A Report on Frozen Food and Fisheries Sector of Bangladesh

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Executive Summary

The frozen foods export is the second largest export sector of the country. The massive natural resources available in Bangladesh make this sector particularly promising for investors looking to supply in international as well as in domestic markets. Shrimp is one of the leading exportable products in Bangladesh. Bangladesh is earning about 500 million USD of foreign currency yearly by exporting shrimp and contributing 3.78% in GDP.

The public sector corporation and the private organizations have setup about 148 numbers of shore based export oriented fish processing plants at Dhaka, Chittagong, Khulna, Jessore, satkhira, Bagerhat, cox`s Bazar, Chandpur, Kishoregonj, Patuakhali. Shrimp plays an important role in the economy of Bangladesh. It is the second largest export industries after garments from which Bangladesh earned as US$ 456 m in the year 2006 (BFFEA, 2008). Among shrimp producing countries, Bangladesh ranks fourth with respect to area of shrimp farming and sixth in volume of production. The fisheries sector including shrimp, contributes about 6% to the national GDP and 5% to the national export earnings. Shrimp alone contributes about 93% of sectoral export earnings and 4.99% of the national earning item in Bangladesh (DoF, 2007).

1. Introduction

Shrimp culture is expected to continue to play an important role in ensuring food security and poverty alleviation, particularly for the rural poor. The urban population will be benefited from the improvement in processing, value adding, and marketing of the shrimp industry as a whole. Incidence like "EU ban on Bangladeshi shrimp" should not happen again and most importantly, this industry is operating under capacity and can increase the productivity up to five times than the current capacity. A majority of workers in the processing industries are women. The shrimp industry benefits three to four million "mostly poor" Bangladeshis while providing livelihood directly numbering some 11, 50,000 people. In 2007-2008, a total of 2, 23,095 Metric ton shrimp produced in Bangladesh that contributes 19, 56,790 core taka in the GNP. There is ample demand in the international markets for shrimp and Bangladesh is blessed with an environment friendly for shrimp production. Technological innovation has been creating a greater impact on domestic economy. A primary study was undertaken to detect the problems plaguing the different levels of the value chain of shrimp in the country. Consequently, the study was conducted in which the participants were representatives of the various stakeholders in this industry. The increasing demand and steadily rising prices of shrimp encouraged its cultivation in the coastal belt of the country.

By 2007-08, the shrimp farming area occupied nearly 2, 17,877 hectors; the main fresh water shrimp farming districts are Khulna, Bagerhat, Jessore, Narail, Gopalganj, Pirojpur and Noakhali. More or less 80% of the shrimp farming areas are in the southwestern region of Bangladesh while the rest are in the southeastern part. Shrimp is the second most important export item in Bangladesh.

Basic Information on Frozen Food Industries in Bangladesh

No of Fish Processing Plants	133
Plants Licensed by the GOB	75
Fish Processing Plants Approved by the EU	65
Quantity of Frozen Food Exported in 2007-2008	75,299 Metric Ton
Shrimp Exported in 2007-2008	49,907 Metric Ton
Processing Capacity in the Total Plant	2,65,000 Metric Ton
Export Earning from Shrimp & Fish 2007-2008	TK. 3396.28 Crore

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No of Shrimp Hatchery	105
Production of Shrimp Fly	1200-1500 Crore
Shrimp Cultured Land	1,70,000 Hector

Source: BFFEA, 2013

2. Historical Background

Shrimp culture is an old practice in the coastal areas in Khulna, Satkhira, Bagerhat and Cox's Bazar districts. In the past, people trapped tidal water in low lying inter tidal lands by constructing small dikes and harvested shrimp and finfish after 3-4 months. There was no stocking of fry under this system and only wild seeds of shrimp and fish carried by tidal water were allowed to grow without any form of management. Shrimp species harvested from the country are mainly black tiger shrimp (Bagda), brown shrimp (Horina), Indian white shrimp (Chaka) and giant freshwater shrimp (Golda).

After the independence of the country, interest in shrimp production grew with rising price and demand in international markets. Shrimp farms were establishing in peripheral lands near the mouth of coastal rivers where inundation of saline water is possible. From the late 70's to early 80's, shrimp culture system expanded steadily. The industry grew rapidly to the mid 1990's. Local shrimp hatcheries did not become established until the late 1990's. In 1994 white spot disease spread throughout the semi-intensive farms and extensive farms. Most investors incurred heavy losses in successive years and outsiders lost interest in this business. Freshwater shrimp or Golda farming started in the mid 1970's and achieved steady growth during the late 1980's and 1990's. Such farming was subjected to less criticism than brackish water shrimp farming. Freshwater shrimp farms in rice fields were found mainly around coastal districts with some exception into inland districts with perennial water bodies. Environmental problems sometimes associated with shrimp farming were mainly related with habitat destruction and environmental degradation.

3. Overview of Fisheries Sector in Bangladesh

The water body in Bangladesh is suited for the production of fish, the most important resource of the freshwater ecosystem. Bangladesh ranks third among the world's largest inland fish producing countries after China and India. Fish is the major source of animal protein consumption in Bangladesh contributing to about 60 percent of the per capita animal intake in the diet of the people of Bangladesh. Total water area under inland fisheries is about 5.3 Million hectors where 92.27 percent is inland open water, 7.73 percent is inland closed water.

There are 148 fish dispensation plants in Bangladesh and 88 amongst those are approved by the government of Bangladesh. Shrimp farming is done on approximately 170,000 hectare of land, whereas 100,000 hectare is still unused. Bangladesh earns about 500 million US dollar every year from export of frozen food. During the last decade, the frozen food industry of Bangladesh has earned a good reputation globally.

4. **Types of Fisheries**

There are about 260 species of fish in Bangladesh which can broadly be grouped into five broad categories - hilsha, carp, catfish, prawn and others. During monsoon floods, population of all fish and prawn species increase both in numbers and in biomass. They occupy all the available niches in the expanded aquatic habitat produced by the monsoon floods. Fisheries in Bangladesh are broadly into four categories:

(i) Inland capture (open water),

(ii) Inland culture (closed water),

(iii) Marine industrial or trawl fishing, and

(iv) Marine artisanal or small scale fishing.

5. **Production and Yield**

The inland fishery is the main source of fish production which comprises about 78 percent of total fish production. In 2002 the area under total inland fisheries was 5.3 Million hectors and total catch was 1475 thousand metric tons, implying a yield of 278 kg per hectare. Within the inland fishery, the contribution of the closed culture water is higher than that of the open water capture. Inland open water fisheries are natural systems. The biological cycle of these fish depends on the nature and there is no human intervention in the reproduction cycle and growth of fish. Total production in the inland open water fishery in 2002 was 688 thousand tons (DOF, 2002) which was 46.64 percent of total inland fish production and 36.4 percent of total fish production (inland plus marine).

Ponds, oxbow lakes and shrimp farm fall into the category of the inland closed water fishery. The pond fishery and the coastal aquaculture are main sources of the inland closed water fishery. The coastal aquaculture consists primarily of brackish water shrimp farming. An area of 141,353 hectares is under shrimp culture in the southern part of Bangladesh. Total area under the inland closed water fishery is 413,341 hectares (7.73 percent of total inland fisheries). In 2002 total capture in the inland closed water fishery was 787 thousand tons which was 53 .36 percent of total inland fish catch and 41.64 percent of total (inland plus marine) fish production.

The quantity of fish produced in the marine sector is 415 thousand metric tons which is 21.95 percent of the total fish production (2002). The share of trawl fishery is very small. Only 6.4 percent in total marine fisheries

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and 1.3 percent in total fish production (2002). Main production in the marine sector is performed by mechanized and non-mechanized small boats.

6. Income and Employment

The fishery sector is a source of income and employment to a large number of people particularly in the rural areas of Bangladesh. Four types of fishermen are involved in fishing: (i) professional fishermen: who earn their livelihood entirely from fishing (ii) part- time fishermen: who fish for only part of the year to supplement their income; they are engaged in other employment, for example, in agriculture for the rest of the period (iii) subsistence fishermen: who fish occasionally for subsistence rather than income, and (iv) fish farmers: who own ponds and operate fishing activities. About 2 million people are employed in fisheries sector on a full-time basis which is 7 percent of the total employment of Bangladesh (DOF, 2002).

7. Shrimp Sector in Bangladesh

Area under Shrimp Cultivation Within the fisheries sector the contribution of shrimp is the highest in terms of foreign exchange earnings and employment generation. Shrimp is cultivated in the brackish water of the coastal areas of Bangladesh which are situated in the coastal districts of Chittagong, Khulna, Bagerhat and Shatkhira. Two types of shrimp are cultured in Bangladesh

I. Bagda which is cultivated in brackish water, and

II. Golda which are sweat water shrimp and can be cultivated in any region.

Currently about 37,397 farms are cultivating bagda with an average farm size of 4.5 hectares. About 60 hatcheries are in operation, most of which are located in Cox’s Bazar. Golda shrimp is produced in an area of 30,000 hectares and its average farm size is only 0.28 hectare. Area under golda is expanding at the rate of 10-20 percent per year, in an unplanned way though. The number of golda farms is 105,000, mostly located in the Khulna division.

According to BFFEA there are 128 shrimp processing factories located in Khulna, Bagerhat, Satkhira and Chittagong out of which 61 has license from the government to export, 44 has the permission to export to the EU (BFFEA, 2004).

About 33 percent of shrimps grown in Bangladesh are exported. As shrimp has become an important source of export earnings in Bangladesh the area under shrimp cultivation has also undergone significant expansion. During 1990s the area under shrimp cultivation increased by three fold. At present the total area under shrimp cultivation is about 141,353 hectares which is about 1 percent of the total land area of Bangladesh. The method of shrimp cultivation in Bangladesh is extensive with low input, little or no nutritional inputs and with little or no mechanization.

8. Yield and Capacity Utilization

Although land under shrimp production is increasing, the yield rate of bagda is declining. The present yield of bagda is 150-160 kilogramme (kg) per hectare which was 230 kg per hectare in 1995-96 (Aftab, 2004). However, the under production of bagda shrimp is being compensated by golda shrimp. One of the reasons for the decline of bagda shrimp is that during the mid 1990s there was an epidemic due to the virus attack, which forced many shrimp farms to close down. On the other hand poorly managed ponds and farms, lack of infrastructure, especially adequate water reserve and lack of pure water sources were also responsible for the epidemic during the period.

Processing factories are usually equipped with cleaning, washing, processing and freezing facilities and these require huge investment. However, the capacity utilization of the shrimp processing firms is less than 50 percent. Most of the firms are operating at only 13 percent of their processing capacity (IUCN, 2004). These firms can increase their capacity up to 50 percent without bringing any new land under shrimp cultivation but simply by doubling their yield per acre.

9. Market Size & Local Markets

Bagerhat District

Bagerhat district comprises an area of 3959 square kilometer (sq. km), and situated in the southwest region of Bangladesh. Shrimp industry plays a significant role in the economy of the district. There are 12,563 shrimp farms in the district, which comprises an area of 47,710 hectares (ha) of land. The Gross Domestic Product (GDP) of the fishery sector was taka 5167 million in 1999-2000 at current market prices, which was 17.8 percent of the total GDP (BBS, 2001).

Khulna District

With an area of 4394 sq. km., Khulna is situated in the southwest corner of Bangladesh. Fishing sector is an important sector of the economy. The GDP of the fishery sector was taka 15509 million in 1999-2000 at current market prices, which was 13.1 percent of the total GDP of the district. There are 3,409 shrimp farms in the district and the area under shrimp farm is 29,551hectares.

Chittagong District

Situated in the southeast part of Bangladesh, Chittagong district has an area of 5282 sq. km. The GDP of the fishery sector of the district in 1999-2000 was taka 14670 million at current market prices, which was 6.6 percent of the total GDP of the district. There are 7 hatcheries in the district and 807 hectares of land are under the shrimp farms. Chittagong is also the source of marine fish since the Bay of Bengal flows by the district.

Market Information

Districts	**Places**	**Categories of Informants**
Khulna, situated in the southeast of Bangladesh	Botiaghata; Dumuria; Baghmara	Hatchery operators, hatchery workers, farmers, ice plant workers, exporters, processors, women workers, middlemen
Bagerhat, situated in the southeast of Bangladesh	Mongla; Rampal	Hatchery operators, hatchery workers, farmers, ice plant workers, exporters, processors, women workers, middlemen
Chittagong, situated in the southwest of Bangladesh	Shagarika Road; Sadarghat Jetty (landing centre)	Boat owners, fishing crews, artisanal fishermen, processors, middlemen

10. Market Player

The main market player is given below:

Market Competitor
1. Khulna Frozen Foods Export Ltd.
2. Amam Sea Food Industries Ltd.
3. Aqua Resources Ltd.
4. Asian Sea Food Ltd.
5. Bagerhat Sea Food Ind. Ltd.
6. Bangladesh Sea Food Indus. Ltd
7. Bionic Fish Processing Ltd.
8. Rupali Sea foods Ltd.
9. ARK Sea Foods Ltd.

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10. Coastal Seafoods Ltd.

Source: Field Survey, 2014

11. Export of Frozen Food and Fisheries

In July-December 2012, export earnings from the frozen foods sector was $290 million. According to Export Promotion Bureau, the most significant rise in terms of value was seen in shrimps, which posted a 35% growth to over $331 million compared to $246 million of 2012. While frozen fish saw a 14% decline to $25million, compared to previous year's $29million.

In 2012-13 fiscal year, frozen foods exports recorded 9% fall to $544m as fish production fell due to disease in prawn. Imposing additional duties by the US government on shrimp imports from five competitor countries, including India and Vietnam, has helped increase the export from Bangladesh.

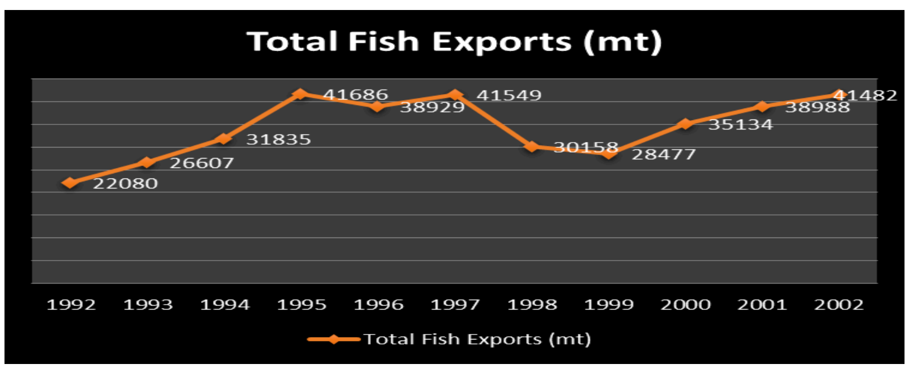
The EU, the USA and Japan are the major importers of shrimp from Bangladesh accounting for more than 95 percent of total fish exports. The rest is exported to countries in the Southeast Asia and Middle East. In 2003 shrimp export to the EU accounted for 52.1 percent of the total market while the share of the USA was 38.6 percent and of Japan for another 4.5 percent. Evidently, the importance of the EU market for this particular export sector of Bangladesh is very high. Any disruption in this market is bound to have severe and important implications for this export-oriented sector of the country, and negative multiplier impact for the national economy.

Year	Item	Quantity (Million Pounds)	Value (Million $)	Taka Core
2003-04	Shrimp & Fish	84.48	390.25	2300.9
2004-05	Shrimp & Fish	96.11	420.74	2587.90
2005-06	Shrimp & Fish	107.86	459.11	3200.00
2006-07	Shrimp & Fish	112.15	515.32	3558.78
2007-08	Shrimp & Fish	106.77	490.58	3396.28

Source: BFFEA, 2010

The export income from shrimp has increased from an amount of US$ 2.9 million in FY 1972- 73 to US$ 297 million in FY 2002-03. The share of shrimp export in total export earning has increased to 4.5 percent in FY 2002-03 compared to less than 1 percent in FY 1972-73. After the export oriented RMG sector shrimp has emerged as the fastest growing export sector. To a large extent the trade policy reforms carried out in the country in recent years has played a crucial role to this change.

Fish Production from Various Sources (000 metric ton)							
Year	**Inland Capture**	**Inland Culture**	**Total Inland**	**Marine Trawl**	**Marine Artisanal**	**Total Marine**	**Total (Inland plus Marine**
1994	573	264	837	12	241	253	1091
1995	591	317	908	11	253	264	1173
1996	609	379	988	12	258	270	1258
1997	599	486	1085	13	261	274	1360
1998	616	575	1191	15	258	273	1464
1999	649	593	1242	16	294	310	1552
2000	670	657	1327	16	317	333	1661
2001	689	712	1401	23	356	379	1781
2002	688	787	1475	25	390	415	1890
Source: DOF, 2003.							



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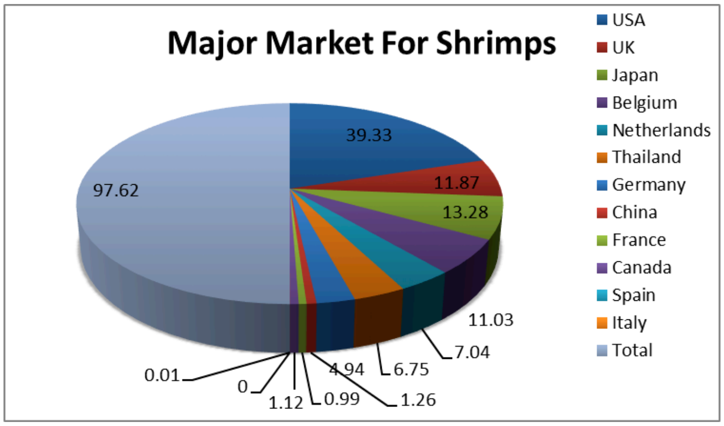
Export of Shrimp and its Share in GDP							
Year	Total Export ($ million)	Total Fish Export ($ million)	Total Shrimp Export ($ million)	% of shrimp in total export	% of shrimp in total fish export	Total GDP ($ million)	% share of shrimp in GDP
1999	5312.86	287	242.23	4.56	84.4	48327.2	0.54
2000	5752.2	354.07	322.43	5.61	91.06	49320.9	0.49
2001	6467.3	376.72	349.75	5.41	92.84	50376.8	0.64
2002	5986.09	303.39	252.18	4.21	83.12	50630.3	0.69
2003	6548.44	330.13	297.04	4.54	89.98	52303.7	0.48
Source: BBS, 2005							

Major Markets for Bangladeshi Frozen Shrimps								
Countries	**1988-89**		**1999-2000**		**2000-2001**		**2002-2003**	
	Value ($ mln)	% of total fish export	Value ($ mln)	% of total fish export	Value ($ mln)	% of total fish export	Value ($ mln)	% of total fish export
USA	9.53	39.33	12.59	39.06	11.91	34.04	9.74	38.63
UK	2.87	11.87	4.57	14.18	5.99	17.11	6.21	24.61
Japan	3.22	13.28	3.62	11.24	2.8	8.01	1.14	4.53
Belgium	2.67	11.03	2.69	8.35	3.5	10.02	2.65	10.5
Netherlands	1.17	7.04	2.65	8.21	4.51	12.89	2.2	8.73
Thailand	1.63	6.75	2.23	6.92	0.98	2.79	0.73	2.88
Germany	1.2	4.94	1.99	6.19	3.17	9.07	1.62	6.44
China	0.31	1.26	0.45	1.4	0.11	0.31	0.06	0.22
France	0.24	0.99	0.56	1.73	0.75	2.16	0.44	1.73
Canada	0.27	1.12	0.29	0.89	0.42	1.21	0.07	0.27
Spain			0.2	0.62				
Italy		0.01	0.11	0.33	0.05	0.15	0.02	0.09
Total	23.11	97.62	31.95	99.12	34.19	97.76	24.87	98.63
Source: Export Promotion Bureau, GOB, 2005								



12. **Exportable Products**

The private organization and the public sector corporation offer the following products for export:

- Frozen shrimp & prawn
- Frozen fish
- Fresh & chilled fish
- Frozen fillets & steaks of fish, sharks shells skates & rays
- Shark fins & fish maws
- Salted & dehydrated fish
- Dry fish
- Live crabs & tortoises
- Fish meals & crushed
- Value added shrimp & fish products

13. **Investment Opportunity in Bangladesh**

After ready-made garments, frozen food is the second largest export industry in Bangladesh. Bangladesh has enough resources available to meet the demands of the international and local markets. There are approximately 148 government and private shore-based fish processing plants, which produce various types of yields - fresh water shell on, seawater shell on, peeled and deveined, peeled and un-deveined shrimps.

Sector Overview

- Encouraged and promoted by the government
- Farming, Processing and Exporting industry mostly dominated by small business owners,
- Government steps to improve quality of frozen food,
- Government offering of 15% cash incentive to frozen food exporters,
- Exported products: Frozen shrimp and prawn, fresh and chilled fish, frozen fillets of fish, shark fins, dehydrated fish, live crab and turtles, fish meals and crushed.
- Sub sectors involved in the frozen fish industry: Hatcheries, Sustainable aquaculture technology, Feed Meals Plants, dispensation unit for value added products, etc.

Frozen Foods:

Sector Highlights:

- Government is promoting semi-intensive shrimp farming.
- Fish and prawn exports grew at an average 20% in the past decade.
- Shrimp processing and export industry is largely dominated by the smaller unorganized sector.

14. Prospect of Frozen Food and Fisheries

I. Shrimp earned 378 million US dollar in the year 2003-04. During the last ten years, Bangladesh has earned international credibility by responding to the food-safety and quality requirements of its destinations, mostly, the United States and the European Union countries.

II. 65 processing plants have been approved by the European Commission for exporting shrimp and fish products to the European Union member states. Recently, Bangladesh has also initiated projects for implementing 'traceability' regulations of the EU.

III. It may be noted that, Bangladesh has also focused on organic production of shrimp. Swiss Import Promotion Programmed (SIPPO) is assisting Bangladesh in this initiative.

IV. A larger number of export processors are now producing greater amount of value-added products such as individually quick-frozen, peeled and divined, and butterfly-cut shrimps as well as cooked and semi-cooked products.

V. Value-added products have constituted about 33 percent of total exports of 32,000 metric tons valued at 378 million US dollar

VI. Bangladesh`s frozen food & fisheries sector is deemed competitive because a favorable business environment.

15. Shrimp Sector policy

Since shrimp holds a special position in the economy of Bangladesh the GOB has a policy for the shrimp sector as well within the NFP. The policy aims to undertake the following measures in order to develop the shrimp sector:

• There will be committees at the national and local level. These committees will operate according to government policy and work for the development of shrimp cultivation. In this respect the committees will take necessary steps and will formulate required rules and regulations for solving various problems.

• To maintain the eco-balance of the coastal area necessary steps will be taken to coordinate fish cultivation, shrimp cultivation and rice cultivation.

• Arrangements will be made for eco-balance in future construction of polder and barrage, and opportunity will be created for cultivation of shrimp, rice and fish in these polder and barrage areas.

• Advanced but traditional method of shrimp cultivation would be emphasized. Shrimp cultivation will also be encouraged in potential areas. On the other hand, shrimp cultivation will be prohibited in such cases where it may destroy the mangrove forest. To maintain natural balance, plantation of appropriate trees around the shrimp farms will be made mandatory for the owners of shrimp farms.

• Shrimp exhibition farms will be established and training for shrimp farmers would be arranged under private initiative with assistance from the government.

• Equal status and incentives will be given to shrimp industry as an export industry like other export industries.

• Necessary arrangements will be made for modern training so that while collecting shrimp larvae from natural resources other fish larvae are not destroyed. Proper physical infrastructure will be created so that shrimp larvae are not damaged while carrying them from one place to another.

• Private sector will be encouraged to establish hatchery to reduce pressure on natural sources for shrimp larvae.

• During the regeneration period shrimp collection from the sea will be prohibited. Some areas of the sea will be declared safe area for shrimp regeneration.

• Private sector will be encouraged to establish hatchery for producing bagda shrimp.

• Initiatives will be taken by the government to build proper infrastructure in the existing shrimp farms and also in potential areas, and proper security system will be created during the selling and distribution period.

• To increase the production of shrimp, special emphasis will be given on the use of appropriate technology. Farm owners will be encouraged to establish small farms and to divide big farms into a number of small farms so that it can easily be managed.

• Steps will be taken to provide food for shrimp from indigenous sources and if necessary some types of shrimp foods like fish meal, vitamin and mineral primacies, food binder etc., will be imported

. • Hygiene will be ensured throughout the period of shrimp cultivation to shrimp processing. Proper infrastructure and proper training will be provided to ensure the health and quality of the collected shrimp

. • To ensure export market for the shrimp, marketing system will be strengthened.

• Quality control laboratory institutes will be expanded and modernized to ensure the quality of fish and shrimp products.

• The Central Shrimp Cell created for providing shrimp cultivation related services, will be extended at the grass roots level. To strengthen these shrimp cells more manpower and benefits will be provided.

• For cultivation of shrimp, some coastal areas will be marked so that the eco- balance could be preserved. In this regard the DOF will collaborate with the Ministry of Environment and Forest (MOEF).

• For environment friendly shrimp cultivation foreign investors with higher technological capacity will be encouraged for joint venture with local investors.

• Insurance system for fish and shrimp production will be initiated.

16. Recommendations

Mass level of the stakeholders need institutional and industry related education immediately. Activities like training programs, seminars, and trade-fair are still in the initial level and done on small project base. Industry wise expansion of these kinds of activities should be taken into account immediately. Problems including high mortality rate, lack of virus screening facility and the unfair practices should be taken into account for the both operative and strategic level immediately. Enforcement of food safety outside the government should be explored. Following special measures should be taken immediately:

· Shrimp processing industries or shrimp producer some time face lots of risk like disease problems, raising price of shrimp feed, natural calamities, falling of shrimp price etc. So Government should share the risk with them to ensure the productivity of shrimp industry.

· Shrimp transportation should be facilitated with modern facilities like insulated & refrigerated carrier van and handling of shrimp with food graded plastic basket.

· Introduction of quality certification system at all levels of the shrimp and fish based industry to ensure food safety, traceability, environmental sustainability and social responsibility is needed.

· In Bangladesh electricity supply is not adequate but government should ensure the continuous electricity supply in shrimp processing industries.

· Quality control measurement standard should be more developed

· Affordable rate of interest, easy repayment schedule should be introduced for the industry related entrepreneurs.

· Vocational training centers should be established at aquaculture locations for hands-on training in aquaculture, post-harvest handling and processing.

· Laboratory should have enough facilities with Modern and sophisticated, machine, instruments and methodology for testing quality parameters of exportable shrimp.

· Ocean going vessel for the export of shrimp should be available. The ocean going vessel are not available as pre it's requirement. Exporter couldn't export Shrimp in due time.

17. Conclusion

A clear change in the attitudes of the managers and owners of shrimp processing factories towards acknowledging the importance of ensuring social compliance in processing factories became prevalent. Integrated efforts both from the public and private sides have been able to create a position from where the

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industry can initiate further activities respond to the market demands related to food safety as well as social compliance. Throughout the recent meetings and workshops, there has been good demand for further assistance from the factory managers and owners in terms of providing adequate training on labor rules and CSR issues. This can be considered as the immediate outcome from the project initiatives.

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