shama Sundar (2001) in his write-up on "Fish Handling" employed that 'It has actually been approximated that on an international basis around 27 per cent of the collected fish are being thrown out as substandard due to top quality consideration. A substantial quality of reduced-worth fish is being tossed out right into the sea by numerous deep-sea trawlers. In India likewise, large amounts of beneficial protein food are thrown

away as waste or refined into fishmeal or even converted into manure. Any type of lapse in proper handling, handling, storage and circulation system can likewise lead to high-quality degeneration and also ensuing waste. Fish ends up being ruined as a result of which different physical, chemical and various other post-mortem changes take place in them [21].

D. M. Bartley and also R. S. V. Puttin (1999) in their study on "Towards Policies for Aquatic Resources" unleashed that 'Water sources have substantial potential to boost resources of low-income teams and at the same time fulfil the requirements of dietary security. It is a market that has actually expanded extremely swiftly in regard to production and payment [22].

Julie Bordages, Department of Fisheries, Canada, stressed that 'An analysis of the expense to consumers and also the price of healthy protein for different foods exposes that, usually fish compares positively to many of them. Increased usage of fish offers several health and wellness advantages. "It is as a result a wise food option to which consumers must become better accustomed" [23].

The previous research studies made it possible for the researchers to formulate their research in the here-and-now kind. It is hoped that the research will be an important contribution to the existing body of knowledge. None of the above studies has actually been especially associated with the issues of the Marine exporter's problems in Andhra Pradesh. The here-and-now research completes this void by presenting comparative research on the issues of the merchants of Vishakhapatnam as well as Bhimavaram etc. in Andhra Pradesh.

4. Research Gap

The seafood export industry is one of the thriving sectors in India that added Rs. 9245.30 crores in the year 2020-21 as against Rs. 7646.66 crores in 2019-20 registering a development rate of 9.01 per cent. Its payment in the GDP of India is 1.4 per cent. Though the contribution of the industry is incredible, still it has its own problems as well as hurdles. The researchers have made an extensive analysis of the problems encountered by the exporting devices that are enumerated under:

1. Infrastructural Problems.
2. Operational problems.
3. Export Problems.
4. General Problems.

The considerations and the findings arrived through the circulation of the meeting schedules amongst the exporting systems were statistically evaluated and completely interpreted. The researchers have actually made an earnest attempt to locate remedies to the above problems in this study.

Research Questions

1. Does a relationship exist among the variables?
2. Are they the most significant factors?
5. Objectives of the Study
 - 1) To find out the problems faced by marine product exporters.
 - 2) To identify the most significant factors.

6. Research Hypotheses

H0: There is no relationship exists among variables.

H1: There is a relationship exists among variables.

H0: The hypothesized structure fits the data well.

H1: The hypothesized structure does not fit the data well.

7. Methodology of the Study

In this study, the data has been collected from primary sources from exporters and employees who were working under MPEDA. The data has



Figure 1
Conceptual Research Model

been collected through a questionnaire. For this study, the statistics such as Exploratory Factor Analysis(EFA) and Confirmatory Factor Analysis (CFA) have been used to find out the relationship among variables as well as the most influencing factors as shown in Figure 1.

8. Data Analysis

8.1 Exploratory Factor Analysis

Table 1
Consolidated Factor Matrix

Rotated Component Matrix^a				
Variables	Component			
	1	2	3	4
OPP2	.804			
OPP3	.794			
OPP4	.782			
OPP1	.710			
OPP5	.676			
EPP1		.828		
EPP2		.777		
EPP4		.758		
EPP3		.690		
GP2			.775	
GP1			.734	
GP3			.550	
INP3				.853
INP2				.727
INP4				.579
Eigenvalue	4.763	1.813	1.492	1.127
Variance%	31.752	12.087	9.949	7.515
Cumulative percentage of variance explained	31.752	43.84	53.789	61.304
Cronbach's alpha	0.85	0.798	0.615	.603
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 5 iterations.				

Source: Primary Data

8.2 Confirmatory Factor Analysis

Chi-Square = 231.784, DF = 84, $p = .000$

Standardized Estimates

GFI = .905 AGFI = .864 IFI = .893 NFI = .842

CFI = .892 RMSEA = .79

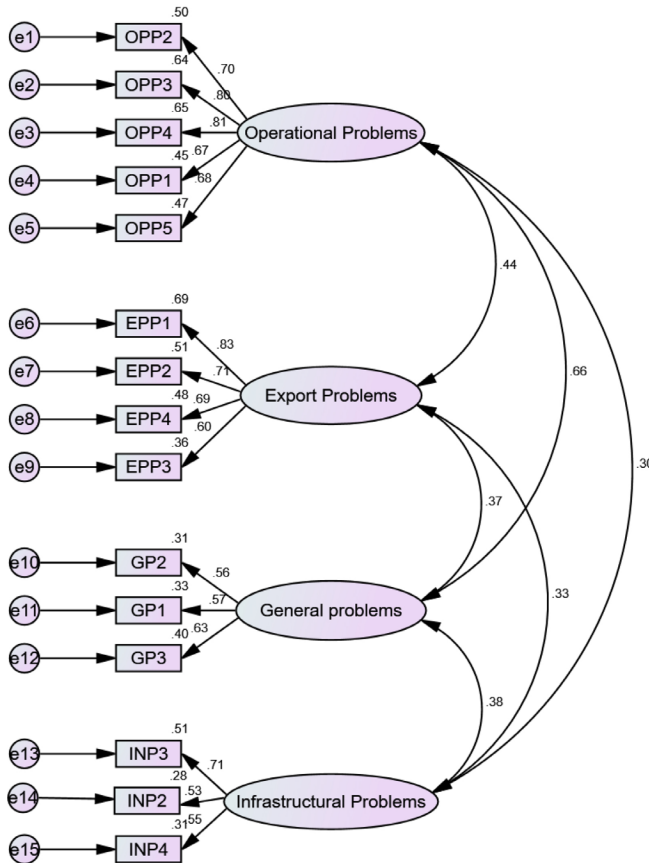


Figure 2

Measurement model (Completely Standardized Solution)

Figure 2 infers that it is important to emphasize that in the confirmatory analysis the same multi-factorial structure of 15 items distributed among 4 constructs, in agreement with the reviewed literature and exploratory validation, Measurement Model of problems faced by exporters and employees (Completely Standardized Solution). However, the model fit

indices were close to the cut-off points suggested by Hu and Bentler (1999). The measurement model obtained using AMOS exhibited satisfactory fit statistics (Chi-squared = 231.784, df = 84, CMIN/df = 2.759, GFI = .905, AGFI = .864, IFI = .893, NFI = .842, CFI = .892, RMSEA = .079). While an ideal RMSEA score is .05 or less, a value of about .08 or below indicates a reasonable error of approximation and is therefore satisfactory (Bollen and Long 1993).

9. Findings of the Study

This research talks about the fads of aquatic items export with unique reference to the troubles encountered by the aquatic items processing and also exporting systems and also efforts to position in the best views the future leads as well as the advancement of the market.

The method of this research was both detailed as well as analytical. The researchers have actually used both primary and secondary information for the research. For accumulating the data, the researchers made use of an interview set up and guide interviews were performed for 6 months from September 2020 to March 2021. The needed secondary information has been accumulated from the sources of the authorities' documents of the Department of Fisheries, the Central Marine Fisheries Research Institute, the Fisheries College and Study Institute, and the Marine Products Export Development Authority (MPEDA) in Cochin as well as Thoothukudi, the Fish and Shellfish Exporters Organization of India and it accumulated info likewise from the leading fishery publications, journals, regulars and sites. The summary of findings, problems and also tips for the improvement of the fishery market and also its export turnover of Marine Item Exporting Systems exist in this phase.

Managerial Implications

The fisheries sector of India is a substantial gold mine, indeed, a gift of nature. It has given ended up being an emerging industry that provides employment to about 10 million people staying in 3,651 towns along the 8,129 km shoreline of India. Because of its prevalent geographical circulation, it indirectly advertises fair circulation of resources normally. Besides being a vital component in the food web of about 500 million humans, it supplies straw for livestock to the tune of 5.4 million tonnes. However, there are countless and also difficult obstacles on the way. Our immediate task is to assess all these powerful difficulties and work out a

new system and also construct a new sectoral order to achieve sustainable fisheries advancement. In fact, financial investment and also cutting-edge entrepreneurial drive, inter alia, are the devices required to develop this freeway.

The markets in developed nations are the unenviable silver line available to the Indian fish and shellfish industry. With the development of marine export handling industries and also the fantastic increase in varied production capacities accompanied by appropriate sophisticated technological proficiency, the export field of India's aquatic items has, in the course of the past few decades, become one of the most vivid fields in our foreign trade, accounting for more than 4 per cent of our total export profits.

Our fisheries, without a doubt, transform our water bodies into mines of the ever-shining yellow metal. For over a year, our handling devices have actually ended up being important. Exporting centres off frozen shrimps to the US processing devices. Only just recently Individually Qualified Foods (IQF) in the ready-to-eat forms are being transferred, value-added by Indian systems to their own abroad import systems to circumvent repayment of import tasks at the abroad end. Because the importers are involved by the Indian exporters, market research is being quickly made and all the major markets are determined.

10. Conclusion

Indian fishery profession is still mainly shrimp oriented and the by-catches and reduced-value fish are mainly wasted. Approximately 30 per cent of the total amount of landings are by-catches and low-value fishes. At the very least 25 per cent of this i.e., 4 to 5 lakh tonnes each year, can be conveniently converted into an attractive value-added item with excellent export possibility.

The fisheries resources of India are large and varied giving a large variety of chances for lasting food production. The cold waters in the greater altitudes of the Himalayan vary to warm waters in the coastal locations, these sources supply enough chances to optimize fish manufacturing via liable capture fisheries as well as farming methods.

A nation like India with its rich and also different tank farming potential remaining practically unused hold a great pledge for diversification and growth. The growth of aquaculture must be led on the basis of ecological influence evaluations and research to bring the ability of the regional settings by embracing environmentally suitable cultural

practices such as Integrated Farming, Sea Farming and so on would certainly be preferable.

Be it society, tradition, background or nature, India always tops the checklist for its richness, wealth and also selection and also the exact same opts for its quality-rich fish and shellfish. India is the location for it all, selection and preference, complying with top quality.

Ever before on the mission to better itself, the Indian Fish and shellfish Industry stands on par with the worldwide seafood sector, if not one action in advance. It can today boast of cutting-edge innovation and infrastructure, making sure quality is of the highest degree in every stage of fishing, pre-processing, handling and also packaging.

In spite of a number of odds, the field kept its development prices over the years through diversity, adjustment, innovation and also value-addition in different phases of fisheries consisting of angling, tank farming, harvesting, handling, processing, product development and marketing. India offers scrumptious specials like damaged as well as breaded shrimp, as well as breaded fish fillet, breaded squid rings, and stuffed crab.

11. Scope for Further Research Study

There is much range for more research studies in the following areas:

1. Research can additionally be launched on the use of 'by-catch' products such as pet catfish, snappers, eels, pomfrets and mackerel that have their own rewarding markets.
2. A parametric research on production price and market price inter relationship ought to be undertaken in order to examine the impact of international rates on the production price of the catch.

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