PROBLEMS AND PROSPECTS OF SEAFOOD EXPORTERS IN ERNAKULAM DISTRICT, KERALA.

by

Hari Prakash A (2015-31-010)

MAJOR PROJECT REPORT

Submitted in partial fulfillment of the requirement for the post graduate degree of

MBA IN AGRIBUSINESS MANAGEMENT

Faculty of agriculture

COLEGE OF CO-OPERATION BANKING AND MANAGEMENT

VELLANIKKARA, THRISSUR- 680656

KERALA, INDIA.

2017

DECLARATION

DECLARATION

I, hereby declare that this project report entitled **"PROBLEMS AND PROSPECTS OF SEAFOOD EXPORTERS IN ERNAKULAM DISTRICT, KERALA"** is a bonafide record of research work done by me during the course of project work and that it has not previously formed the basis for the award for me for any degree/diploma, associateship, fellowship or other similar title of any other University or society.

30.10.2017
Vellanikkara

HARI PRAKASH A
(2015-31-010)

CERTIFICATE

CERTIFICATE

Certified that this project report entitled **"Problems and Prospects of Seafood exporters in Ernakulam district, Kerala"** is a record of project work done independently by Mr.Hari Prakash A under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship or other similar title to them.

Dr. G S Arularasan
Associate Professor (Agricultural Extension)
Communication Centre
Kerala Agricultural University
Mannuthy, Thrissur.

Vellanikkara

30-10-2017

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

Words cannot express my profound gratitude to Dr. G S Arularasan, Associate Professor, Department of Agricultural Extension, Kerala Agricultural University, my distinguished supervising guide, for his sincere and dynamic guidance, faithful discussions, ever willing and constant encouragement during my research work.

I remember with much respect and gratitude, the good advices and help from our Director Dr. E.G. Ranjit Kumar.

I take this opportunity to thank our Associate Dean Dr. P Shaheena, for all the help rendered by her during my project.

I thank all the teachers of College of Co-operation, Banking and Management, for giving me necessary suggestions. I am also thankful to all the library staffs, especially to the beloved Librarian of College of Co-operation, Banking and Management **Mr. Sathian K P,** for all the help rendered during the study.

I take this opportunity to thank my family, friends including classmates, seniors and juniors for their unforgettable affection and support extended to me.

I take this opportunity to thank Mr. Prabhakaran, librarian of MPEDA for his good advices and support.

Above all, I bow my head before the almighty without whose invisible hands above my head i am nothing at all.

HARI PRAKASH A

CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES

LIST OF ABBREVIATIONS

LIST OF ABBREVIATIONS

1. CCRF – Code of Conduct for Responsible Fisheries
2. EU – European Union
3. GAP – Good Aquaculture Practise
4. HACCP – Hazard Analysis and Critical Control Point
5. MPEDA – Marine Products Exports Development Authority of India
6. MMT- Million Metric Tonnes
7. RCMC – Registration-Cum-Membership Certificate
8. SEAI – Seafood Exporters Association 0f India
9. USA – United States of America
10. UNCTAD – United Nations Conference on Trade and Development
11. WTO- World Trade Organisation

DESIGN OF THE STUDY

Chapter 1

Design of the Study

1.1 Introduction

In India, the marine fishing industry occupies an important place in the organized sector. As a source of food, fisheries stand almost at par with agriculture and animal husbandry. Fisheries have a large potential to fulfil the basic objectives of production-cum-employment as envisaged in the development plans of India. Fisheries provide employment to millions of people directly and indirectly. In a direct way it provides employment through the allied activities like net making, boat carving, fish processing, fish transportation, ice and salt making and the like.

Marine environment in India has a great potential with a vast coastline of 7500 km, which is the 6th largest in the world (Source: MPEDA Annual Report, 2016). The fishing ground available is two million square kilometres, yielding an annual fish catch of over four million tonnes. It is estimated that marine products export will be one of the top five foreign exchange earners for the country. India is one among the seven largest fish producing countries in the world. Indian marine fishing sector plays a significant role in the economy of the country through employment generation, foreign exchange earnings and above all by providing cheap protein-rich food for the people.

The fishing industry is one of the oldest industries in India and it has a great scope for rapid improvement in the future. But in many parts of India, the fishing industry is still in the primitive stage. The changes which take place in the methods of fishing and in the handling of fish are not modern enough to cope up with the increased need for fish in India and abroad.

Despite the earnest efforts made by the central and state governments to improve the condition of the fishing industry, the progress made is not very impressive when compared with the progress achieved by other countries like Japan, Chile, Russia, China, the United States of America, Canada, the United Kingdom and Norway.

The total annual catch of fish in India is over two and quarter Million Metric Tonnes (MMT). This is not a very impressive figure when compared to the total annual world catch of over 50 Million Metric Tonnes. Still India holds the seventh rank among the fishing nations of the world. Fisheries and seafood exports have a long history in India and form an integral part of the country's coastal economy. The historical development of India's seafood exports can be divided into two phases. In the first phase before 1986, the Indian seafood exports were totally based on the supplies from the marine resources only. It had become necessary to go in for deep sea fishing but the country had neither the experience nor the infrastructure for the task at the time.

Nearly seventy per cent of the sea food comes from Asia where India today is one of the biggest seafood suppliers (after China and Thailand) with a quantity of nearly 4,60,000 tonnes. India's seafood export is worth US $ 1.3 billion (Rs. 6,900 crores) and it contributes to 2.6 per cent of total export earnings (Source: MPEDA Annual Report, 2016). Termed as blue revolution, the aqua culture industry developed very rapidly in India and the state of Andhra Pradesh became the hub for all aquaculture activities as brackish waters in the deltas of rivers Godavari and Krishna were found to be more congenial for the purpose.

During early and mid-1990, more than 100 new export units were started and a majority of them were partnership firms in the country. They were fully integrated in nature with large investments. Today India has more than 350 registered seafood exporters and the industry has sizable infusion of capital, public offers, institutional funds, besides the monetary support from the governments in the form of capital subsidies for installation of process plants and equipments.

India holds a good potential on agricultural sector. Agriculture shall be classified into two types; the first type is land based agriculture and the other is water based agriculture. The water based economic resources shall be broadly classified into two categories such as fresh water fisheries and marine fisheries.

The demand for the marine products in the world market is high. Fishery is one of the important sectors to generate employment opportunity to millions of coastal populations and help the people below poverty. India's fishery production

has reached 6.57 Million Metric Tonnes. India is the 3rd largest fish producing country and 17th seafood exporting country in the world.

India has a long coast line of 8,129 km, two million sq. km of Exclusive Economic Zone (EEZ) and 1.2 million ha of brackish water bodies, which offers vast potential for development of fisheries. Out of the estimated fishery potential of 3.93 million tonnes from marine sector, only 3.3 million tonnes are tapped and remaining 0.6 million tonnes remain untapped.

Indian marine fishing activities are engaged in 7 States and 3 Union Territories namely Kerala, Maharashtra, Tamil Nadu, Gujarat, West Bengal, Karnataka, Odisha, Andhra Pradesh, Goa, Pondicherry, Lakshadweep and Andaman & Nicobar Islands respectively. The estimated India's marine fisher folk population is 30.57 lakhs and they are living in around 3,305 marine fishing villages. 9 lakh people are involved directly in fishing activities and 7.6 lakh people are involved in other fisheries-related activities. Fishing efforts are largely confined to the inshore waters through artisanal, traditional, mechanised sectors. 90 per cent of the marine products yield within a depth range of 50 to 70 meters and remaining 10 per cent of yield extend to the depth of upto 200 meters. 93 per cent of marine production is contributed by artisanal, mechanised and motorised sector and the remaining 7 per cent by deep sea fishing.

1.1.1 Indian Marine Export

India has started marine product export through exporting dried items like dried fish and dried shrimp. In 1953, the frozen shrimp was exported and it helped to overcome the value of dried items from 1961. In 1966, the Government of India has devaluated the Indian currency and it resulted a rise on the export value of frozen and canned items in value. Neighbouring countries were the traditional buyers to Indian seafood and it was steadily changed to developed countries markets. The high demand of seafood in developed countries helped India to expand market rapidly.

The markets for Indian marine dried products are Sri Lanka, Myanmar (formerly Burma), Singapore, etc. The development of technology/modernization paved the way for canned and frozen items and it resulted in Indian marine product market shift from neighbouring countries to developed countries like Japan, USA, Europe, Australia, etc. Indian marine export policies and subsidies boosted seafood processing units in number with modern machinery for freezing and production of value added products. The present technology and modernization units are not enough to utilize the full marine potential.

USA was the prime buyer for Indian frozen shrimp till 1977 and was overtaken by Japan, followed by the West European countries. Japan retained its position till 2002 through importing about 31 per cent on value of total marine products exports. During 2002-04, USA once again became the principle buyer and from 2004-06 European Union was the largest Indian marine products importer. In 2014-15, Indian marine products export has reached Rs. 12901.47 crores. European Union (EU) has continued as largest importer by 26.78 per cent share. China maintained the second place with a share of 16.43 per cent followed by USA, Japan, Middle East and other countries by 15.35 per cent, 13.06 per cent, 5.19 cent and 7.79 per cent respectively. Exports to countries like Libya, Reunion Islands, Australia, Puertorico, Dominican Republic, Kenya, Tanzania, Ukraine, Brazil etc. had shown positive growth (Source: MPEDA Annual Report, 2016).

Expert committee had studied the Indian deep sector and recommended to diversify the existing fishing vessels into resource specific vessels such as long lining for tuna, jigging for squid etc. To execute their recommendation, India has introduced progressive conservation policy. The main objective of this policy was to support tuna fish export with high quality and reach the top position in world sashimi (Japanese dish consisting of very thin bite-size slices of fresh raw fish) market.

India's seafood exports stood at 2,51,735 Metric Tonnes (MT), valued at Rs. 9,066.06 crores (US $1.42 billion) in the first quarter of the current fiscal, according to the Marine Products Exports Development Authority (MPEDA). During the same period in the last fiscal it stood at 2,01,223 MT, worth $1.17 billion. USA and Southeast Asia retained their position as the major importers of India's seafood,

followed by the European Union (EU) and Japan, while the demand from China saw a healthy surge during the period. Frozen shrimp continued to be the top export item of the marine products basket, accounting for a share of 50.66 per cent in quantity and 74.90 per cent of the total earnings in dollar terms. Shrimp exports increased by 20.87 per cent in terms of quantity and 21.64 per cent in dollar terms. Frozen squid was the second largest export item, accounting for 7.82 per cent in quantity and 5.81 per cent in dollar earnings, registering a growth of 40.25 per cent in terms of dollar value. Besides frozen shrimp and frozen squid, India's other major seafood product was frozen fish, which recorded a growth of 24.96 per cent, 17.55 per cent and 21.75 per cent in terms of quantity, rupee value and dollar earnings, respectively.

"Healthy harvests of shrimp, drastic reduction in the rejection rate by the EU countries, sustained measures to ensure quality and improved infrastructure facilities for production of value added products were chiefly responsible for India's surge in seafood exports," said A. Jayathilak, Chairman, MPEDA. "What is satisfying is that growth in exports was achieved in the face of continued uncertainties in the global seafood trade," added the chairman. USA imported 54,344 MT of Indian seafood worth $499.28 million, accounting for a share of 35.05 per cent in dollar terms. Southeast Asia continued to be the second largest destination of India's marine products, with a share of 31.26 per cent in dollar terms, followed by the EU (14.70 per cent), Japan (6.68 per cent), the Middle East (3.47 per cent), China (3.06 per cent) and other countries (5.79 per cent). The EU continued to be the third largest destination for Indian marine products with a share of 15.23 per cent in quantity. Japan was the fourth largest destination for Indian seafood, accounting for 6.68 per cent in earnings and 7.26 per cent in quantity terms.

1.2 Statement of the problem

The marine food industry faces numerous problems. A study on the problems being faced by the seafood exporters in Ernakulam district of Kerala state has been attempted in this research project.

India is rich in raw material resources and the exports are in priority for supports from the Government. So far, no significant study had been made linking the entire marine operations with the practical problems and the ground realities of

the trade. Marine food industry is one among the industries which fetches substantial foreign exchange to our country. A study relating to export of marine food, its procedures and the problems normally faced, has been attempted in this research study. It was also found that there has been no individual or collective clear-cut strategy in marketing and export of seafood products.

Researches in fisheries have not drawn the attention of many social scientists and even today it remains one of the least explored areas. The fishery scientists and institutions like Central Marine Fisheries Research Institute (CMFRI) at Cochin are mostly concerned with the biological aspects of marine life only. Marketing plan has an important role to play in any business activity. Fish, being a perishable commodity, has a unique pattern of distribution. Earlier, fish marketing meant the buying and selling of fish at the landing centres or nearby areas. On the other hand, an efficient fish marketing system and export procedures and problems developed on modern lines would bring rapid quality betterment in the functions of production of fish and consumption needs of the society. Organization of modern marketing will ensure better quality of fish, proper grading, weighing and fair competition in pricing.

Exporting of fish has many unique problems like uncertainties of production, high perishability, assembling in many demand patterns, wide fluctuations in price and transportation in specialized vehicles. All these create great difficulty in exporting. Among other things, a well-developed marketing system and simple practice of exporting is essential for the better development of marine industry. This study aims to go into the various aspects of the problems and prospects of sea food exports in Ernakulam.

Therefore, it becomes necessary to undertake such a study on the topic problems and prospects of seafood exporters in Ernakulam to provide possible and essential perspective within which the Indian seafood export industry particularly in Ernakulam District can set out its strategy for the effective functioning in future.

1.3 Objectives of the Project

The following objectives have been set for the study.

1. To study the present status of seafood exporting companies
2. To identify the challenges, constraints and opportunities available in seafood exporting companies
3. To study the services provided by MPEDA and other agencies for sea food exporting companies
4. To provide suggestions to seafood exporting companies and MPEDA for their betterment

1.4 Methodology

1.4.1 The research design

This study was mainly based on primary data that was to be collected from the seafood exporters in Ernakulam district. The present study is intended to assess the problems and prospects of seafood exports in Ernakulam district. There are 88 seafood exporters in Ernakulam district (Source: MPEDA, Annual Report, 2016); and the total population of 88 seafood exporters were selected for this study and the data required for this study were collected from these exporters using the structured interview schedule.

1.4.2 Data sources

To achieve the stated objectives, the data were collected using both primary and secondary data.

1.4.2.1 Primary data

Primary data were collected directly from all the 88 seafood exporters, using semi structured interview schedule and informal discussion with the respondents.

1.4.2.2 Secondary data

Here the secondary data were collected from the sources like MPEDA, Seafood Exporters Association of India (SEAI), Internet sites, journals and annual reports.

1.4.3 Data Analysis Technique

For the purpose of data analysis appropriate statistical tools like percentage analysis was used.

1.5 Scope of the study

This study will help the seafood exporters to identify their strengths, weakness, opportunities and threats within and outside their company thereby they can perform better in the future. Also this project studies about the positives and negatives of the various agencies like MPEDA, SEAI etc., that supports seafood exporting in India. From the findings of this study, the negatives can be reduced and the seafood exports can be increased which can benefit the exporters and the economy of the country could also be improved.

1.6 Limitations

The study has been limited to Ernakulum district only and therefore the inference made in the study is based on the situations and opinions of the exporters of this particular area. It should not be generalised till the same is validated by conducting the study with the large sample.

1.7 Organisation of the project

The study has been designed into the following chapters:

CHAPTER-1

The first chapter deals with Introduction, Statement of the problem, Objectives, Methodology, Scope of the study and Limitations.

CHAPTER-2

This chapter deals with the Review of Literature related to Indian seafood exports and the studies that have been carried out with reference to MPEDA.

CHAPTER-3

This chapter gives a profile of Marine Products Export Development Authority of India.

CHAPTER-4

This chapter deals with the data analysis and interpretation.

CHAPTER-5

This chapter deals with the summary of findings, suggestions and conclusion.

REVIEW OF LITERATURE

Chapter 2

Review of Literature

2.1 Introduction

A review of existing studies undertaken by both individuals and institutions is found highly useful in designing the present study. A brief account of some of the relevant studies made previously is given below.

2.2 Theoretical literature review of the study

Durairaj (1981) concluded that mechanised boat was the best to have more fish catch. Only 57 per cent of the price paid by the consumer had gone to the fishermen and the middlemen had provided 60 per cent of credit requirements of fishermen at an exorbitant rate of interest, which varied between 36 and 60 per cent. The study suggested that the money lending practices in fishing villages should be regulated immediately.

Hari (1997) found that the fishermen's lack of control over the marketing of their fish was one of the important reasons for their low income. The market power of the fishermen was determined by the composition of the buyers on the beach that is the point of first sale. Other things remain the same. More the number of small buyers, the greater is the market power of fishermen, which in turn, would lead to fair price for the catches and a situation wherein only a few large buyers at the first point sale would be inimical to the interest of fishermen. The report also stated that 70 per cent of coastal villages in Kerala had large number of small buyers.

Kaushal (1997) observed that the quality consciousness was a must for more exports from India. The study dealt with quality problem because, Indian marine consignments to each of the major importers have been returned. The study stated that decline in fish landings was also the reason for fall in exports. Moreover, efforts to export value added products and developing new markets could also help Indian seafood exports.

Joseph and Srinivasan (2002) focussed on fisheries development in Tamil Nadu. The study dealt with the average annual growth rate of fisheries, demand and

supply. They stated that the state has gained significantly from the export of marine products. The long-term growth rate for the state has been higher than all-India linear growth rate for the period 1970-2000 both in terms of quantity and value. Further, the study found that the growth rate in the state during the last decade in terms of quantity has been far below the growth rate of all-India fish export. The study observed that average growth rate of marine products export from the state, in terms of quantity during the second half of the last decade had been better compared to the first half. However, the study argued that export growth in Tamil Nadu has declined in terms of quantity and infrastructure facilities and other intermediaries were inadequate for the development of fisheries sector in Tamil Nadu.

Devadasan (2003) revealed that most of the market channels currently used were not suitable to trade value added products and a new appropriate channel would be the super market chain, which would want to procure directly from the source of supply. Packaging must also keep abreast with the latest technology.

Guledgudda et. al., (2003) observed that the growth rate of fish exports in terms of quantity (10.89 percent) was positively significant due to increase in the quantity of fishery products exports. Fishery sector exports had made rapid strides in the period from1960-61 to 2001-02.

Perumal (2003) pointed out that the export of marine products from Tamil Nadu was nearly 10 per cent (1998-99). The marine fish and fish products export trend increased at the increasing rate and suggested that the government could construct some more major fishing harbours (at present only three major harbours at Chennai, Tuticorin and Chinna- muttom) so that more mechanized trawlers could be operated in Tamil Nadu.

Praduman and Anil (2003) focused on the cost of compliance with the food safety standards, export competitiveness of fish and fishery products, economic impact of food safety measures. The study revealed that the compliance with food safety measures was a costly proposition for the developing countries and also affected the export competitiveness adversely.

Ramachandra Bhatt (2003) mentioned that an important reason for the decline in marine exports came through sanitary and phyto-sanitary sanctions. However, the study argued that the export oriented production of high value commodities such as shrimp would lead to increased foreign exchange that will "trickle down" to benefit the poor and create more jobs.

Anjani Kumar (2004) studied some of the issues like temporal changes in the composition of exports, magnitude of growth in exports of fishery products and determinants of fisheries export, comparative advantage of fishery products in the international market and recent trade policy reforms in fisheries sector and their potential implications. He stated that the export of fish and fish products have performed well and liberalization policies too seem to have augmented their growth. To give exports a further boost, various sanitary and phyto-sanitary measures should be taken up vigorously to ensure international hygiene standards for Indian fisheries products. The study pointed out that fisheries development had both positive and negative impacts on the livelihood of poor people in developing countries like India.

Ayyappan and Krishnan (2004) revealed that the role of the fisheries sector need to be highlighted in order to build awareness among the population to enhance increased participation and create social cohesiveness for the development of the sector.

Pagire et. al. (2004) observed that annual fish production during post-liberalization period was a bit higher than pre-liberalization period. Market strategies should be developed to increase the various kinds of marine fisheries export. Moreover, product diversification and value addition to Indian marine products along with adoption of proper marketing strategies and co-coordinated efforts of the marine products exporters would increase the export opportunities.

Sarad et. al. (2004) revealed that, to make use of Japan and U.S.A markets' vast potential, Indian seafood items should be priced competitively and the quality should be kept superior compared to fish and fish products export competing countries.

Shyam, et. al. (2004) stated that there has been dynamism in export in commodities as well as markets from the traditional one commodity (shrimp) - one country (Japan) framework.

Shyam et. al. (2004) concluded that there was good scope for better performance of Indian fisheries export with respect to the world fisheries export in the context of WTO.

Umamaheswari et. al. (2004) observed that the fisheries production increased six-fold from 0.75 million tonnes in 1950-51 to 5.66 million tonnes in 2000-01 and marine fishery production grew by 8 per cent per annum on an average between 1980-81 to 2001-2002 but remained stagnant in the post – WTO period. The study also highlighted the efforts needed to be made for diversification and quality control of products for the export market.

Abijith Das (2005) stressed that UNCTAD and Government of India accept MPEDA and SEAI to carry out the activities such as building networks of existing trade related institutions which are capable of providing essential support services to exporter's trade policy information, commercial intelligence, export promotion, marketing, product development, establishing an effectively functioning trade portal and formation of virtual sector network for facilitating interventions across the entire value chain.

Elias (2005) found that the growth of captured fisheries was slow at an average rate of 2.23 per cent per annum compared to culture fisheries which was 8.13 per cent during the period 1989-2004. Analysis of the marine fishery of the country revealed that the catch from the sea was stagnated around 2.5 million tonnes whereas the world production was recorded at 85 million tonnes. About 65 per cent of the catch was by mechanized vessels whereas the traditional crafts accounted for only about 34 per cent. The deep sea fishing vessels accounted for only about 1 per cent of the total catch. About the infrastructure facilities, he stated that the country

had six major fishing harbours, 41 minor fishing harbours, 138 landing centres. Out of the 402 fish processing units complying HACCP requirements, about 150 units were approved for export to EU countries.

Ramachandra Bhatt (2005) examined the changing structure of marine exports and analysed cost implication conforming EU regulations for the Indian Exporters. The study expressed their concern about the variety of issues currently faced by the seafood sector. The escalating price of fuel as well and the operating cost for a matter of concern, the study suggested that the Government should waive levy of Sales Tax/VAT on fuel used for fishing purpose.

Venkatesan (2005) observed details of various agreements of the WTO that were relevant to fishery trade, the implementation of the agreement by principal nations and its impact on the international trade, the role played by the WTO in removing the barriers etc.

Venugopal (2005) observed that Tuna fishing was not economically viable as the hooking rate was very low. The study pointed out that a system should be developed where by the smaller tuna fishing vessels could transfer their catches to a mother vessel stationed at mid sea and these small vessels could go for further fishing which would help in reduction of fuel cost.

Mini and Ramachandran (2007) identified that the constraints faced by the Indian ornamental fish exporters. The constraints were put forward as high freight charges, need for free imports of new varieties, lack of international flights, non-availability of quality breeding stock of exotic fishes, lack of professional training in breeding and seed production, lack of training in handling and packing, poor marketing strategies, restriction on the marketing of marine fishes and invertebrates and lack of incentives. To enhance ornamental fish exports from India, the prime requisite is to analyse the order in which these constraints were considered to be severe by the marketers. Unlike the exporters of the metropolitan cities, the main constraints faced by the indigenous ornamental fish marketers of Kerala were lack of flight facilities, high cargo rates, difficulty in filling consignments and lack of information.

Nikita (2007) reported that the export of finfish from India had been rising over the years, having touched 1.86 lakh tonnes in 2005, which accounted for 37 per cent of the total seafood export. In value terms, however, its contribution was only 16 per cent. The unit value realisation for finfish exports, excluding ribbonfish, was US $ 1.92 per kg in 2005, which was not significantly different from what was realized in 1991 at US $ 1.56 per kg, an increase of 23 per cent in 15 years. This unit value realisation of finfish was low in comparison with the domestic prices.

Shyam and Salim (2008) observed that the trade liberalization initiated during 1991 had resulted in improvement in the Indian shrimp export. Recently there was erosion in the competitiveness of Indian shrimp trade. Nevertheless, there were issues of concern due to the competitiveness, instability and rejection on quality grounds.

Sathiadhas (2007) suggested that the gross earnings from marine fisheries at first sales in India recorded an increase of 48 per cent between 1995 (Rs.7409 crores) and 2005 (Rs.11, 007crores). The fishing industry in India was still depending on the export markets as 50 per cent of the gross earnings at landing centre level was contributed by exportable varieties like crustaceans and cephalopods which hardly constituted about 20 per cent of the total landings. The average landings centre price of different varieties ranged from Rs.11 per kg for silver bellies to Rs.596 per kg for lobsters in 2005. Although the share of producers increased over the years for high quality fishes, there was also enormous scope to enhance the marketing efficiency of low quality fishes such as silver bellies and lizardfish in the internal markets.

Geethalakshmi et. al. (2009) stated that export trade of seafood started way back in 1953 with the first shipment of frozen shrimp to USA by M/s. Cochin Company from the port of Cochin. Frozen shrimp has since then been the major revenue generator among seafood exports from India. Its share in 2005-2006 has been 59 per cent in terms of value of total seafood export, India having exported 145,180 tonnes of shrimp out of a total of 512, 164 tonnes of seafood exports. The Indian marine product exports were driven primarily by the Japan, US and European Union markets. Japan had been the leading importer of Indian frozen shrimp till 2001-2002. Then USA became the major market for Indian frozen shrimp to be replaced by EU during 2004-2005.

Ayyappan (2009) highlighted issues of open access fisheries in marine sector, deep sea fisheries, island fisheries, water management, organic aquaculture, customized cold chain, disaster management, climate change, food safety and quality assurance. The study pointed out new avenues in Mari culture, large scale cage culture, seed and leasing policy, bio secure system for producing disease-free seed. The study highlighted the strength and opportunities of the sector in coming years and emphasized the need for treating aquaculture at par with agriculture.

Kuruvila (2009) highlighted the need for increased cooperation between the processors and the other stake holders including fishermen. The concept of benefit sharing is essential to the sustainability of the sector. The fishermen should be given reasonable price for their catch. The study suggested that Indian exporters should now focus to overcome the problems caused by Antidumping Duty. The study also concluded that some of the domestic policy and legislative constraints needed to be immediately addressed. For instance, the Excise Duty for processed products remains at 8 per cent as against 0 per cent for agricultural products. The study concluded that India should be made a seafood processing hub in order to fully utilize the capacity.

Krishnaiah, (2009) measured the strategies for the development of the fisheries sector in India. The study highlighted the need for intensive aquaculture in ponds and tanks, reservoir fisheries development, coastal aquaculture, revival of shrimp culture & diversification, cold water fisheries, mission mode approach, intensive district development plans, resource mobilization, increased role of private sector, human resource development and need for policy interventions.

Leena (2009) stressed the need to augment quantity and quality of catch. She wanted sustained fishing as against intense fishing. The study highlighted the need to promote deep sea fishing and to combat decline in shrimp export due to disease and antibiotics residual problems. Subsidy provided by MPEDA should be availed by the state and central governments. The study emphasized on the need for stringent rule for hatcheries on introduction of exotics, bridging the gaps in legislation, enactment of the seed act as in agriculture. The traceability and eco-labelling from hatchery to final product were the new trade issues which required attention. The status of hygiene at the fishing harbours and landing centre should also be looked

into. Only 20 per cent capacity of cold storage was utilized and therefore there was a requirement for more emphasis on processing. The study also drew attention towards some other issues like traceability of trawlers and registration of the fishing vessels, popularization of ornamental fisheries as export commodity and inadequate insurance covers, Good Aquaculture Practices (GAP) to avoid rejection in the export market. The study emphasized the need to set up a system to take care of the issue of delay in the testing and retesting of the export commodity.

Syda Rao (2009) analysed that while marine fisheries have performed well, there is still a scope for better management in areas like fisheries prediction, re-visit CCRF to suit to changing local conditions, introduction of catch quotas, introduction of eco-labelling, introduction of Ecosystem Based Fisheries Management (EBFM), better Monitoring, Control and Surveillance (MCS) and Vessel Monitoring System (VMS). He further proposed interventions in terms of introduction of Total Allowable Catch (TAC), setting of Annual Catch Levels (ACL) for important resources for sustainability, implementation of mesh-size regulations to reduce the exploitation of juveniles, reduction of discards through targeted fishery, introduction of log sheets for mechanized vessels, encouragement of exploitation of oceanic stocks such as tunas, squids and pelagic sharks, by introducing high capacity vessels with storage and processing facility, conversion of existing trawlers to long-liners for the exploitation of oceanic resources and introduction of marketing chains through co-operative sector.

Venkatesan (2009) revealed that the Quality Control programmes and safety standards had caused significant interest to exports. Substantial investments were required for ensuring the international quality hygiene standards. The study informed that the product segregation based on traceability and eco-labelling are gaining momentum and that the Indian exporters should adopt these concepts as a marketing tool.

Anwar Hashim (2011) analysed the tsunami that wreaked havoc in Japan was set to rock the US $ 2-billion Indian seafood export industry. The North-Eastern city of Sendai in Japan, the epicentre of the quake and tsunami, was a bustling city full of seafood factories and processing units with which Indian exporters had direct links. While the seafood exports to Sendai would be immediately affected, he

pointed out that the impact on other export destinations such as Tokyo and Osaka has been on a far lower scale and trade with these destinations could revive faster.

Karna (2011) observed that Visakhapatnam was one of the major marine product export centres in the country, but of late it was registering negative growth and therefore the IIP had decided to hold the workshop to educate the exporters and others in the field on the need for proper packaging of marine products. The study highlighted on handling marine products, storage and logistical problems associated with marine products and also on the latest trends and technologies.

References

Abijith Das., (2005), MPEDA presented a paper on "Indian export on overview", The 3rd sector inception workshop of the UNCTAD-DFID Project on "Strategies and Preparedness for Trade and Globalisation in India" (Project) in the Fisheries Sector was organized in Visakhapatnam on 4thOctober 2005.

Anjani Kumar., (2004), Export Performance of Indian Fisheries strengths and challenges ahead, Report, MPEDA, Cochin, p 77.

Anwar Hashim., (2011), President of the Seafood Exporters Association of India, http://www.thehindubusinessline.com/todays-paper/tp-agri-biz-/article1541394.ec.

Ayyappan and Krishnan, (2004), Fisheries sector in India to dimensions of development, Project Report, Madurai Kamrajar University, p 85.

Ayyappan S., (2009), "An overview of Indian fisheries sector in the perspective of the Eleventh Five Year Plan" Proceedings of the National Conference of State Fisheries Ministers, Bhubaneswar, p 25.

Devadasan., (2002), Value Added fish and fisheries products, Project Report, Marine Fisheries College, Calcutta, p 82 and 83.

Durairaj., (1981), Study of marine Fisheries Industry in Thanjavur district, unpublished Ph.D. Thesis, Madurai Kamarajar University, Madurai, p 167.

Elias Sait., (2005), The 4th Inception workshop for the Project strategies and preparedness for trade and globalization in India with special reference to assessment of export capabilities of small fishermen was held at Chennai on 6th October, 2005.

Geethalakshmi, Nikita Gopal and Unnithan, (2009), "Shrimp Exports from India an Economic Analysis, India's Exports: Perspective and Sectoral Trends", p 126.

Guledgudda, Patil, Hiremath and Dodmani, (2003), Production and Export Performance and plan allocations: Review of fishery sector in India, Research Report, CIFT, Cochin, p 48.

Hari., (1997), Report of the Task Force on Livelihood Secure Fishing Communities, State Planning Board, Government of Kerala, Thiruvanathapuram, p.25,26 and 44.

Joseph Durai and Srinivasan, (2002), Analysis of fisheries development in Tamil Nadu, Retrieved from http://www.thehindubusinessline.com/2002/01/22/stories/20020122115.html.

Karna V.K., (2011), Deputy Director of the Indian Institute of Packaging Retrieved from http://www.thehindubusinessline.com/2011/01/22/stories/2011012251152100.htm

Kaushal., (1997), Quality consciousness must for more exports from India, Department of Economics, St.Mary's College, Tuticorin, p 25.

Krishnaiah P., (2009), "Strategies for the development of the fisheries sector in India" Proceedings of the National Conference of State Fisheries Ministers, Bhubaneswar.

Kuruvila Thomas., (2005), presented a paper on "Indian export on overview", The 3rd Sector Inception Workshop of the UNCTAD-DFID Project on "Strategies and Preparedness for Trade and Globalisation in India" (Project) in the Fisheries Sector was organized in Visakhapatnam on 4thOctober 2005.

Kuruvila Thomas., (2009), 'Strategies and Preparedness for Trade and Globalisation in India', The United Nations Conference on Trade and Development (UNCTAD)-Government of India- DFID, Project.

Leena Nair, (2009), "The need to augment quantity and quality of catch she wanted sustained fishing as against intense fishing" Proceedings of the National Conference of State Fisheries Ministers Bhubaneswar.

Mini Sekharan and Ramachandran, (2007), "A probe into the constraints encountered in exporting ornamental fish from India - Technical Session 1X: Exports, Trade and Globalization", Fisheries and Aquaculture: Strategic Outlook for Asia, Book of Abstracts, 8th Asian Fisheries Forum (8aff2007), November 20 - 23, Kochi, India, p.231- 232.

Nikita Gopal., (2007), "An analysis of the Exports of finfish from India – Technical Session 1X: Exports, Trade and Globalization", Fisheries and Aquaculture: Strategic Outlook for Asia, Book of Abstracts, 8th Asian Fisheries Forum (8aff2007), November 20 - 23, Kochi, India, pp.231.

Pagire B.V, .Navadkar D.S and Birari K.S, (2004), Analyzed the production status and potential for export of Indian fisheries.Project, Kerela University, p 24.

Perumal V.M.S., (2003), Growth trends of marine fish production and export in Tamil Nadu, Dissertation, Indian Institute Management, Ahmadabad, p 72.

Praduman Kumar and Anil Kumar, (2003), The Food Safety Measures: Implications for Fisheries Sector in India, Conference Proceedings, CMFRI, Calcutta, p 33 and 36.

Ramachandra Bhatt., (2003), Impact of Globalization on the Marine Exports of India, Dissertation, Fisheries College Mangalore, p 23.

Ramachandra Bhatt., (2005), College of Fisheries Mangalore, Under Government of India, UNCTAD DFID project on Strategy and Preparedness for Trade and Globalization in India (project) a Sector inception Workshop in the fisheries sector was organized in Goa.

Sarad C., T. Ravisankar, M. Krishnan and P. Ravichandaran, (2004), Indian seafood export demands an application of principal component regression, Project, CHIFT, p 41 and 42.

Sathiadhas., (2007), "Economic efficiency of domestic fish marketing in India - Technical Session 1X: Exports, Trade and Globalization", Fisheries and Aquaculture: Strategic Outlook for Asia, Book of Abstracts, 8th Asian Fisheries Forum (8aff2007), November 20 - 23, Kochi, India, p 230-231.

Shyam, Sallm and Ojha, (2004), Commodity diversification and geographic concentration of Indian seafood exports, Project, Fisheries College, Mangalore, p 47 and 48.

Shyam and Salim, (2008), 8th Asian Fisheries Forum (8aff2007), Technical Session 1X: Exports, Trade and Globalization", Fishing Chimes, Vol.27 No.10/11, January & February, p 23.

Shyam, Sekhar, Uma and Rajesh, (2004), Export performance of Indian fisheries in the context of globalization, Resarch Report, CIFT, Cochin, p 64.

Syda Rao G., (2009), "Status of marine fisheries in India" Proceedings of the National Conference of State Fisheries Ministers Bhubaneswar.

Umamaheswari, Nasurudeen L P and Binukumar D., (2004), An analysis of export competitiveness of marine fisheries in India, Project, Alikar University, Agra, p 39.

Venugopal., (2005), The 4th Inception workshop for the Project strategies and preparedness for trade and globalization in India with special reference to assessment of export capabilities of small fishermen was held at Chennai.

Venkatesan V., (2005), The 3rd Sector Inception Workshop of the UNCTAD-DFID Project on "Strategies and Preparedness for Trade and Globalisation in India" (Project) in the Fisheries Sector was organized in Visakhapatnam.

Venkatesan V., (2009), 'Strategies and Preparedness for Trade and Globalisation in India', The United Nations Conference on Trade and Development – UNCTAD, (Project) Government of India - DFID.

INDUSTRY AND COMPANY PROFILE

Chapter 3

Marine Products Export Development Authority (MPEDA) – A Profile

3.1 Genesis

The Marine Products Export Development Authority (MPEDA) was set up by an act of Parliament during 1972. The erstwhile Marine Products Export Promotion Council established by the Government of India in September 1961 was converged in to MPEDA on 24th August 1972. MPEDA is given the mandate to promote the marine products industry with special reference to exports from the country. It is envisaged that this organisation would take all actions to develop and augment the resources required for promoting the exports of "all varieties of fishery products known commercially as shrimp, prawn, lobster, crab, fish, shell-fish, other aquatic animals or plants or part thereof and any other products which the authority may, by notification in the Gazette of India, declare to be marine products for the purposes of (the) Act". The Act empowers MPEDA to regulate exports of marine products and take all measures required for ensuring sustained, quality seafood exports from the country. MPEDA is given the authority to prescribe for itself any matters which the future might require for protecting and augmenting the seafood exports from the country. It is also empowered to carry out inspection of marine products, its raw material, fixing standards, specifications, and training as well as take all necessary steps for marketing the seafood overseas.

MPEDA is the nodal agency for the holistic development of seafood industry in India to realise its full export potential as a nodal agency. Based on the recommendations of MPEDA, Government of India notified new standards for fishing vessels, storage premises, processing plants and conveyances. MPEDA's focus is mainly on market promotion, capture fisheries, culture fisheries, processing infrastructure & value addition, quality control, research and development.

3.2 Functions of MPEDA

The functions of MPEDA are as follows:

1. Registration of infrastructural facilities for seafood export trade.
2. Collection and dissemination of trade information.
3. Promotion of Indian marine products in overseas markets.
4. Implementation of schemes vital to the industry by extending assistance for infrastructure development for better preservation and modernised processing following quality regime.
5. Promotion of aquaculture for augmenting export production through hatchery development, new farm development, diversification of species and upgradation of technology.
6. Promotion of deep-sea fishing projects through test fishing, joint ventures and up-gradation & installation of equipments to increase the efficiency of fishing.
7. Market promotional activities and publicity.
8. Carry out inspection of marine products, its raw material, fixing standards and specifications, training, regulating as well as to take all necessary steps for maintaining the quality of seafood that are marketed overseas.
9. Impart trainings to fishermen, fish processing workers, aquaculture farmers and other stake holders in the respective fields related to fisheries.
10. Conduct research and development for the aquaculture of aquatic species having export potential through Rajiv Gandhi Centre for Aquaculture (RGCA), Nagapattinam, Tamil Nadu.
11. Conduct extension and awareness activities, trainings etc. through Network for Fish Quality Management and Sustainable Fishing (NETFISH) & National Centre for Sustainable Aquaculture (NCSA).
12. Prescribe for itself any matters required for protecting and augmenting the seafood exports from the country in the future.

3.3 MPEDA's Subsidy Assistance Schemes

Government of India is providing the following subsidy assistance schemes through MPEDA for both capture and culture marine products. MPEDA's schemes for capture marine products shall been classified into three types:

1. Export Production.
2. Induction of new technology, modernization of processing facilities and development of infrastructure facilities.
3. Market Promotion.

3.3.1 Export Production

There are four schemes operated under export production. All these schemes are working with an objective of increasing marine production for export. Under these schemes all small, medium and large export producers are taken care.

3.3.1.1 Multi Day Fishing and Catch Preservation

Under this scheme, financial assistance is provided (30 per cent on total cost or maximum of Rs.5 lakhs per owner) for multi day fishing and preservation of catch to mechanized fishing vessel owners for installation of insulated / refrigerated fish hold, Refrigerated Sea Water System (RSW) and ice making machine on board mechanized fishing vessels.

3.3.1.2 Conversion of existing fishing vessels to tuna long liners

Under this scheme 50per cent of the cost of mono filament long line system or maximum of Rs.7.50 lakh for fishing vessels of Olympus Automation Limited (OAL) less than 20 mars and Rs.15 lakhs for deep sea fishing vessels of OAL more than 20 mars shall be provided to existing fishing vessels to converting them into Tuna long liners. The objective of this scheme is to harvest deep sea tuna and other under-exploited items by monofilament tuna long line system.

3.3.1.3 Financial assistance for constructing New Tuna Long Liners

Financial assistance shall be provided to fishermen at 5 per cent points on bank interest limited to Rs.10 lakhs for 18-20 metre vessels and Rs.15 lakhs for above 20 metre vessels to construct New Tuna Long liners.

3.3.1.4 Scheme for conversion of small boat for preservation of Tuna catch

This scheme provides maximum assistance of 50 per cent of the cost including fixing or Rs. 20,000/- whichever is less for integrating / installing of FRP (Fibre Reinforced Plastics) tank fixed inside the craft / box in small country crafts. The small country craft fishermen shall to be get approval in advance from the Regional MPEDA office to install the box.

3.3.2 Induction of new technology, Modernization of processing facilities and Development of infrastructure facilities

3.3.2.1 Financial assistance for creating basic facilities for fish curing / drying / packing / storage for export

Scheme A – For setting up of dried fish handling / curing / drying facility (with solar system and LPG back up) maximum of Rs.23.50 lakh, per beneficiary, (or) 33⅓ per cent of the actual cost incurred shall be provided to for dry fish handling, processing, packing and storage.

Scheme B - Maximum assistance shall be Rs.8.25 lakh per beneficiary (or) 33⅓ per cent of the actual cost incurred shall be provided for setting up dried fish packing and storage facility by dried fish processors / exporters registered with MPEDA.

3.3.2.2 Financial assistance for basic facilities (new) for Chilled fish / Chilled Tuna for export

To create adequate infrastructure for chilled fish / chilled tuna export, a maximum of Rs.35 lakhs per beneficiary (or) 33⅓ per cent of the actual cost incurred whichever is less, shall be provided.

3.3.2.3 Technology Upgradation Scheme for Marine Products (TUSMP)

It is a new scheme introduced for promoting value added seafood processing unit. Under this scheme, financial assistance shall be provided on two types namely Capital subsidy and Interest subsidy, the beneficiary shall avail any one of these subsidies. The capital subsidy shall be provided up to 25 per cent of expenditure incurred for value addition (or) maximum of Rs. 100 lakhs for new units and Rs. 85 lakhs for the existing units.

Under Interest subsidy scheme, assistance shall be availed from financial institutions at 5 per cent interest to a maximum of Rs. 150 lakhs for new units and Rs.125 lakhs for existing units.

3.3.2.4 Subsidy for setting up New Modern Ice Plant / Renovation of Existing Plant

The objective of this scheme is to produce and supply quality ice to the fishermen, processor and shrimp farmers. Under this scheme Rs.31 lakh (or) 25 per cent of the cost shall be provided to a new block ice unit, Rs.26 lakh (or) 50 per cent of the cost for renovation to existing unit and Rs.14 lakh (or) 25 per cent of the cost to Flake / Chip / Tube ice unit.

3.3.2.5 Subsidy for acquisition of machinery for Tuna cannery / processing of value added Tuna product

Financial assistance is provided to set up tuna cannery / processing facilities for value added tuna products at 25 per cent of the cost of machinery & equipment (or) a maximum of Rs. 65.25 lakh.

3.3.2.6 Financial support for acquisition of Refrigerated Truck/Containers

To purchase refrigerated trucks / containers for transportation of raw material and finished products, assistance shall be provided under this scheme at 25 per cent of the cost of Refrigerated Truck/ Container (or) a maximum of Rs.3.50 lakh.

3.3.2.7 Financial assistance for setting up Large Cold Storages

To establish cold storages, assistance shall be provided at 25 per cent of the cost of cold storage (or) a maximum of Rs.60 lakhs to the individuals.

3.3.2.8 Subsidized distribution of insulated fish boxes

To preserve raw materials under iced condition on board fishing vessel, in shrimp farms, peeling sheds and processing plants, the moulded synthetic insulated fish boxes of various capacities are distributed at 50 per cent subsidy.

3.3.2.9 Interest subsidy assistance for seafood units to facilitate upgradation

The loan shall be arranged through bank (or) financial institutions at subsidised interest rate of 7 per cent to modernize the unit as per the EU standard. The maximum loan amount is Rs. 15 lakhs.

3.3.2.10 Subsidy for setting up Mini Laboratory

Subsidy shall be provided for setting up mini laboratory in plant for quality control at 25 per cent of the cost (or) maximum of Rs. 1,50, 000 per unit.

3.3.2.11 Assistance to seafood processors for construction / renovation of Captive Pre-Processing Centres (PPCs) with upgraded facilities

The aim of this scheme is to bring pre-processing activities under the control of processors and upgrade the facilities on par with Hazard Analysis and Critical Control Point / European Union (HACCP/EU) regulations. Under this scheme, the subsidy shall be provided at 50 per cent of the cost of eligible expenditure (or) a maximum of Rs.15 lakhs for new construction and 45 per cent of the cost (or) a maximum of Rs.13.50 lakh for renovation of captive Pre-Processing Centres (PPCs), which is again linked to the area of the pre-processing hall.

3.3.2.12 Financial assistance to pre-processors for construction / renovation of Independent Pre-Processing Centres (PPCs) with upgraded facilities

Financial assistance is provided under this to upgrade the facilities on par with HACCP/EU regulations. The subsidy shall be provided at 50 per cent of the cost (or) a maximum of Rs.22 lakhs for new construction and 45 per cent of the cost subject to a maximum of Rs.19.8 lakh for renovation of independent PPCs, which is again linked to the workers and the area of the pre-processing hall. The subsidy is further restricted to maximum limits fixed for individual items.

3.3.3 Market Promotion

3.3.3.1 Group Insurance coverage for workers employed in the Pre-Processing and Processing plant

The coverage shall be claimed from the United India Insurance Company. The valid period of this policy is one year and it shall be renewable. The following are the benefits extended from this policy

It covers Rs.50, 000 for accidental death. A coverage of Rs. 20,000 for loss / damage to the dwellings / contents due to fire, riot, strike, malicious damage, landslide, flood, storm & earth quake. Under the policy Rs. 10,000 shall be claimed for hospitalization, treatment expenses due to accident or disease for beneficiary, spouse, and two dependent children, in the case of married employees, and beneficiary and two dependent parents in the case of unmarried employees on floater basis. A maximum of Rs. 2,000/- shall be claimed for emergency medical evacuation.

3.3.3.2 Sea freight assistance for export of specified value added products to European Union / United States of America / Japan and other countries

To export the specified value added products to EU, USA, Japan and other countries sea freight assistance shall be provided for the first two years of implementation @ Rs. 4/kg for EU, Rs. 5/kg for USA and Rs. 3/kg for Japan and for the next two years (3^{rd} and 4^{th} year) Rs. 2 for EU, Rs. 3 for USA and Rs. 1.50 for Japan per kg. The freight assistance shall be applicable to South East Asia, Middle East, China and Korea. The USA rate shall be applicable to Canada, Mexico etc., and EU rate shall be applicable to Australia, Africa etc.

3.3.3.3 Sea freight assistance for import of raw material for processing and export of specified value added products.

Under this scheme, sea freight assistance shall be provided to import raw material for processing at 100 per cent for the first three years (freight differential per container) and 50 per cent for the fourth year will be given to the units for import of raw material for processing and export of specified value added products provided there is atleast 25per cent value addition on such material.

3.4 Steps to export marine products from India

Export is an art; the exporter produces goods to satisfy the unknown foreign consumers. To satisfy the international customers and consumers three important things have to be considered namely Quality, Timing and Price. The following are the steps to start marine products export company in India and export.

Step 1- Apply for **Import-Export Code Number** (IE Code No.) and get from Director General Foreign Trade Regional office.

Step 2- Register with concerned export promotion council. For example, to export fish products, it is essential to obtain **Registration-Cum-Membership Certificate** (RCMC) from the **Marine Products Export Development Authority** (MPEDA) for exporting and to avail subsidy benefits.

Step 3- The process of export starts from this stage. After getting satisfied with the sample, the buyer (importer) shall place purchase order (or) Export Order. To assure the payment, the importer has to send a promissory note issued from importer bank called **Letter of Credit** (LC). By using LC, exporter shall get maximum up to 80 per cent value in advance from his bank (Exporter Bank) to meet the production expenses.

Step 4- Once the export order has been received, the exporter starts production as per the agreement between importer and exporter. In addition, Exporter shall approach **Export Credit Guarantee Corporation** (ECGC) for payment guarantee. ECGC shall charge 0.19 per cent on value for rendering their service.

Step 5- After getting over the production, the exporters make arrangements for quality control and obtain certificate from Quality Control Inspector. To measure the quality of food products including fish products, **Hazard Analysis and Critical Control Points** (HACCP) certificate has to be obtained and for EU, **Catch Certificate** has to be obtained from MPEDA.

Step 6- An exportable finished product has to be dispatched to Ports/ Airports for transit.

Step 7- With the despatched marine products, the exporter has to apply for Marine/ Air Insurance coverage from an insurance company. In some case this has to be done through **Clearing and Forwarding** (C & F) agent.

Step 8- At this stage, the exporter shall contact the Clearing and Forwarding (C & F) agent for storing the goods at port warehouses. The C & F agent comes out with a document called **Shipping Bill** (SB), which is essential for allowing shipment by the Custom Authority.

Step 9- The Clearing and Forwarding agent submits shipping bill to custom house for verification and the custom house examines the documentation.

Step 10- The C & F agent also submits a copy of the verified shipping bill to the shed superintendent and obtains carting order for exports.

Step 11- The C & F agent presents the shipping bill to the preventive officers who oversee the transit procedure for loading exports into ships or aircraft.

Step 12- Once the product has been loaded, the captain of the ship/air craft shall issue a receipt called – Mate's Receipt to the superintendent of the port. The superintendent calculates port charges and bills the C & F agents for it.

Step 13- After making the payment, the C & F agent collects mate's receipt and requests the port or airport authority to prepare Bill of Lading or Airway Bill (AB).

Step 14- After collecting the **Bill of Lading** (BL), the C & F agent shall send BL (or) AB to respective exporter.

Step 15- Exporter has to apply for the certificate of origin with the received documents in the relevant chamber of commerce.

Step 16- Exporter needs to send shipping documents to the importer stating the date of shipment, name of the vessel, etc., with other important documents like Bill of Lading, Custom Invoice and Packing List for getting their forging counterparts.

Step 17- From this stage, the exporter starts working on the payment of export. The exporter submits all important documents to his bank for scrutinizing these documents against the original Letter of Credit / Purchase Order. The bank shall

follow **Uniform Customs and Practice for Documentary Credits** (UGPDC) / **Uniform Rules for Collection** (URC) Norms.

Step 18- The exporter's bank sends all important documents to the importer's bank, which presents the documents to the importer. Then the importer accepts the bill if it is Usance bill and pays before the due date.

Step 19- After receiving the requisite documents, the importer makes payment through bank. The export amount shall be credited in the exporter account (in case of advance the balance amount shall be credited). Simultaneously, the **Guaranteed Remittance** (GR) Form shall be sent to RBI as evidence of realization of export proceeds and in case of Electronic Data Interchange System User, the **SDF** shall be sent instead of GR Form.

Step 20- The last step, exporter shall apply for benefit from the various duty drawback schemes and automatically the sanctioned amount shall be credited to the exporter account.

These are the 20 steps that should be followed to become a seafood exporter in India.

ANALYSIS AND INTERPRETATION

Chapter 4

Data Analysis and Interpretation

In this chapter, the captured data from the qualitative and quantitative research is presented, analysed, described and interpreted in a systematic manner as the next step of the research process. The documentation and analysis process aimed to present data in an intelligible and interpretable form in order to identify the exact problems and prospects of seafood exporters.

4.1 Product range

Table 4.1 shows the seafood products processed by the companies

Table 4.1 Product Range Processed by Seafood Exporting Companies

N=88

Sl. No.	Product name	Frequency	Percent
1	Squid	10	11.30
2	Shrimp	20	22.70
3	Fish products only	20	22.70
4	All the above	38	43.30
Total		88	100

Source: Primary Data

The above table reveals that 22.7 per cent of the companies processed and exported shrimp products, 11.3 per cent of the companies only squid products, 20 per cent of the companies only fish products and the rest 43.1 per cent of the companies, all the above mentioned products.

4.2 Exporter type

There are four different types of seafood exporters, they were

1. Manufacturer exporter
2. Merchant exporter

3. Ornamental fish exporter
4. Route through merchant exporter

Manufacturer exporter is an owner of an approved processing plant, or an approved fishing vessel having on-board processing facilities or live fish or chilled fish handling facility or dried fish.

Ornamental exporters, are the one who export only ornamental fish, but not an exporter of live marine products for human consumption.

Merchant exporters are the one who do not own a processing plant, but utilizes the surplus capacity of an approved processing or handling facility.

Table 4.2 Type of the Exporter Company

N=88

Sl. No.	Exporter type	Frequency	Percent
1	Manufacturer exporter	47	53.40
2	Merchant exporter	33	37.50
3	Ornamental fish exporter	8	9.10
Total		88	100

Source: Primary Data

From the above table it was observed that the majority of the companies, 53.4 per cent were in the category of manufacturer exporter, around 37.5 per cent of the companies were in the category of merchant exporter and the rest 9.10 per cent were ornamental fish exporters.

4.3 Type of processed seafood

From the table 4.3, it was clear that majority (53 %) of the companies exported frozen type of fish products and in this list, next came the dried process type and the rest 15.8 per cent of the companies preferred ornamental, live and others as their process type.

Table 4.3 Type of processed seafood exported by the Exporting Companies

N=88

Sl. No.	Process type	Frequency	Percent
1	Frozen	53	60.20
2	Dried	23	24.00
3	Ornamental	8	9.00
4	Live	3	3.40
5	Others	3	3.40
Total		88	100

Source: Primary Data

4.4 Countries to which the Seafood was Exported

Table 4.4 Countries to which the Seafood was Exported

N=88

Sl. No.	Countries	Frequency	Percent
1	EU	24	26.70
2	U.S.A.	14	15.35
3	South East Asia	14	16.40
4	China	13	15.40
5	Japan	11	13.16
6	Middle East	5	5.20
7	Other countries	7	7.79
Total		88	100

Source: Primary Data

From the above table it was clear that majority of the seafood processed from Ernakulum were exported to the European Union countries like Spain, Italy and France and next around 15.3 per cent of the companies exported their products to United States and next South East Asia, 16.4 per cent were exported and 15.4 per cent of the companies exported their products to China and the rest 7.7 per cent of the companies exported to other countries like Singapore, Malaysia etc and a small amount (5.19 %) was exported to Middle East countries.

4.5 Mode of transport

Table 4.5 Mode of transport preferred for exporting the products

N=88

Sl. No.	Mode of transport	Frequency	Percent
1	Waterways	88	100
Total		88	100

Source: Primary Data

From the above table it was observed that all companies preferred waterways as their mode of transport as it was cheaper when compared to other modes, and they also used airways for transporting their samples to the exporting countries.

4.6 Joint venture with foreign company

Table 4.6 Joint venture with the foreign companies

N=88

Sl. No.	Joint venture	Frequency	Percent
1	Yes	5	5.60
2	No	83	94.40
Total		88	100

Source: Primary Data

From the above table it was clear that 94.4 per cent of the company don't have any joint venture with the foreign companies in the importing countries and the rest 5.6 per cent of the company had their own joint venture in the importing countries.

4.7 Problems faced in infrastructure facilities

Table 4.7 Infrastructure problems faced by the companies

N=88

Sl. No.	Infrastructure problems	Frequency	Percent
1	Lack of cold storage	30	34
2	Laboratory problems	30	34
2	No problems	28	32
Total		88	100

Source: Primary Data

The above table reveals that the majority of the companies (68.1 %) faced problems in their infrastructure such as lack of proper cold storage and freezers, 34 per cent of the companies reported that they didn't have proper lab facilities and 34 per cent said they didn't have proper cold storage facilities and the remaining 31.9 per cent of the companies didn't have any problems in their infrastructure.

4.8 Availability of raw materials

The list of raw materials mostly preferred by the companies for exporting was given below,

1. White prawn
2. Pink shrimp
3. Marine shrimp (karikadi)
4. Mud crab
5. Squid

6. Octopus
7. Pearl oyster
8. Sea crab
9. Clam
10. Indian oil sardinella

Table 4.8 Availability of raw materials for processing

N=88

Sl. No.	Availability of raw materials	Frequency	Percent
1	Very good	8	9.09
2	Good	20	22.91
3	Average	30	34.00
4	Poor	30	34.00
Total		88	100

Source: Primary Data

From the above table it was clear that 34 per cent of the companies felt the availability of raw material was poor and the same proportion felt the availability of raw material was average. Around one fourth per cent of the companies opined that there was good availability of raw materials and the least 9.09 per cent stated that the availability of raw materials for processing was very good for them.

4.9 Mode of procurement of raw materials

Table 4.9 Mode of procurement of raw materials

N=88

Sl. No.	Purchase mode	Frequency	Percent
1	By intermediaries	53	60.30
2	Direct purchase	35	39.70
Total		88	100

Source: Primary Data

From the above table it was clear that the majority of the companies 60.3 per cent procured their raw materials required for processing from the intermediaries that includes commission agents, middle men and the rest 39.7 per cent of the companies purchased the raw materials required for processing directly from the fisher man.

4.10 Source of raw material

Table 4.10 Source of raw material

N=88

Sl. No.	Source	Frequency	Percent
1	Aquaculture	55	62.50
2	Natural catch	33	37.50
Total		88	100

Source: Primary Data

The above table revealed that 62.5 per cent of the companies used aquaculture as raw materials for their processing and the remaining 37.5 per cent used naturally caught raw materials for processing.

4.11 Problems faced in the procurement of raw materials

The problems faced by the companies while procuring raw materials is given below:

1. There is no fixed price for the raw materials.
2. Variation in the raw material availability.
3. Role played by the middle men.

Table 4.11 Problems faced in the procurement of raw materials

N=88

Sl. No.	Problems faced	Frequency	Percent
1	No fixed price	35	39.71
2	Middle men	30	34.09
2	No problem	23	26.20
Total		88	100

Source: Primary Data

From the above table it was clear that 39.77 per cent of the exporters said that there was no fixed price for the raw materials and 30 exporters said that they faced problems from the middle men in the procurement of raw materials for processing and the rest 26.2 per cent of the companies faced no problem while procuring raw material.

4.12 Domestic demand for processed seafood

Table 4.12 Demand for processed seafood in India

N=88

Sl. No.	Domestic demand	Frequency	Percent
1	Good	20	22.70
2	Average	40	47.50
3	Poor	22	23
4	Very poor	6	6.80
Total		88	100

Source: Primary Data

From the above table it was inferred that 45.5 per cent of the companies stated that the demand for processed seafood in India was average and 22.7 per cent of the companies felt good demand within the country and 13.6 per cent of the

companies inferred that the demand for processed seafood is poor within the country and the rest 6.8 per cent of the companies felt very poor demand for processed seafood.

4.13 Global demand for Indian seafood

Table 4.13 Demand for processed seafood in the International market

N=88

Sl. No.	Global demand	Frequency	Percent
1	Very good	22	25
2	Good	35	39.80
3	Average	16	18.20
4	Poor	15	17
Total		88	100

Source: Primary Data

The above table reveals that 39.7 per cent of the respondent companies accepted that there was good demand for processed Indian seafood globally and about 25 per cent opined that there was very good demand globally and about 18.18 per cent of the respondent companies inferred that the demand was average outside the country and the rest 17 per cent companies felt the demand was poor.

4.14 Impact of seasonal changes in raw material availability

Table 4.14 reveals that 77.2 per cent of the companies opined that the differences in the availability of raw materials due to changes in the seasons, it was in the month of June and July due to the onset of monsoon, the fishermen are not allowed into the sea for fishing and also government restricts fishermen to enter the sea during the fish multiplication season, at that time the companies faces problems in getting raw material for processing and the remaining 22.8 per cent of the companies felt no impact due to seasonal changes, as they have sufficient storage capacity for storing their raw materials.

59

Table 4.14 Impact of seasonal changes in raw material availability

N=88

Sl. No.	Impact	Frequency	Percent
1	Yes	68	77.20
2	No	20	22.80
Total		88	100

Source: Primary Data

4.15 Impact of regulatory measures in importing countries

Table 4.15 Impacts of regulatory measures in importing countries

N=88

Sl. No.	Impact	Frequency	Percent
1	Yes	58	66
2	No	30	34
Total		88	100

Source: Primary Data

From the above table it was clear that 66 per cent of the companies faced problems due to the difference in the regulatory measures that prevails currently in the importing countries and the rest 34 per cent were ok with the prevailing regulatory measures in the importing countries.

4.16 Impact of cultural and language differences in importing countries

The table 4.16 reveals that 93.2 per cent of the companies didn't face any problems due to the varying language and culture that prevailed in the importing countries and the rest 6.8 per cent faced problem due to this difference.

Table 4.16 Impact of cultural and language differences

N=88

Sl. No.	Impact	Frequency	Percent
1	Yes	6	6.80
2	No	82	93.20
Total		88	100

Source: Primary Data

4.17 Problems faced in the side of technology

The problems faced by the exporting countries related to technology includes,

1. Lack of new model fishing vessels for catching fishes,
2. Lack of latest machineries used for processing and packaging.

Table 4.17 Technological problems faced by the companies

N=88

Sl. No.	Technological problems	Frequency	Percent
1	Lack of latest machinary	43	48.80
2	No problems	45	51.20
Total		88	100

Source: Primary Data

From the above table it was clear that 51.2 per cent percent of the companies didn't face any problems in the technological aspects and the rest 48.8 per cent of the companies faced problems in the technological aspects, as the technology changes faster, adoption becomes complicated for these companies.

4.18 Problems faced from competitors

The table 4.18 reveals that 46.6 per cent of the companies didn't face any competition from their competitors and the rest 39.7 per cent faced competition.

Table 4.18 Problems faced from competitors

N=88

Sl. No.	Problems faced	Frequency	Percent
1	Yes	35	49.70
2	No	53	50.30
Total		88	100

Source: Primary Data

4.19 Impact of Labour issues in the company

Table 4.19 Labour issues in the companies

N=88

Sl. No.	Impact	Frequency	Percent
1	Labour shortage	60	68.20
2	No labour issues	28	31.80
Total		88	100

Source: Primary Data

From the above table it is clear that 68.2 per cent of the companies faced labour problems, due to the labour shortage most of the companies used migrant labourers for their purpose, also they faced problems due to inadequate skilled labours and the rest 31.8 per cent didn't have any labour issues within the company.

4.20 Incentives and services provided by MPEDA

The following services are rendered by Marketing Section of the MPEDA for the benefit of the trade.

1. Dissemination of market information & trade enquiries to trade.

2. Taking up problems / issues of the industry with appropriate agency / organizations working under Govt. of India.
3. Redressal of quality and trade disputes.
4. Providing suggestions / proposals for pre-budget exercise of the Union Government related to seafood sector.
5. MPEDA has been designated as the authorized body for the issuance of RCMC (Registration-Cum-Membership Certificate) to exporters of seafood items.
6. Operation of Financial assistance schemes.

These are the marketing services provided by MPEDA for the betterment of the trade with the foreign countries.

Table 4.20 Satisfactory level of the services and incentives from MPEDA.

N=88

Sl. No.	Services by MPEDA	Frequency	Percent
1	Highly satisfied	17	19.30
2	Satisfied	38	43.20
3	Neutral	18	20.50
4	Unsatisfied	15	17
Total		88	100

Source: Primary Data

The above table reveals that 43.1 per cent of the companies were satisfied with the services provided by the MPEDA and 20.4 per cent of the companies had a neutral view and 19.3 per cent of the companies were highly satisfied with the services provided and the rest 17 per cent of the companies were unsatisfied with the services provided by the MPEDA.

4.21 Services provided by SEAI

List of services provided by SEAI includes,

1. Providing market information to the exporting companies,
2. Providing training to the employees in adopting latest technologies in the fishing industry,
3. Creating awareness about the latest technologies that prevails in the seafood industry.

Table 4.21 Satisfactory level of the services provided by SEAI.

N=88

Sl. No.	Services by SEAI	Frequency	Percent
1	Highly satisfied	40	45.50
2	Satisfied	30	34
3	Neutral	10	11.40
4	Unsatisfied	8	9.10
Total		88	100

Source: Primary Data

The above table reveals that 45.5 per cent of the companies were highly satisfied with the services provided SEAI, as they provided many useful information and services for the exporters and about 34 per cent of the exporters were satisfied with the services provided by them and 11.4 per cent were neutral in their views it meant that they are ok with the services and the rest 9.09 per cent of the exporters were unsatisfied with the services provided by SEAI.

4.22 Credit facilities provided by banking institutions

The banking institutions provides three types of credit to the exporting countries and they are,

1. Long term loan for infrastructure facility,
2. Medium term loan for machineries,
3. Short term loan for fishing vessels.

Table 4.22 Satisfactory level regarding the services provided by various banking institutions.

N=88

Sl. No.	Services by banking institutions	Frequency	Percent
1	Highly satisfied	55	62.50
2	Satisfied	15	17
3	Neutral	12	13.60
4	Unsatisfied	6	6.90
Total		88	100

Source: Primary Data

The above table reveals that 62.5 per cent were highly satisfied with the credit facilities provided by the banking institutions for seafood export and 17 per cent of the exporters were satisfied and 13.6 per cent of the exporters were neutral in their views and the rest 6.8 per cent of the exporters were unsatisfied with the roles played by the banking institutions in promoting seafood exports.

4.23 Role played by government in seafood export

It was clear that 54.5 per cent of the exporters were highly satisfied with the services provided by the government in promoting seafood exports in India and 25 per cent of the exporters were satisfied with the support provided by the government and 11.4 per cent of the exporters were unsatisfied with the government's role and the rest about 9.09 per cent of the exporters were neutral in their views.

Table 4.23 Role of Government

N=88

Sl. No.	Services by government	Frequency	Percent
1	Highly satisfied	48	54.50
2	Satisfied	22	25
3	Neutral	8	9.10
4	Unsatisfied	10	11.40
Total		88	100

Source: Primary Data

SUMMARY OF FINDINGS

Chapter 6

Findings, Suggestions and Conclusion

Indian fisheries and aquaculture are important sectors of food production providing nutritional security to the food basket, contributing to the agricultural exports and engaging about fourteen million people in varied activities. With diverse resources ranging from deep seas to lakes in the mountains and more than 10 percent of the global biodiversity in terms of fish and shellfish species, the country has shown continuous and sustained growth in fish production since Independence. Constituting about 4.4 percent of the global fish production, the sector contributes to 1.07 percent of the GDP and 4.7 percent of the agricultural GDP. The total fish production of 6.4 million metric tonnes presently has nearly 55 percent contribution from the inland sector and nearly the same from culture fisheries. Paradigm shifts in terms of increasing contributions from inland sector and further from aquaculture are significant over the years, with high growth rates. The different facets of marine fisheries, coastal aquaculture, and fisheries are increasingly being diversified, contributing to food, health, economy, exports, employment and tourism of the country.

The present chapter intends to summarise the findings in the foregoing comprehensive analysis. It seeks to make a set of suggestions while highlighting various aspects of production and exports, it also analyses factors contributing to the exports of seafood exports in Ernakulum District. This study makes an effort to bring out the problems and prospects of the marine fishery sector, it further makes some indication for future research.

6.1 Summary of findings

The following are the major findings of this study.

1. From the study it was clear that, majority of the seafood exporters in Ernakulum produced shrimp, squid and fish products and twenty exporters produced only fish products and ten companies produced only squid products.

2. When we look into the exporter type, majority of the exporters was 53.4 per cent were manufacturer exporters. Manufacturer exporter is an owner of an

approved processing plant, or an approved fishing vessel having on-board processing facilities or live fish or chilled fish or dried fish and 37.5 per cent were merchant exporters; they are the one who do not own a processing plant, but utilizes the surplus capacity of an approved processing or handling facility and a least 9 per cent were ornamental exporters, they exported only ornamental fish but not an exporter of live marine products for human consumption.

3. Regarding the process type, more than half the population (53 companies) in Ernakulum district exported frozen type, 23 companies exported dry processing type and the rest 9 companies exported ornamental type of processed seafoods.

4. With respect to the countries that imported Indian seafood, 26.7 per cent of the seafood from Ernakulam district was exported to European Union countries and 16.4 per cent of the seafood was exported to South East Asian countries and 15.4 per cent was exported to Japan and the rest 8 per cent of the seafood from Ernakulam was exported to other countries including middle east.

5. From this study it was clear that all the exporters used waterways as the mode for transporting their processed seafood and they also used airways for transporting their samples to the importing countries. The reason behind using waterways is that it was cheaper when compared to other means as they exported in larger quantities.

6. When we look into the company's joint venture with the foreign companies in the importing countries, it was revealed that majority (94 %) of the seafood exporting companies in Ernakulam district didn't have any joint venture with the foreign companies and the rest 6 per cent had joint venture.

7. It was evident that more than two third population (68 %) of the seafood exporting companies in Ernakulam faced problems in their infrastructure facilities such as improper cold storage facilities and some companies didn't have proper laboratory facilities and 32 per cent of the companies faced no problems in their infrastructure.

8. An overwhelming population of the seafood exporters in Ernakulum procured their raw materials for processing from the intermediaries, either from the middle men or from the agencies who supply raw materials for processing and 40 per cent of the exporters procured directly either from the fisher men or they had their own shipping vessel.

9. When we look into the availability of raw materials, it was clear that 34 per cent of the exporters said that the availability was average and the same proportion of the exporters opined that the availability was poor and 23 per cent of the exporters inferred that the availability was good and the rest 9 per cent of the exporters mentioned the availability of raw materials was very good.

10. About two third of the companies (63 per cent) preferred aqua-cultured raw materials for their processing, the reason was that they got the right quantity at the right time and 37 per cent of the exporters preferred naturally caught raw materials for their processing.

11. Regarding the problems faced by the companies while procuring raw materials, around three-fourth of the population (74 %) of the exporters faced problems like they didn't get good quality and some faced problems on the increase in cadmium content in the naturally caught raw material and about 26 per cent faced no problems while procuring raw materials.

12. Relating to the demand for processed seafood within the country, 45 per cent of the companies opined that the demand was average, 23 per cent felt that the demand was good, 13.6 per cent of the companies stated the demand was poor and the 7 per cent of the exporters said that there was a poor demand for the processed seafood within the country.

13. In regard to the global demand for Indian seafood, it was clear that 40 per cent of the exporters said the demand was good, 25 per cent said the demand was very good, 19 per cent said as average and the rest 9 per cent of the exporters said the demand for our seafood was poor in the global market.

14. Majority of the exporters said they faced problems in the availability of raw materials during seasonal changes in the months of June and July (monsoon) and the rest 23 per cent faced no such problems.

15. About two third of the exporters (66 %) faced some kinds of problems due to the changing regulatory measures in the importing countries and the rest 44 per cent of the exporters faced no such problems.

16. Majority of the seafood exporters in Ernakulam faced no problem in the varying cultural and language problems that prevailed in the importing countries and about 7 per cent faced slight problems while communicating with the importing countries.

17. While looking into the problems faced in the technological aspects, half of the exporters faced no such problems. When a new technology entered into the market they adopted it and the rest 49 per cent of the exporters faced problems in adopting latest technologies in the field.

18. Two-fifth (60 per cent) of the seafood exporters in Ernakulam district faced no competition from their competitors as they had their own market space and 40 per cent of the exporters faced competition.

19. While looking into the labour issues inside the company, more than two third of the exporters (68 %) said they faced shortage in labourers and so they used migrant labourers and the rest 32 per cent of the exporters faced no labour issues in their company.

20. With respect to the services and incentives provided by MPEDA, 43 per cent of the exporters were satisfied by the services received, 20 per cent of the exporters were neutral in their views, 19 per cent of the exporters were highly satisfied and the rest 17 per cent of the exporters were not satisfied with the services and incentives provided by MPEDA.

21. About half the population (46 per cent) of the exporters were highly satisfied with the services provided by the seafood exporters association, 34 per cent were satisfied with the services received, 11 per cent said they had neutral view

and the rest 9 per cent of the exporters said they were unsatisfied with the services received from the association.

22. While looking into the credit facilities received from the various banking institutions, 62 per cent of the exporters were highly satisfied with the services received, 14 per cent said they were ok with the services, 17 per cent of the exporters said they were satisfied with the services received and around 7 per cent of the exporters were unsatisfied and said they didn't get proper credit facilities from the banking institutions.

23. More than half the population (55 %) of the exporters were highly satisfied with the role played by the government in promoting seafood industries in India, 25 per cent were satisfied with the government's role and around 12 per cent of the exporters were unsatisfied with the government's role in promoting Indian seafood industries.

6.2 Problems that prevail in the Indian seafood industry

1. Only 40 percent of the production quantities satisfy the criterion for exports hence the rest 60 percent of fish are sold away in the domestic markets.

2. The value addition in India is taking place in case of certain species of marine fish only. There is shortage of Ice making units near the vicinity of aquaculture farms.

3. More emphasis is required in hygienic and sanitary practices in pre-processing and processing plants.

4. There is lack of efficient logistics to enable delivery of fishery products in its freshest form to the consumers.

5. Diversification of more species to meet the export demand and adoption of new technologies need focus, there is lack of knowledge and training to utilize the available man power in these sectors.

6. Welfare facilities are not available for manpower employed in pre-processing, processing, and export units.

6.3 Prospects of seafood industry

Prospects refer to the favourable conditions prevailing in the maritime States of our country for the accelerated development of fishing industry. The following are the strengths of the marine fishing industry,

6.3.1 Excess Human Resource

The study of human resource is vital from the point of view of labour intensive industry like fishery. They are not only important as instruments of production but also end in themselves. Out of 35,19,116 fisher folk population of the country, 22,93,425 (65.17 per cent) are adults, of which 8,89,528 (38.79 per cent) are engaged in fishing, 7,56,391 (32.98 per cent) in fishery related activities and only 83,073 (3.62 per cent) are in non-fishing activities. Out of the total adults, 17,28,992 (75.39 per cent) are employed and 5,64,433 (24.61 per cent) remain without any gainful employment. (Source: Marine Fisheries Census 2015, Government of India).

6.3.2 Untapped Marine Resources

Marine fish production from near shore waters has reached almost a plateau and, at best, only marginal increase is predicted from this zone. Major gap in total fishable potential and present production exists in deep sea and off shore pelagic resources. According to Yugraj (2014), an estimation of the depth-wise potential shows that about 58 per cent of the resources are available in 0-50 metre depth, 35 per cent in 50-200 metre depth and 7 per cent in depth beyond 200 metre. (Source: Yugraj Singh Yadhava (2014), 'Fiscal Reforms for Fisheries in India - A Case Study).

6.3.3 Trends in Fish Production

Available data on fish production reveals that it has been on an increasing trend. Marine fish production has increased from 5.34 lakh tonnes during 1950-51 to 29.41 lakh tonnes during 2015-16. There was a 550.75 per cent increase in marine fish production over a period of six decades. This situation may be attributed to the on-going process of rapid motorization/mechanization of fishing crafts and ban on

mechanized trawling during certain periods to achieve sustainable fisheries development. (Source: MPEDA Annual Report, 2016.

6.3.4 Trends in Export of Fish

While the quantity of fish export increased from 15,732 tonnes during 1961-62 to 4,12,017 tonnes during 2015-16, the value of total export increased from Rs.3.92 crores to Rs.6091.95 crores during the same period. The growth rate of exports in quantity term was 18.53 whereas in value terms it was 41.91. This situation may be attributed to the heavy demand for our marine fishery products from the Western and East Asian countries. (Source: MPEDA Annual Report, 2016).

6.4 Suggestions

The following are some of the suggestions made on the basis of the findings to improve the export performance of marine products trade from India by reducing the problems faced by them currently. In fact, there are good prospects for this sector, which have been brought out in this study.

1. It is found that the Indian marine export basket is changing though the quantity of shrimp exports has continued to increase. The study indicates diversification of the exportable items. It suggests creating more processing units in Maritime states of India.

2. There is need to produce value added fishery and fishery based products, specialized packaging and modified techniques are needed to be adopted. Low value species should be used to prepare value added products in order to reduce wastage.

3. More number of pre-processing and processing facilities coupled with cold chain transport and logistics can have beneficial effects to all the stake holders concerned.

Suggestions to Government

1. Upgradation of fishing harbours to international standards is must for sustaining or expanding our marine product.

2. As a drive to prevent illegal and unregulated fishing and regulation to obtain the catch certificate for all consignments of Exports.

3. Focus to address anti-dumping issues, hygienic handling of catch and better preservation, and training on better utilization of by catch.

4. The government has to take several steps to ensure quality assurance at all levels of the supply chain, right from production to exports.

5. Labour productivity in Indian marine sector has to be improved to match favourably with competitive countries like China, New training and modem approach are required to effect qualitative changes in competitive high value niche employment market.

6.5 Conclusion

Keeping in view the responses attained, the data collected and analysed, the designs created and applied, it was concluded on the whole that during the study "Problems and prospects of seafood exporters in Ernakulam district" the need based information collected at every level, worked as a platform for the next level leading to the systematic assessments of the needs to be incorporated in improving the seafood exports in Ernakulam and also in reducing the problems faced by the seafood exporters at various levels.

India has more fish supply than its demand as per the study of Dastagiri and Mruthyunjaya. India will have 4.48 million tonnes surplus of fish in 2020. It shows clearly that India has high potentiality for fish export (Dastagiri and Mruthyunjaya, 2013). According to Sinha and Malhotra, India has the potential to double its exports of the marine products to almost 8 lakh tons by the year 2020 and to 10 lakh tons by the year 2030 (Malhotra and Sinha, 2007).

In the present study, the respondents were asked to express their views about the potentiality for their products. 5.2per cent of them were of the view that demand for their products would decrease in future due to competition and 34.5 per cent of the respondents were of the view that the demand for their products would remain the same, whereas 60.3per cent of the units were of the view that demand for their product would increase in the future.

BIBLIOGRAPHY

Bibliography

Theses and Reports

Abijith Das., (2005), MPEDA presented a paper on "Indian export on overview", The 3rd sector inception workshop of the UNCTAD-DFID Project on "Strategies and Preparedness for Trade and Globalisation in India" (Project) in the Fisheries Sector was organized in Visakhapatnam on 4th October 2005.

Anjani Kumar., (2004), Export Performance of Indian Fisheries strengths and challenges ahead, Report, MPEDA, Cochin, p 77.

Ayyappan and Krishnan, (2004), Fisheries sector in India to dimensions of development, Project Report, Madurai Kamrajar University, p 85.

Ayyappan S., (2009), "An overview of Indian fisheries sector in the perspective of the Eleventh Five Year Plan" Proceedings of the National Conference of State Fisheries Ministers, Bhubaneswar, p 25.

Devadasan., (2002), Value Added fish and fisheries products, Project Report, Marine Fisheries College, Calcutta, p 82 and 83.

Durairaj., (1981), Study of marine Fisheries Industry in Thanjavur district, unpublished Ph.D. Thesis, Madurai Kamaraj University, Madurai, p 167.

Elias Sait., (2005), The 4th Inception workshop for the Project strategies and preparedness for trade and globalization in India with special reference to assessment of export capabilities of small fishermen was held at Chennai on 6th October, 2005.

Geethalakshmi, Nikita Gopal and Unnithan, (2009), "Shrimp Exports from India an Economic Analysis, India's Exports: Perspective and Sectoral Trends", p 126.

Guledgudda, Patil, Hiremath and Dodmani, (2003), Production and Export Performance and plan allocations: Review of fishery sector in India, Research Report, CIFT, Cochin, p 48.

Hari., (1997), Report of the Task Force on Livelihood Secure Fishing Communities, State Planning Board, Government of Kerala, Thiruvananthapuram, p.25,26 and 44.

Kaushal., (1997), Quality consciousness must for more exports from India, Department of Economics, St. Mary's College, Tuticorin, p 25.

Krishnaiah P., (2009), "Strategies for the development of the fisheries sector in India" Proceedings of the National Conference of State Fisheries Ministers, Bhubaneswar.

Mini Sekharan and Ramachandran, (2007), "A probe into the constraints encountered in exporting ornamental fish from India - Technical Session 1X: Exports, Trade and

Globalization", Fisheries and Aquaculture: Strategic Outlook for Asia, Book of Abstracts, 8th Asian Fisheries Forum (8aff2007), November 20 - 23, Kochi, India, p.231- 232.

Nikita Gopal., (2007), "An analysis of the Exports of finfish from India – Technical Session 1X: Exports, Trade and Globalization", Fisheries and Aquaculture: Strategic Outlook for Asia, Book of Abstracts, 8th Asian Fisheries Forum (8aff2007), November 20 - 23, Kochi, India, pp.231.

Pagire B. V, Navadkar D. S and Birari K. S, (2004), Analysed the production status and potential for export of Indian fisheries. Project, Kerala University, p 24.

Perumal V.M.S., (2003), Growth trends of marine fish production and export in Tamil Nadu, Dissertation, Indian Institute Management, Ahmadabad, p 72.

Praduman Kumar and Anil Kumar, (2003), The Food Safety Measures: Implications for Fisheries Sector in India, Conference Proceedings, CMFRI, Calcutta, p 33 and 36.

Ramachandra Bhatt., (2003), Impact of Globalization on the Marine Exports of India, Dissertation, Fisheries College Mangalore, p 23.

Ramachandra Bhatt., (2005), College of Fisheries Mangalore, Under Government of India, UNCTAD DFID project on Strategy and Preparedness for Trade and Globalization in India (project) a Sector Inception Workshop in the fisheries sector was organized in Goa.

Sarad C., T. Ravisankar, M. Krishnan and P. Ravichandaran, (2004), Indian seafood export demands an application of principal component regression, Project, CHIFT, p 41 and 42.

Shyam, Sallm and Ojha, (2004), Commodity diversification and geographic concentration of Indian seafood exports, Project, Fisheries College, Mangalore, p 47 and 48.

Shyam, Sekhar, Uma and Rajesh, (2004), Export performance of Indian fisheries in the context of globalization, Research Report, CIFT, Cochin, p 64.

Umamaheswari, Nasurudeen L P and Binukumar D., (2004), An analysis of export competitiveness of marine fisheries in India, Project, Alikar University, Agra, p 39.

Venugopal., (2005), The 4th Inception workshop for the Project strategies and preparedness for trade and globalization in India with special reference to assessment of export capabilities of small fishermen was held at Chennai.

Venkatesan V., (2005), The 3rd Sector Inception Workshop of the UNCTAD-DFID Project on "Strategies and Preparedness for Trade and Globalisation in India" (Project) in the Fisheries Sector was organized in Visakhapatnam.

Venkatesan V., (2009), 'Strategies and Preparedness for Trade and Globalisation in India', The United Nations Conference on Trade and Development – UNCTAD, (Project) Government of India- DFID.

Research papers

Elias Sait., (2005), The 4th Inception workshop for the Project strategies and preparedness for trade and globalization in India with special reference to

assessment of export capabilities of small fishermen was held at Chennai on 6th October, 2005.

Krishnaiah P., (2009), "Strategies for the development of the fisheries sector in India" Proceedings of the National Conference of State Fisheries Ministers, Bhubaneswar.

Kuruvila Thomas., (2005), presented a paper on "Indian export on overview", The 3rd Sector Inception Workshop of the UNCTAD-DFID Project on "Strategies and Preparedness for Trade and Globalisation in India" (Project) in the Fisheries Sector was organized in Visakhapatnam on 4thOctober 2005.

Kuruvila Thomas., (2009), 'Strategies and Preparedness for Trade and Globalisation in India', The United Nations Conference on Trade and Development (UNCTAD)-Government of India- DFID, Project.

Leena Nair, (2009), "The need to augment quantity and quality of catch she wanted sustained fishing as against intense fishing" Proceedings of the National Conference of State Fisheries Ministers Bhubaneswar.

Sathiadhas., (2007), "Economic efficiency of domestic fish marketing in India - Technical Session 1X: Exports, Trade and Globalization", Fisheries and Aquaculture: Strategic Outlook for Asia, Book of Abstracts, 8th Asian Fisheries Forum (8aff2007), November 20 - 23, Kochi, India, p 230-231.

Shyam and Salim, (2008), 8th Asian Fisheries Forum (8aff2007), Technical Session 1X: Exports, Trade and Globalization", Fishing Chimes, Vol.27 No.10/11, January & February, p 23.

Syda Rao G., (2009), "Status of marine fisheries in India" Proceedings of the National Conference of State Fisheries Ministers Bhubaneswar.

Websites

Anwar Hashim., (2011), President of the Seafood Exporters Association of India, http://www.thehindubusinessline.com/todays-paper/tp-agri-biz-/article1541394.ec

Joseph Durai and Srinivasan, (2002), Analysis of fisheries development in Tamil Nadu. Retrieved from http://www.thehindubusinessline.com/2002/01/22/stories/20020122115.html.

Karna V.K., (2011), Deputy Director of the Indian Institute of Packaging. Retrieved from http://www.thehindubusinessline.com/2011/01/22/stories/2011012251152100.html.

APPENDIX

PROBLEMS AND PROSPECTS OF SEAFOOD EXPORTERS IN ERNAKULAM DISTRICT, KERALA.

SCHEDULE

1. Name of the company:

2. Address:

3. Year of establishment:

4. No of workers:

5. Mention the product range produced by the company?

A) Shrimp products B) Scampi products C) Squid products D) Octopus products

E) Fish products E) Others

6. Name the processed Seafood exported by your company?

7. Mention the Exporter type of your company?

A) Manufacturer exporter B) Merchant exporter C) Route through merchant exporter D) Ornamental fish exporter

8. Mention the Process type of your company?

A) Ornamental type B) live C) Frozen D) Dried E) Others

9. Total capacity of production plant:

10. Countries to which you export?

A) USA B) Vietnam C) Japan D) Spain E) others

If others, mention

11. Mention the mode of transport you prefer for exporting your products?

A) Airways B) Waterways C) Others

12. Problems faced in transportation while exporting your products?

13. Export turnover of the company?

14. Is the plant approved by EU committee?

A) Yes B) No

15. Is the plant having any joint venture opportunity with foreign company?

A) Yes B) No

16. Do you face any problems in Infrastructure facilities?

If yes, specify

17. Availability of raw materials for processing?

A) Very good B) Good C) Average D) Poor E) Very poor

18. Source of raw material for the production?

A) Direct purchase B) By intermediaries C) Others

If others, specify

19. What is your mode of procurement?

A) Aquaculture B) Natural catch

20. Do you face any Problems in the procurement of raw material for production?

A) Yes B) No

If yes, specify

21. Demand for processed seafood domestically?

A) Very good B) Good C) Average D) Poor E) Very poor

22. Demand for Indian seafood in the international market?

A) Very good B) Good C) Average D) Poor E) Very poor

23. Whether your production is affected by seasons?

A) Yes B) No

24. Do you offer any credit to the customer (importer), If yes specify?

A) 15-30days B) 30-60days C) 60-90days D) more than 90 days

25. Do you face any problems in the importers default in the payment?

A) Yes B) No

26. Do you face any problems in the food safety legislation of the importing countries?

A) Yes B) No

If yes, specify

27. Do your exports get affected due to cultural and language differences in the importing countries?

A) Yes B) No

28. Do the political systems of importing countries affect your exports?

A) Yes B) No

29. Do you get any subsidies from Indian government?

A) Yes B) No

30. Do you face any problems in the technological aspects?

A) Yes B) No

If yes, specify

31. Do you face any problems from your competitors?

A) Yes B) No

32. Do you face any labour issues in your company?

A) Yes B) No

33. Do you face any challenges in getting the information about foreign market?

A) Yes B) no

If yes, specify

34. Are you satisfied by the support provided by our government in exporting seafood?

A) Yes B) No

35. Mention the opportunities that you see in the seafood exports in India in the coming days?

Thank you.