Chapter-6

Government and Fish Processing Industry

6.01 Introduction

The objective of this chapter is to examine the government support to the fish processing industry of Gujarat and the problems connected with it. The present chapter is divided into four sections. Section One deals with infrastructure support for fish processing. Section Two deals with government policy. Section Three deals with legal problems and Section Four deals with tariff and non-tariff barriers in the fish processing sector.

Section-I

INFRASTRUCTURE SUPPORT

6.02 Introduction

The modern fish processing is an organized activity deploying sophisticated machinery and management techniques observed in the tiny fish exporting sector. Adequate supplies of potable water, uninterrupted power supply, local availability of machinery, packing material and other inputs and specialized cargo movement facilities are the main physical infrastructure needed in this sector. Governmental intervention in this area therefore seems necessary. (Nair, 2001).

The Indian seafood industry is losing $ 1,257 million a year due to spoilage caused by an inadequate logistic system, according to the Seafood Exporters' Association of India. The total annual production is 5.2 million tonnes, worth £ 3.6 billion, of which only 9% is exported. However, 20% of the total

produce is destroyed due to incorrect handling and imperfect transportation and storage facilities (Seafood Processor, 2006).

"There is a shortage of facilities such as ice and chill rooms while much of the industry's systems and procedures are unhygienic. Our infrastructure is not in line with international standards. Congestion in the ports is a major issue when it comes to exports and this is exacerbated by the shortage of refrigerated containers. These issues, combined with high freight costs have made India's fisheries export sector considerably less competitive than that of rival countries such as China and other Asian countries. EU is the leading market for Indian seafood exports, taking over 28% of the total, followed by the US with 26% and Japan with 18%. While exports to the US and EU increased last year, exports to Japan, China and South East Asia declined" (Seafood Processor, 2006).

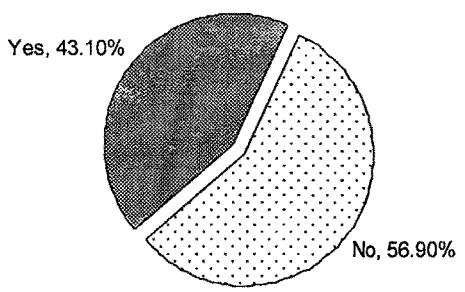
Infrastructure is believed to be the key factor in the development of any industry. Therefore, this section examines whether Gujarat fish processing sector has such necessary infrastructure support or not?

6.03 Electricity

"If an industry is represented by rapidly turning wheel, it is the energy that makes the wheel turn. Without energy the wheel will come to a halt and the modern industrial sector would stop functioning" (Desai and Bhalerao, 1999).

"Seafood processing is a power intensive industry that needs power all 24 hours. However, electricity is in short supply in most of the maritime states" (Venkatesan, 2001). It is therefore important to understand the conditions in the state of Gujarat.

Chart 6.01
Satisfaction in Electricity Service



The graph reveals that more than 50% of the fish processing units were dissatisfied with electricity service. Following reasons reported by fish processing units for this.

Table 6.01
Problems of Electricity

Problems of Electricity	Percent
Disruptions	34.5
High Electricity Rte	5.2
Disruptions and High Electricity Rate	17.2
Not applicable	43.1
Total	100.0

The problems that they face relate to the disruptions and the other being high electricity charges.

Studies have shown that high electricity cost affects industrial productivity. "As fuel prices have risen, so has the electricity cost. Kenyan industries are now faced with the harsh reality of business closures and likely relocations. The country will not only lose out on new investments but will also have current industries relocating to neighbouring countries with lower energy costs" (Anon., 2008).

Many of the respondents opined (43.1%) that this has financial implications for their firm. The following financial implications were reported by the fish processing units.

Table 6.02
Financial Implication due to Disruptions

Financial Implication due to Disruptions	Percent
High Generator Cost	31.0
Deterioration of Fish Quality	5.2
Decrease in Output	5.2
Machine Failure	1.7
Not applicable	56.9
Total	100.0

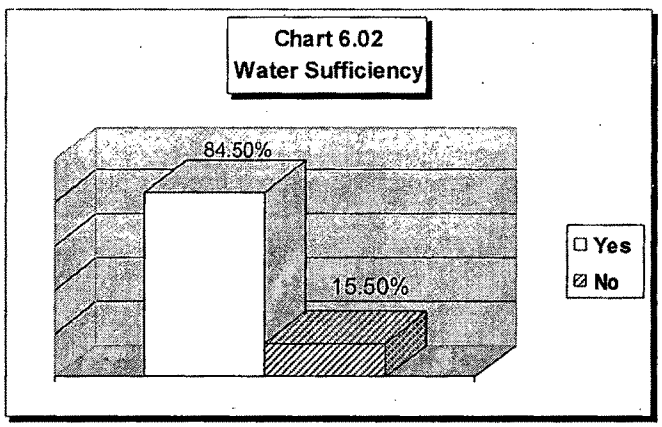
About 31% of the fish processing units reported that disruptions of the electricity supply results into increase in the fuel for the generator and therefore cost; and it also causes deterioration of fish quality (5.2%), reduction in optimum output (5.2%) as well. "Power cut has seriously hit the storage capacity as most varieties of fish are perishable ones. This has forced the processing units to cut the volume of processing drastically. (Shoukat, P., 2008).

6.04 Water

Water is essential for fish processing, good hygiene and the production of a safe product. It is recommended that the regular washing down with copious quantities of water is the key to maintaining cleanliness. "Keep all facilities and equipment clean and maintain high standards of personal hygiene" (Hull, 1996).

In fish processing units, water requirement varies between 2,000 to 8,00,000 litres per day. In the present study, the average water requirement was found to be 85077 litres per day. This depends on the quantity of fish being processed, type of products and other factors. The Export Inspection Council (EIA) recommended that 10 litres of water be used to process one kilogram of fish.

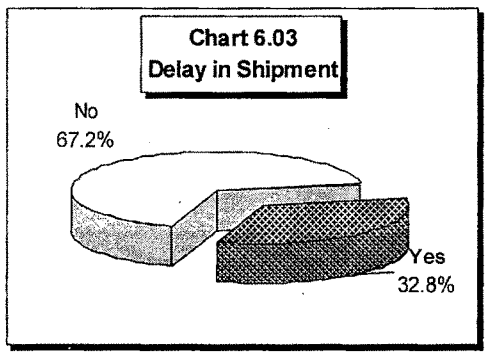
The average quantity of fish processed was found to be 5187.41 tons yearly. The average working days are 244. So, the average quantity processed would be 21259 kg/per day, and the average amount of water required would be 85077 litres. Though these rough calculations are far below the required prescribed norms.



Though in the present study the processing houses in Gujarat do not face water problem and 84.5% of the fish processing units get sufficient water for fish processing, only 15.5% do not adequate water. In case of potable water, "almost all the units in the Saurashtra region have to purchase water. The water supply from municipal sources is either non-existent or woefully inadequate" (Thomas, K., 2003). The non-availability of water and purchasing of water results into high cost of water tankers, poor quality of the product and heavy investment in treatment plants. Non-availability of water will bring production activity to a standstill. Clean water in sufficient quantities is essential for fish processing. A majority of the units (70.7%) have their own water arrangement, while 29.3% have no such arrangement. 63.8% of the units have invested in water resources (water tankers and bore-wells). On an average a processing firm invests around Rs 11.57 lakhs for this facility. In short, lack of sufficient availability of water increases cost of production.

6.05 Transportation

Transport cost is normally borne by the buyer either directly or indirectly. In the present study also, 17.2% of the fish processing units reported that the transportation cost is borne by the buyer, whereas 82.8% reported that it is borne by the seller. But it is paid by the buyer as part of the payment depending on payment conditions such as F.O.B., C.I.F.



The graph shows that 32.8% of the fish processing units face problems of delay in shipment, whereas 67.2% do not face such problems. K. Rama Mohan Rao and D. Vijaya Prakash have said, "The fish and fish products are most perishable and as such any problem in transport may lead to disastrous consequences. Ocean transport is used mostly by the Indian exporters to reach overseas markets. Shipping space becoming scarce during the season periods and due to that the

exports are getting delayed" (Rama Mohan Rao, K. and Vijaya Prakash, D., 2000).

In the present study, 31% of the fish processing units reported that shipment was being delayed due to the shipping company's schedules. During some seasons space availability is low and the next shipment is only after some interval. Sometimes fish processing units have an order to deliver, but there is no shipment scheduled. Sometimes the delay in shipment is also due to priority given to other products such as potatoes and onions. Fish processing units were of the view that during monsoon, their nearest facility was unable to handle shipping, leading to delay.

Export of seafood from Kerala has come to a near standstill as the heavy congestion of containers at the Kochi port has affected cargo movement, stockpiling marine products worth crores of rupees. Seafood exporters are worried that any further delay in clearing the cargo would have serious repercussions on the prospects of seafood exports, especially since these consignments are meant for the peak shopping season of Christmas. Normally it takes about a month of voyage for the shipments to reach their destinations abroad. "This kind of delay will result in loss of reputation and credibility. This damage is more serious and far-reaching than monetary loss," says Mr. Sandu Joseph, Secretary, and Seafood Exporters Association of India (SEAI). According to SEAI, an estimated 300-400 container, carrying products worth at least Rs. 100 crores are now stuck at the port and outside the premises of seafood processing units, each container carries 20 tonnes of seafood (Nair, V., 2004).

6.06 Banking

While most (82.2%) of the fish processing units do not face any problem in banking procedures, 17.2% of the units reported facing problems in banking procedures. These are as under.

5.2% of the fish processing units reported that banks are not ready to give loans without security which at times they find difficult to arrange. 6.9% of the units reported that bank procedures were lengthy and complex for loans and other services. They also reported that bank staff was lazy and their attitude to customers was "physically slow and mentally dull".

One of the respondents was of the view that interest rates in India are higher than those in other countries. This result into high cost of production and therefore price of the product.

In brief, the fish processing units are unhappy with the banking services in some areas. They feel the interest rate is high, and are displeased with the lethargic attitude of bank personnel.

6.07 Other Problems

"The fish processing industry lack several other basic amenities and ancillary facilities such as fishing harbours, land availability for development, drainage facilities, qualified personnel, repair facilities for fishing boats and adequate training facilities" (Thomas, K., 2003).

Table 6.03
Other Problems

Other Problems	Responses		Percent of cases
	N	Percent	
Insurance	6	8.8	10.3
Training	15	22.1	25.9
No MPEDA Office	1	1.5	1.7
No Direct Shipment Facility	19	27.9	32.8
No Problem	27	39.7	46.6
Total Responses	68	100.0	117.2

To safeguard themselves against payment risk, the units take insurance from ECGC (Export Credit Guarantee Corporation). However, these are not satisfactory. "Training facilities for the labour and supervisory staff in the industry

are less than adequate. As the training facilities available are not commensurate with the increase in demand for skilled workforce, productivity is affected" (Thomas, K., 2003).

6.08 Availability of Skilled Manpower

"Skilled manpower is highly essential in fish food processing. Even though fish processing is dealt with in many agricultural universities and some institutions, many of these are tailor-made for general food science applications or product processing for export. A unified curriculum aimed at tackling the biochemical, nutritional, and bacteriological aspects of fish processing for domestic consumption has to be drawn up in harmony with the national fish food standards. An agro processing technologists or a general food chemist may not make a good fish processing technologist, owing to the biochemical and bacteriological peculiarities which the fish possesses" (Nair, 2001).

"There is a serious inadequacy of qualified and experienced personnel required for the maintenance and repair of the processing units, viz. refrigeration equipment, cold storages, freezers, etc. Processing units and ice plant owners have to depend on the second grade facilities available, and this often means that the equipment is performing at sub-optimal levels" (Thomas, K., 2003).

82.8% of the fish processing units in the study reported having qualified and experienced personnel required for maintenance and repair, but 8.6% of them do not have them. Still, the majority of the fish processing units reported that training provided by the government is inadequate and not much relevant.

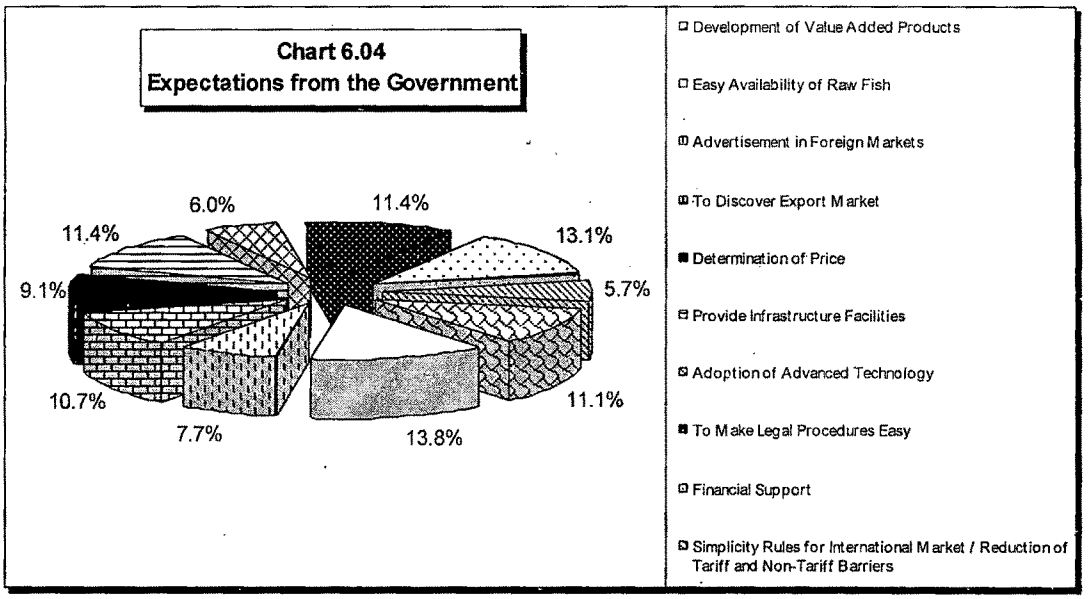
Section – II

GOVERNMENT POLICY AND INDUSTRY

6.09 Introduction

The primary objective of this section is to understand role of government in the growth of fish processing industry.

6.10 Expectations from the Government

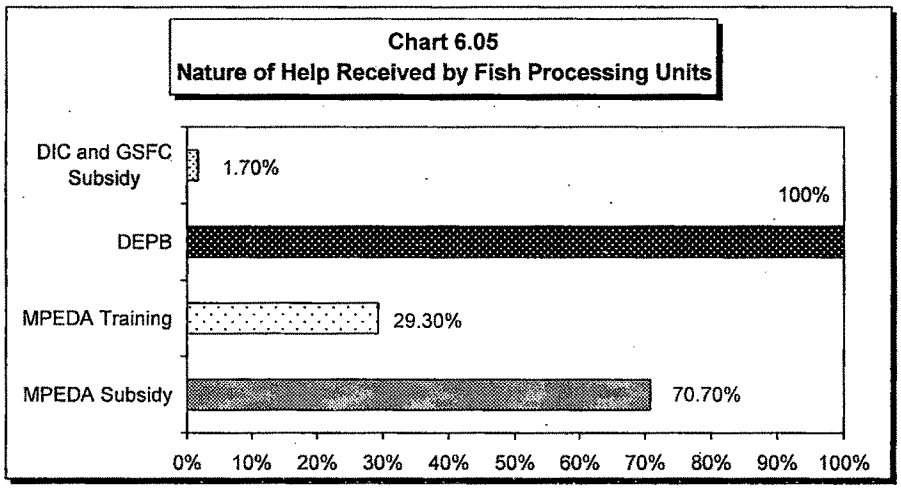


Industry can thrive better with government support. The expectations of the respondents range from government interference in the market, exploring international markets to financial support. "Fish exporters opined that MPEDA should take up publicity campaign in favour of Indian exporters in the markets abroad. They feel that publicity has a pivotal role to play in influencing the importers to buy marine products. Since the market is very sensitive, the word of mouth communication through opinion leaders and campaign through credible third parties build-up strong positive image and thereby establishes lead over competitors. The independent exporting organizational resources are unable to promote their products. Therefore, the MPEDA should take up such initiative (Rama Mohan Rao K., and Vijaya Prakash, D., 2000). The priority areas where

fish processing units wanted government support were in raw fish availability and in financial matters.

6.11 Financial or Technical Help from Government

MPEDA is a government organization, created to help the fish processing units. All fish processing units have received financial or technical help from the government. MPEDA and MOFPI subsidise 40 to 50% of project cost for fish processing (SEAI, 2007). Most of the units in the present study mentioned that financial assistance from MPEDA reduced their investment burden and also the cost of production.



Nearly 71% of the units had received subsidy and training (29.3%). In fact, all the units have received subsidy from DEPB and few from DIC and GSFC subsidy (1.7%).

6.12 DEPB scheme

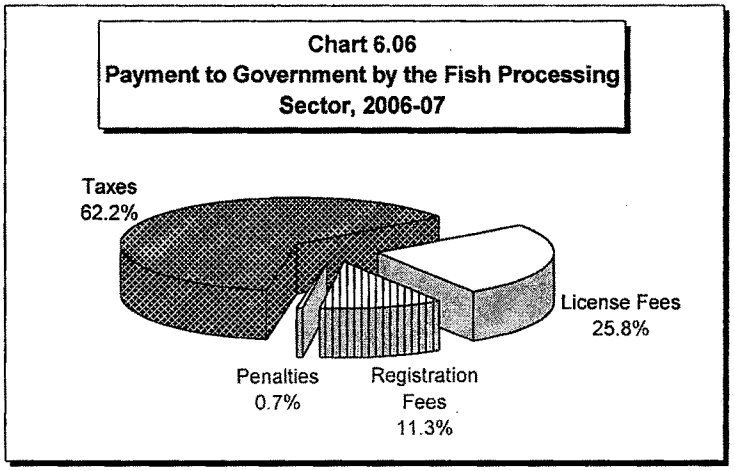
DEPB is an export promoting scheme introduced by DGFT, government of India. DEPB is an export incentive to fish processing units with 8% of F.O.B. value. The units reported that they all export under DEPB scheme and receive benefit from the government. SEAI reported that the earlier DEPB rate was 3% and at the request of SEAI, the government increased it to 5%. Subsequently, in 2007-08, due to problems like appreciation of the rupee, steep increase in fuel costs, and levy of anti-dumping duty in the USA, the government had enhanced

the DEPB rate to 8% (SEAI, 2007). "This DEPB scheme is vital for us because our margins are dwindling and if this was removed, it would have been curtains for our industry. We seek more help and support from the centre," Anwar Hashim, president of the Seafood Exporters Association of India said (India Prwire, 2008). The DEPB scheme of the government is a blessing for fish processing units, sustaining the fish processing industry in unexpected disasters like rupee appreciation, hike in fuel prices or lower price realisation.

6.13 Rupee Appreciation

"Fish exporters expressed that the frequent fluctuations in the exchange rates are causing lot of problems to them and they are quite unsure of the returns due to the fluctuations" (Rama Mohan Rao, K. and Vijaya Prakash, D., 2000). The fish processing sector has been severely affected by rupee appreciation of over 15% over the past 6 to 8 months. Exporters are unable to compete with their Asian competitors like China, Vietnam, and neighbouring seafood exporting nations like Bangladesh and Sri Lanka (SEAI, 2007). Profit is being wiped out due to rupee appreciation, making survival difficult. To protect the fish processing industry and the livelihood of thousands of people, the government introduced relief schemes. 93.1% of the fish processing units reported receiving benefit from the government to counter rupee appreciation.

The government has actively taken two steps to provide relief against rupee appreciation; the DEPB rate was increased from 5% to 8%, and the interest rates for fish processing sector were subsidized by an additional 2%. This indicates that government is playing an active role in the development of fish processing industry and even protects against unexpected disaster.



At the same time, fish processing is a valuable source of income for the government. The government collects on an average Rs. 15 lakhs annually from each fish processing unit as revenue by various ways like income tax, government cess, professional tax, municipal tax, excise duty, CST, VAT, licence fees, registration fees and penalties. It was reported that the government gets an income of Rs 876.42 lakhs annually from the fish processing sector of Gujarat.

6.14 Subsidies

Adam Smith's interest in the management of fishing industry led him to analyse the subsidy system prevailing in England at that time. He points out that subsidy on production would be cheaper in the home market than elsewhere. Smith also said that subsidy had ruined boat fishery. After a thorough analysis of the merits and demerits of the subsidy system, Adam Smith concluded that the usual effect of such subsidies was to encourage production (Smith, A., 1937). However, "subsidy should be used as medicine not as food".

70.0% of the fish processing units in the study reported receiving subsidy from MPEDA (government). The Seafood Exporters Association of India has reported that the units have a problem in availing the subsidy. The two government organizations usually providing subsidy to fish processing sector are Marine Products Export Development Authority (MPEDA) and Ministry of Food Processing Industry (MoFPI). Some subsidy is given by MoFPI only and is not

covered by MPEDA. Other agencies are District Industrial Centre (DIC) besides and GSFC.

The subsidy amount given by government organizations varies from Rs 2 to 60 lakhs. The average subsidy was Rs 22.11 lakhs. These subsidy schemes encourage and increase the ability of fish processing units to take risk.

6.15 Welfare Schemes

The welfare schemes reported by fish processing units are the labour insurance scheme, DEPB scheme and interest subsidy. There are many welfare schemes of the government for the development of the fish processing industry, but more than 60% of the units have no information about them.

MPEDA is the nodal agency for the development of fish processing in India. It has introduced 20 export promotion schemes for the encouragement of fish export, as follows.

Table 6.04
Subsidy Schemes for Fish Processing

Item	%	Maximum limit
1.Subsidy for acquisition of machinery for tuna cannery / processing of value added tuna product	25%	Rs.65.25 lakhs
2.Subsidy for automatic flake/chip tube ice making machine	25%	Rs.2.25 lakhs
3.Subsidy for upgrading deficient cold storage	25%	Rs.3.50 lakhs
4.Assistance for establishment of Chill Room facility in seafood processing plants	25%	Rs.3.00 lakhs
5.Financial support for acquisition of Refrigerated Truck/Containers	25%	Rs.3.50 lakhs
6.Financial assistance for setting up large Cold Storages	25%	Rs.60 lakhs

7.Assistance for the setting up of new/ modern ice plants/ renovation of existing ice plants	-	Rs.22 lakhs for new units and Rs.12 lakhs for renovation.
8.Subsidized distribution of insulated fish boxes	50%	Rs.1 lakhs
9.Subsidy for generator sets	25%	Rs.2.50 lakhs
10. Assistance for installation of Water Purification System in seafood processing plants.	25%	Rs.7.50 lakhs
11. Assistance for setting up of Effluent Treatment Plants in seafood processing plants.	25%	Rs.7 lakhs
12. Interest subsidy assistance for seafood units to facilitate upgradation.	7%	Rs.15 lakhs
13. Assistance for establishment of Chill Room facility in seafood processing plants.	25%	Rs.3 lakhs
14. Subsidy for setting up Mini Laboratory.	25%	Rs.1.50 lakhs
15.Assistance to seafood processing units for construction / renovation of Captive Pre-processing Centres with upgraded facilities	50% (New) 45% (Ren.)	Rs.15 lakhs for new units and Rs.13.50 lakhs for renovation.
16. Financial assistance to pre-processing units for construction /renovation of independent pre-processing centres with upgraded facilities.	50% (New) 45% (Ren.)	Rs.22 lakhs for new units and Rs.19.80 lakhs for renovation.
17. Financial assistance for procurement of quick testing kit for antibiotics.	33.3%	Rs.1 lakhs
18. Assistance for setting up of Ornamental Fish Breeding units.	50%	Rs.0.75 lakhs
19. Developmental assistance for Export of Ornamental/ Aquarium fishes.	10%	Rs.3 lakhs

20. Financial Assistance for extending Insurance Coverage to Workers Employed in the Fish Processing Units.	The Insurance scheme is envisaged for workers employed in the Seafood Processing Units with a terminal benefit of Rs50,000 for the insured, medical expenses (hospitalization) reimbursement up to Rs10,000/- for the insured or his/ her parents or dependants and also to insure house hold articles against calamities either natural or man made up to Rs20,000/- and for emergency medical evacuation, Rs.2,000 (maximum).	The premium of the insurance will be paid by the employer, employee and MPEDA in a ratio of 50%, 25% and 25%. The annual premium works out to Rs.200/- per worker.

Source: www.mpeda.com

Despite all these schemes, the government can play an active role in the growth of the industry the determination of the raw-material price such as in case of administrative prices for agricultural products. Sick units should have easy and fast availability of loans. MPEDA or any other agency should undertake welfare schemes for workers employed in fish processing units.

"Processed Fish exporters strongly feel that the Government must take an active initiative and avoid political bans on Indian products in some countries. The government of India should develop bi-lateral relations with the countries and enter into agreements that promote export and import trade in both the countries for mutual benefit. They also opined that the government of India should take up market research programmes through MPEDA and other market research organizations, to explore new markets for Indian marine products to avoid excessive dependency on other countries. The results of the research studies will be helpful in identifying the potential markets around the globe and as such to design a promotional programme to create demand for our products in the

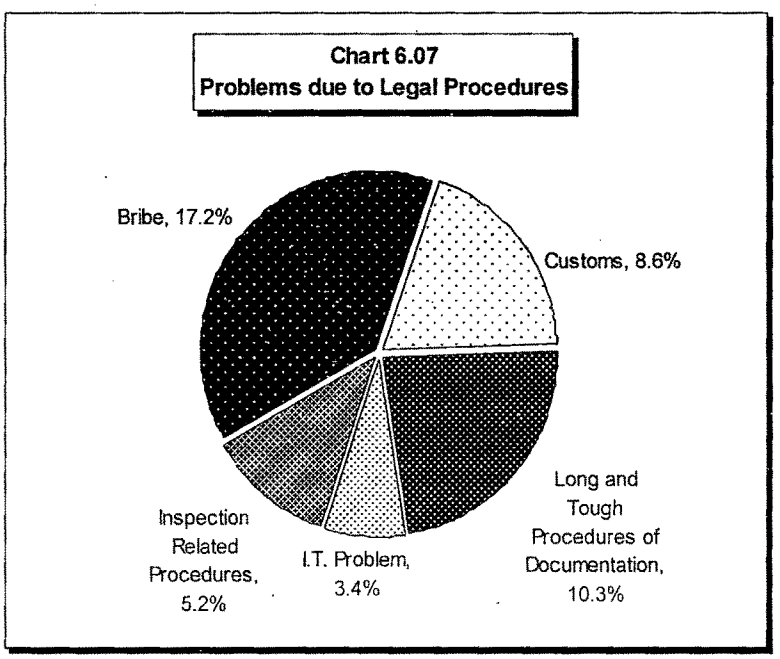
markets. They also wanted the government to take-up special programmes to avoid uncertainty and fluctuations in the supply of marine catch" (Rama Mohan Rao, K. and Vijaya Prakash, D. 2000).

Section - III

PROBLEMS IN LEGAL PROCEDURES

6.16 Legal Problems

The objective of this section is to examine the legal problems faced by fish processing units in dealing with government agencies. Fish processing units wishing to establish an enterprise, needing finance, hiring labour, sanctioning subsidy or exporting containers must follow the procedures as determined by the government. 44.8% of the fish processing units faced problems related to these procedures. The problems faced by fish processing units are given below.



Some of these problems include officers demanding bribes (17.2%), customs (8.6%), long and tough documentation procedures (10.3%), and complicated inspection related procedures (5.2%).

Section - IV

TARIFF AND NON-TARIFF BARRIERS

6.17 Tariff and Non-Tariff Barriers

In 2002, about 38% of world fish production of 133.0 million tons entered the international trade, against 10% of meat and 8% of primary forest products. Trade mainly flows from developing to developed countries. Despite great scope, very little trade flows between developing countries. In 2002, global import of fish and fishery products was US $ 61.4 billion, of which developed countries accounted for 82%. Global export of fish and fishery products was US$ 58.2 billion, of which the share of developing countries was 49% (Venkatesan, V., 2005).

"Fish and fishery products are exported from India over 73 countries. During 2004-05, a total quantity of 461329 tons of fish and fishery products valued Rs 6646.69 crores (US$ 1478.488 million) was exported from the country. The main destinations were E.U., USA, Japan, China, South-East Asia and Middle East. Exports to E.U. accounted for 27.37%, of the total export of fish products from the country by value, followed by USA (23.37%), Japan (18.09%), China (10.42%), South East Asia (9.46%) and Middle East (3.7%). Export of fish and fishery products are vital to developing countries including India. Export production and processing also promote income generation and employment. But the barriers in the international trade (which are too many) are hindering the overall development of the fisheries sector in general and the export in particular" (Venkatesan, V., 2005).

India faces some trade barriers in selling fish products in international markets. There are two types of trade barriers viz. (1) Tariff Barriers (2) Non-tariff Barriers. Countries impose these barriers for three purposes: (1) to safeguard human health, (2) to protect the domestic fishing industry, and (3) to save precious foreign exchange. For example, E.U. countries have laid down quality

standards for fish processing and export, to ensure hygienic food to their people. The USA has imposed anti-dumping duty on shrimp to protect the domestic industry. India has imposed tariff rates on import of fish to save valuable foreign exchange. Sometimes it is difficult to implement these standards and are an obstacle to trade, such as the E.U. standards for water quality and concentration of chlorine in processed water. These standards are sometimes difficult to follow and have little effect on fish quality in case of non-compliance, these standards discourage the exporting countries. As a result, India prefers selling to markets in countries like China, Thailand, and Vietnam where these standards are not very stringent.

In the present study the processing units having faced tariff and non-tariff barriers, in fact, many of the respondents were ignorant about tariff and non-tariff barriers.

Table 6.05
Tariff and Non-Tariff Barriers Reported

Barriers	Percent
EU Quality Standards	31.0
American Anti-Dumping Duty on Shrimp	8.6
Duty on Products in the Chinese Market	3.4
Import Quotas	1.7
Not Applicable/Don't Know	55.2
Total	100.0

The imposition of anti-dumping duty was more than double the price of Indian shrimp in the US markets. The president of the Seafood Exporters Association of India (SEAI), A. J. Tharakan has mentioned that, "The duties are unwarranted. We undertake farming that is why we are able to sell at lower prices unlike in the U.S. where the shrimps are sourced from the sea at high cost. Moreover, the American shrimp industry meets only 10 per cent of the local demand. We will try and prove at the final stage of investigation that we are not dumping" (Hindu, 2004).

"From the beginning, India's seafood exporters have contested the claims raised by their counterparts in the U.S.A. point highlighted by Indian exporters is that there are differences between the varieties of shrimps caught in the U.S. and in Indian waters. Besides, shrimp harvesting and processing in the U.S. are capital-intensive processes, while in India they require only a low level of investment. Indian exporters would therefore enjoy a price advantage". (Hindu, 2004).

The antidumping duty imposed on Indian shrimps was a serious setback to India's exports to the USA. This became a major trade barrier for India. During 2006-07, shrimp exports to USA dropped by 23%. Further, the number of shrimp exporters to the USA had come down from 179 in 2001-02 to 80 in 2006-07 (SEAI, 2007).

"In the international market of fish and fishery products, one of the most serious difficulties faced by exporters is that different standards and regimes are being imposed by importing countries on producing countries to ensure that products meet the requirements of the target market. Even after the ratification of the Agreement on Sanitary and Phytosanitary (SPS) measures and the Agreement on Technical Barriers to Trade (TBT), under the World Trade Organization (WTO), differences among various national standards and inspection systems may maintain or create new non-tariff trade barriers" (Ababouch, L. et al, 2005).

In the present study, 31% of the fish processing units reported that they cannot export to European countries due to strict quality standards. A few reported that fish importers had quotas in their markets. If they import more than the quotas, then the import duty is high. 5.2% of the fish processing units reported that they face market restrictions for particular destinations. "Some countries do not permit import of Indian marine products due to political reasons. Fish exporters opined that "such bans in any part of the world will demoralise Indian exporters and damage the image of the Indian products in the other parts of the world".

According to Anjani Kumar, the impressive growth performance of India in export of fisheries may be limited by the stringent international regulations being pursued by importing countries under the guise of food safety and environment protection (Kumar, A., 2004).

6.18 Conclusions

The objective of this chapter is to examine the government support to the fish processing industry of Gujarat and the problems related to it. Fish processing units have most of the infrastructure facility.

All fish processing units have received financial or technical help from the government, in terms of subsidy, training and DEPB assistance. However, fish processing units reported that the training facilities available are not commensurate with the increase in demand for skilled workforce, therefore productivity has been affected. They also reported that subsidy sanctioning procedures are tough; therefore several units are stuck with financial crisis due to this. Further, fish processing units reported having to pay bribes to corrupt officers; else their work would not get done. The growth of fish export is also restricted by several tariff and non-tariff barriers.

REFERENCES:

Ababouch, L. et al (2005) *Causes of Detentions and Rejections in International Fish Trade.* Rome: Food and Agriculture Organization of United Nations (FAO).

Anon. (2005) *Evaluation of Fish Waste Management Techniques* http://www.scotland.gov.uk/Publications/2005/03/20717/52860 [viewed on 08.01.2009]

Anon. (2008), *High electricity cost affecting industrial productivity* http://en.afrik.com/article14550.html [viewed on 09.01.2009]

Anoruo and Braha (2008), *Corruption and Economic Growth: The African Experience* http://www.jsd-

africa.com/Jsda/Spring2005/ArticlePDF/Arc_Corruption%20and%20Economic%20Growth.pdf [viewed on 08.01.2009]

Bill, R., (2006) *Experts says corruption hinders global economic development.* http://www.voanews.com/burmese/archive/2006-08/2006-08-02-voa4.cfm

commodityonline.com. (2007) *How much food does India waste?* http://www.rediff.com/money/2007/mar/16food.htm [viewed on 08.01.2009]

Desai and Bhalerao (1999) *Industrial Economy of India.* Mumbai: Himalaya Publishing House.

George, J. (2008), Seafood Exports Slide On Power Cuts, Ice Shortage. *Business Standard,* September 03, 2008, http://www.business-standard.com/india/news/seafood-exports-slidepower-cuts-ice-shortage/333270/ [viewed on 13.01.2009]

Hindu (2004) Seafood Exporters To File Brief On Monday, *The Hindu,* Saturday, January 24, 2004, http://www.thehindubusinessline.com/2005/05/20/stories/2005052001361000.htm [viewed on 16.12.2008]

Hindu (2004) U.S. Imposes Anti-Dumping Duty on Indian shrimps, *The Hindu,* Saturday, July 31, 2004, http://www.encyclopedia.com/doc/1G1-119187879.html [viewed on 16.12.2008]

Hull (1996), *Fish Processing.* Technical Information Sheet No. 1996/01/FT, Fish Technology Department, Seafish Industry Authority, Seafish House, St. Andrews Dock,Hull, HU3 4QE

India PRwire (2008) *Seafood exporters happy as export incentive stays* Kochi, Kerala, India, Saturday, March 30, 2008 http://www.thaindian.com/newsportal/business/seafood-exporters-happy-as-export-incentive-stays_10032868.html [viewed on 16.12.2008]

Kumar, A. (2004) Export Performance of Indian Fisheries: Strengths and Challenges Ahead. *Economic and Political Weekly,* Vol. XLI, No. 5,September 18, 2004, pp. 4264-70, Mumbai.

Kumar, S., (1997) *A Textbook of Marketing Management.* Mumbai: Himalaya Publishing House.

Mills, M., (1998) *Electricity Consumption is the Key to Economic Growth* http://www.globalwarming.org/?s=Consumption+is+the+Key+to+Economic+Growth&x=26&y=9&=Go [viewed on 09.01.2009]

Nair (2001) Ed. Datta, S. (2001) *Fisheries Sector Development in Gujarat.* Ahemdabad: Indian Institute of Management (IIM).

Nair, V., (2004) Congestion at Kochi Port Hits Seafood Exports, *Business Line: Financial Daily,* Saturday, October 02, 2004 http://www.hinduonnet.com/thehindu/thscrip/print.pl?file=2004100202061000.htm&date=2004/10/02/&prd=bl& [viewed on 16.12.2009]

Rama Mohan Rao, K. & Vijaya Prakash, D. (2000) *Export Marketing of Marine Products.* New Delhi: Discovery Publishing House.

Seafood Processor (2006) Indian Processing Units Strike. *Seafood Processor,* Vol. - , No.13, March-2006, p.4, UK.

Seafood Processor (2006) Poor logistics lose Indian seafood industry $ 1.2 bn. *Seafood Processor,* Vol. - , No.13, July-August-05, p. 8, UK.

SEAI (2007) 37th *SEAI Annual Report 2006-07.* Cochin: The Seafood Exporters Association of India (SEAI).

Shoukat, P. (2008) Power Crunch Woes Hit Marine Export Business, The Times of India, December 19, 2008, http://timesofindia.indiatimes.com/search.cms. [viewed on 13.01.2009]

Smith, A., (1937) *An Inquiry into the Nature and Causes of the Wealth of Nations.* New York: The Modern Library.

Thomas, K. (2003) Eds. Boopendranath et al (2003) *Sustainable Fisheries Development: Focus on Gujarat.* Cochin: Society of Fisheries Technologists.

Venkatesan (2001) Ed. Datta, S. (2001) *Fisheries Sector Development in Gujarat.* Ahemdabad: Indian Institute of Management (IIM).

Venkatesan V. (2005) Trade Barriers in the International Trade of Fish and Fishery Products with Special Reference to India. *Seafood Export Journal,* Vol. XXXV, No. 7 July-Aug-05, pp.3-11, Cochin.