

# **SHRIMP EXPORT OF BANGLADESH**

Track: Economics

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## **ABSTRACT**

Bangladesh frozen food sector in other words the shrimp export has a greater potentiality to achieve the highest foreign currency. This sector added 1.9 percent in export income and 3.65 percent in GDP in the year of 2015-2016 according to the BFFEA data. Bangladesh has the global standard approval for its shrimp processing plants. However, the shrimp export market is making the opposite earnings even as the demand level is increasing. Due to competitions, political issues, environmental disturbances, shortage in the organizational development along with the price fluctuations of necessary raw materials the shrimp sector is suffering. This paper focuses to analyze the recent position of the shrimp export market, the main products of the frozen food sector, the countries that imports Bangladesh's shrimps and the complications this sector suffers and also some recommendation that may improve the situation.

## **1. INTRODUCTION**

Bangladesh economy heavily depends on agriculture, readymade garments (RMG), fisheries, jutes & jute goods, leather & leather goods, hides & skins and frozen foods. Shrimp export and farming has experienced prompt development in the past twenty years. The major exportable products includes shrimp for the foreign exchange earnings of Bangladesh. Among the years of 1983 and 2003 the bulk of it cultured in both open water body and inland water body aquaculture has improved. In that exact time, the pond areas devoted for shrimp cultivation has tripled.

The tradition for shrimp culture is to trap and hold the fry in paddy field while entering tidal water, also additions and impoundments. These are the areas that harvests shrimps, fish and crabs. Khulna, Bagerhat, Satkhira and Cox's Bazar are the main concentrated areas that are used for shrimp culture. Natural features of shrimp area are interconnected through salinity water from

numerous rivers and used for more than six months of the year. Most lands are low lying and has regular tidal accumulation. Three types of shrimp farming is practiced. For Bagda shrimp, based on the intensity of productions the farming process is selected. First one is the extensive system which is a process of tide fed shrimp culture, here a chosen group is stocked and fed to increase production growth with a density of 2-3/m<sup>2</sup>. In the second system, which is improved extensive culture system and its quiet similar to the extensive system except in this the recent origin are used as farms. For the semi intensive culture system the farmers use homogenous ponds with the size of 1 to 2 Ha. In the extensive system the depth of the pond about 1 meter but here the pond are deeper. Through adjacent brackish water the main water source is pumped. The hatchery of post-larvae is stocked at a density rate of (10-15/m<sup>2</sup>). The feeding process is being done though the paddle wheels that is for the artificial aeration and pellet feeding. For Bangladesh semi intensive farming is not common.

Freshwater prawn known as Golda, which is an affordable local food for the rural people. After 197, the prices for shrimp has gradually increased as the international export started. In about 10 percent per year the farming process expanded. Shrimps are cultured with other aquaculture species in about 50 thousand ha of water bodies and different lands.

The frozen shrimp are also known as ‘White Gold’ of Bangladesh. As a country of river, rivulets and tributaries, Bangladesh has a favorable climate which works as a positive attribute towards shrimp farming. The potential fisheries development depends on the inland water resources. It is considered to be one of the lushest area for cultivation in the world. The country has the largest different kinds of fishes for example 24 inland water prawn species, 36 species of marine shrimp, 475 species of marine fish, 260 of freshwater fish species, and 12 species of exotic fishes (DoF, 201). Bagda is one of the major product that is cultivated in salty water as it is a marine shrimp. For the fresh water kind Golda is another important species. The shrimp industry runs the employment population directly direct employment. Bangladesh shrimp farms only occupies 14-16 percent of their total capacity which is 3, 00,000 M. ton per year but only 14-16 percent of their total capacity (BFFEA newsletter).

## **2. BACKGROUND OF SHRIMP EXPORT**

The shrimp production came into the attention of the international market after the independence. As a result, the prices and demand had increased in the world market. For shrimp culture saline water is essential, for that farms are established near the coastal rivers on the outer lands. The cultivation system gradually expanded from the late seventies to early eighties. By mid-nineties the market faced rapid growth. Also hatcheries were well recognized in the late nineties with the simultaneous growth of ice plants, shrimp depots and processing plants. The white spot disease spread in the semi intensive and extensive farms in the 1994. Investors faced hefty losses and the shrimp business potentiality decreased. In the late eighties and nineties the freshwater shrimp known as Golda achieved growth though the farming started in the mid-seventies. As this sector faced less criticism than the farming on brackish water farming because it is cultivated in rice fields with some prohibitions for inland districts containing perennial water bodies. The major problems that shrimp farming faces is due to environmental issues and habitat disturbances. The shrimp farming affects the distribution of wealth along with some societal. All farms that produces shrimp are the participants for the export of processed frozen food. The main cities consumes a percentage of the cultivated shrimps. The marketing follows a multipart network of mediators such as the small traders known as faria also the depo holders and sell to the international clients. The export growth remained positive apart from the exception of EU ban on shrimp in the 1998 to 1999. The competitors of Bangladesh's shrimp sector has expanded than the home country. The problems faced by the producers and the trader's lies within the quality maintenance and the standard set by the world market.

Bangladesh Government has recognized the shrimp industry under the second Five Year Plan (FYP) starting from 1980 to 1985 and set Bangladesh Frozen Foods Exports Association (BFFEA) in 1984 to increase as well as to monitor shrimp production. This trade body is the only one for the members among all the Fish Processing Plants in Bangladesh. The BFFEA has been working from the beginning to endorse and protect the interest of Frozen food processors, packagers along with exporters. The BFFEA is dedicated to set up and uphold congenial relation with the prospective international buyers, the chamber of commerce and business association also the productions to expand export marketing of Frozen Foods to the world market.

### **3. PURPOSE OF THIS STUDY**

The purpose of this study is to evaluate the shrimp industry status, classify the difficulties that distresses the shrimp farming and exporting and advice some precautions for the betterment of the shrimp exporting sector in Bangladesh.

### **4. METHODOLOGY**

The paper is following the qualitative method has been done by data collection and current research papers, newspaper articles and reports of Department of Fisheries (DoF), reports of other organizations like Export Promotion Bureau (EPB), Bangladesh Frozen Food Exporters Association (BFFEA), The Daily Star, NewAge Business, Undercurrent news and Dhaka Tribune. To analyze the current status and overall performance of the shrimp industry by percentage analysis of export value from year 2001-2002 to 2016-2017. Also to discover the supply chain related problems that are also affecting the farming of shrimp and to present some precautions to avoid these

### **5. LITERTURE REVIEW**

This study is about the shrimp export of Bangladesh. It evaluates the current status of shrimp export market, explains the performance of export earnings from shrimp and the arising and existing problems that affects the shrimp farming and exporting. This study uses both quantitative and qualitative methods. For the quantitative method, primary data has been collected from particular surveys. Ahmed (2013), conducted a primary study to discover the problems afflicting various cost levels associated with the shrimp farming. For qualitative method secondary data has been collected from Bangladesh Frozen Food Association (BFFEA), Export Promotion Bureau (EPB), Bangladesh Fisheries Research Institute (BFRI), Bangladesh Bureau of Statistics (BBS) and Department of Fisheries (DoF). Rahman and Hossain (2009), used secondary data from DoF, BBS, BERI, EPB to show the difficulties also the forecasts of export and production of shrimp in Bangladesh. Some other articles analyses the export market with both the methods.

Rahman & Hossain (2009) used data from BFFEA, EPB, DoF, BFRI and BBS to explain the competitive global shrimp market and Bangladesh's average production cost that is high for the lack of technological and aquaculture system. There were some good recommendations provided, like "promote diversification into other brackish water aquaculture species like Mangrove crab and marine finfish", however there was no reference on how to improve the low technological situation and lower the price. Likewise, Mizanur (2013) discusses the shrimp export market of Bangladesh in the global market with secondary data from BFFEA and EPB and primary data from the research locations of Bagerhat district's Rampal Upazilla and Khulna. The evaluation shows that, the country has 148 sea food processing plants where 88 of them are registered by government of Bangladesh. 16 percent are being utilized from the total capacity which is 3, 00,000 M. Tons per year. The lack of vision and strategic planning has cost the sector a great deal. Integrated strategy is need for growth in the competitive world market

Similarly, Ferdous and Hossain (2015) discussed about the prospect and challenges Bangladesh frozen food export faces and presented some tactics to overcome it. This article analyzed the key export items and their destinations, the export earnings, the productions strength and qualities and ways to overcome the challenges by manmade also by some natural disasters. The study shows the frozen food contributed around 23 percent and out of total frozen food export, shrimp along contributed approximately 90 percent. The single sub sector shrimp also contributed near about 4.43 percent of the GDP and it could go up to percent % along with its 12 million employment generation. However this article limits its explanations while presenting some of the recommendations; such as, the advice for government subsidy can play a significant role model as a motivation of the shrimp farmer. This part didn't give further explanations about the motivational process. Another one is, proper price of shrimp and fish has to be ensuring for reinvest and booming this sector. The mention of an amount for the said proper price would have also created an impact. This study uses the qualitative method with the collection of secondary data from Bangladesh Frozen Food Exports Association and Export Promotional Bureau.

Ahamed (2013) presented an analysis for the fisheries sector as well as the frozen food sector of the country. A primary study from the representatives of the various stakeholders in the industry of shrimp industry to find out the cost level problems. More dedications from managers and owners are need for the betterment and the establishment of this sector. The participation of both the public

and private sector will improve the position of this industry, so that they can ensure food safety and meet up the global demand.

Naureen (2006) has done Hazard Analysis Critical Control Point (HACCP) and Traceability to analyze the status of the shrimp in Bangladesh. This analysis was able to distinguish the total production history. Also the study presented three barriers like government restrictions, technical barriers and trade barriers that shrimp industry faces. Yunus (2009) explained the effects import country faced due to EU ban, HACCP compliance and export of shrimp from Bangladesh by using the method of panel estimation. The appropriate model used to explain the shrimp export was the dynamic gravity model. Bangladesh faced the loss of 25 million USD in the short run due to the EU ban and 5 billion USD in the long run. Fortunately Bangladesh gained 18 million USD by exporting shrimp in the short run and 35 million USD in the long run with the help of HACCP compliances

Mohammad (2013) considered both primary and secondary data for the status and potentiality of shrimp in Bangladesh. Khulna district's Chalna Pawrasava was the main research location with the collection of news journals and annual reports. It represented that Bangladesh has a great possibility in increasing its shrimp productivity nationwide and boost up its foreign earnings, if the practiced the semi-intensive and intensive technics for farming. This paper suggests that There is another similar study that was done by Hasan, Hossain & Rahman (2015) for the points out the problems shrimp exporting encounters and suggested that by the improvement of the quality to the global standard might help the situation.

Nupur (2010) and Akter (2007) also explained the complications and the export trend of shrimp industry in the country faces by using both primary and secondary data. Infecting diseases and higher shrimp food prices, unavailability of raw supplies for utilizing shrimps along with environmental disturbances has put the shrimp producers in a great deal of loss. Among the countries of South Asia, Bangladesh can have a greater success in earning the foreign currency though the "White Gold". By 2020 Bangladesh exporters are targeting to earn two to three billion USD by implementing the systems of US-FDA and HACCP.

## 6. STATUS OF THE SHIMP INDUSTRY

Shrimp is one of the most important exportable item in Bangladesh. One of the major items for frozen food includes shrimp. The largest market demand for shrimps are from Japan, United States (US) and European Union (EU), [Ferdous & Hossain 2015]. Shrimp earned 515 million USD in the year 2006-07. In the past decade, the country has earned global standard by reaching the targeted standard quality and food hygiene, typically the US and EU countries. The European Commission for exporting shrimp and fish products to the European Union member states approved 66 processing plants. Bangladesh is a potential country that has worldwide standard frozen fish processing plants to produce and export frozen shrimp and fish. Processing capacity in the total plants in 3, 50,000 metric tons. Export earnings from frozen fish in 2016-2017 is 44.04 million US dollar. Shrimp export alone earned 446.04 million USD. There are 85 shrimp hatcheries in Bangladesh. 49 hatchery of Bagda and 36 hatchery of Galda. Production of shrimp fry is 1318.85 Crore. The shrimp cultured land Bangladesh have is 2, 75,509 Hectare. Production of shrimp in 20115-2016 is 2, 34,188 metric tons. Production of shrimp & fish in 2015-2016 is 38, 78, 324 metric tons. Frozen food contributed 1.9 percent in export income and 3.65 percent in GDP 2015-2016. [BFFEA]

### **Export Items & Destination of Bangladesh Frozen Foods**

Bangladesh produces ten items on the frozen food category, mainly to European Union, America (North and South America), Russian, Middle East and Asian markets (Table 1).

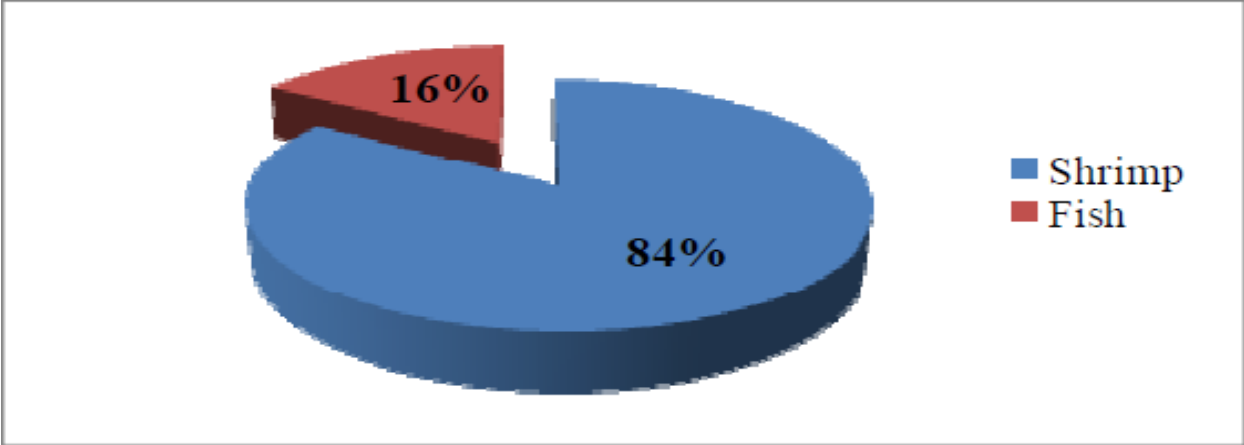
**Table 1.** Exported frozen foods by the government and non-government bulks

Sl. No	Items
1.	Fresh & Chilled Fish
2.	Frozen Shrimp & Prawn
3.	Frozen Fish
4.	Value Added Shrimp & Fish Products
5.	Fish Maws & Shark Fins
6.	Dry Fish
7.	Salted & dehydrated Fish

8.	Fish meals & Crushed
9.	Live Crabs & Tortoises
10.	Frozen Steaks & Fillets of Fish, Sharks Shells Rays & Skates

[Source: Bangladesh Frozen Foods Exports Association (BFEEA)]

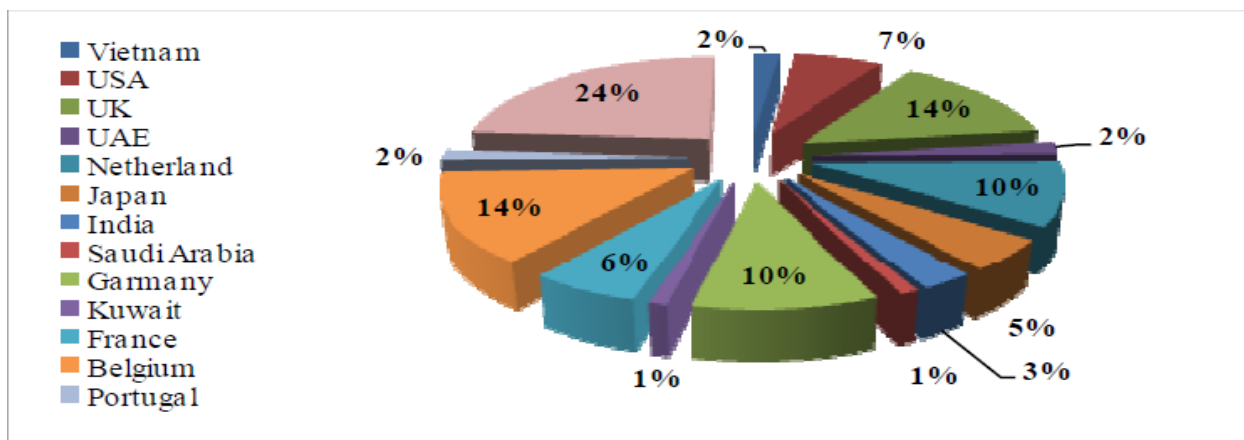
From all the mentioned products in the table, Shrimp is one of primary and the largest export item in the frozen food sector from Bangladesh. Around 84 percent of frozen shrimp has been exported in the fiscal years 2012-2013 from Bangladesh to the world market, whereas only 16 percent of frozen fish has been taken place in the same fiscal year. [Figure1]



**Figure 1.** Individually Shrimp & Fish Exported from Bangladesh (2012-2013)  
 [Source: Bangladesh Frozen Foods Exports Association (BFEEA, 2014)]

In that same year (2012-2013), the upper market of Bangladesh frozen foods were UK and Belgium by 28 percent from the overall export. The next position belongs to European countries, Germany and Netherland, stood 20 percent from the total frozen food export from Bangladesh (Figure 2). [Ferdous & Hossain 2015].





**Figure 2.** Shrimp & Fish Export of Bangladesh according to the countries (2012- 2013)  
 [Source: Bangladesh Frozen Foods Exports Association (BFEEA, 2014)]

According to figure 2, there were thirteen frozen food exporting destination in fiscal year 2012-2013. Gradually the export destination has increased over the time.

The maximum shrimp exporting area from Bangladesh to the world market during the fiscal year 2012-2013, where market of USA, Russia and France boomed by exporting 20488 thousand USD, 18964 thousand USD, and 16910 thousand USD. Now, in the year of 2017-2018, given the data from Export Promotion Bureau (EPB), the flourishing markets are Belgium (59246.38 thousand USD), Germany (47805.34 Thousand USD), Netherlands (69355.86 thousand USD). So, the different market has created a good spot for this.

**Table 2.** Export Frozen Food from Bangladesh July-December 2017-2018 (key countries)

No.	Countries	Frozen Food (value in '000' US\$)
1	UNITED ARAB EMIRATES	553.93
2	AUSTRALIA	921.35
3	BELGIUM	215.91
4	CANADA	1012.6
5	SWITZERLAND	40636

6	CHINA	2834.7
7	CYPRUS	146.34
8	GERMANY	5115.3
9	DENMARK	1174
10	SPAIN	33027
11	FRANCE	4697.1
12	UNITED KINGDOM	2307.4
13	GUADELOUPE	9909.5
14	GREECE	42690
15	HONG KONG	125.89
16	ITALY	24.961
17	JORDAN	124.28
18	JAPAN	295.34
19	KOREA, REPUBLIC OF	16868
20	LITHUANIA	366.52
21	MOROCCO	149.6
22	MALAYSIA	71.486
23	NETHERLANDS	307.54
24	PORTUGAL	378.47
25	RUSSIAN FEDERATION	415.77
26	SAUDI ARABIA	49411
27	SEYCHELLES	162.34
28	SINGAPORE	183.75
29	THAILAND	3222.4
30	TURKEY	156.94
31	TAIWAN, PROVINCE OF CHINA	8094.1
32	UKRAINE	166.27

33	UNITED STATES	165.87
34	VIET NAM	109.64
Total target to export including other countries		263875.6

[Data Source: Export Promotion Bureau (EPB), Bangladesh.]

### Strength & Quality of Fish & Shrimp in Bangladesh

According to Bangladesh Frozen Foods Exports Association (BFFEA, 2018), there are approximately 13, 16,000 number of shrimp and fish farmers directly or indirectly involved in shrimp farming. Two types of fishery resources are available in Bangladesh:

- 1) Inland Water Body (47, 03,658 Ha)
- 2) Marine Water Body (Artisan) (68, 480 S. Nautical Mile) (Table 3).

**Table 3.** Fishery Resource of Bangladesh (Source: BFFEA, 2018)

1	<b>Inland Water Body</b>	
	<b>Closed Water Body (A)</b>	
	i) Pond	3,71,309 Ha
	ii) Semi Flood Plain	25,435 Ha
	iii) Oxbow Lake	5,488 Ha
	iv) Shrimp Farm Zone	2,76,492 Ha
	<b>Total of Closed Water Body</b>	<b>6,78,724 Ha</b>
	<b>Open Water Body (B)</b>	<b>Open Water Body (B)</b>
	i) River and Estuary	8,53,863 Ha
	ii) Sundarban	1,77,700 Ha
	iii) Beel	1,14,161 Ha
	iv) Kaptai Lake	68,800 Ha
	v) Flood Plain	28,10,410 Ha
	<b>Total open Water Body 40,24,934 Ha</b>	<b>Total open Water Body 40,24,934 Ha</b>

	<b>Grand Total of Inland Water (A+B) 47,03,658 Ha</b>	<b>Grand Total of Inland Water (A+B) 47,03,658 Ha</b>
2	<b>Marin Water Body (Artisan)</b>	68480 S. Nautical Mile

The main area is the inland body that is being used for cultivating shrimp and prawn. Pond area usually does not flood. Along with various fish including shrimp known as Gher are cultivated in ponds. Many people can cultivate fish, prawn and shrimp during the season in the semi flood area and oxbow lake. Whereas, the open water body like river, Kaptai, Lake, the Marin water body and Sundarban area, people may fish any time of the year. Beels are also cultivated on the basis of season. Bangladesh can exercise 68, 480 square nautical miles in the surrounding of Bay of Bangle as an economic zone. There is a huge opportunity to use Marin water body as a fishing zone in Bangladesh.

At present, the world oceans and all the open inland waters produce 50 percent of world fish and the rest of the 50% producing from aquaculture. Even though, in 1950, 3 percent of the world fish production was of aquaculture origin. About 55 percent aquaculture supplies from total country's production of fish from all sources and 80-85 percent of all fisheries export is of aquaculture origin in Bangladesh. Near about 80 percent of the global aquaculture production came from Asian countries including Bangladesh. The 2015's road map shows that fish sector's total production was 57 percent alone from aquaculture sector

The holding capacity for this section started in 1983 under the Fish Inspection and Quality Control (FIQC) Ordinance and department of fisheries is working as a monitoring body. In Dhaka, Chittagong and Khulna three microbiology laboratories were also built. In 1997, there was a shortage of HACCP system. Thus in 1998 the organization upgraded the plants and also improved quality policies. To placate the demands of European the LC-MS-MS system was introduced in 2006 at Dhaka laboratory and the experiments on chemicals started in 2007.

**Export Earning of Bangladesh Shrimp**

Bangladesh has been progressing in the fish & shrimp export. The progress did not happen straight to upward from fiscal 2001-2002 to 2016-2017. In the fiscal year of 2001-2002 export earning was 276.11 million USD only. The following fiscal year 2002-2003 to 2007-2008 the export earnings had an encouraging progress. Still, the fiscal year 2008-2009 to 2009-2010 was earning adversely

from fish & shrimp. Nonetheless, in the fiscal year 2010-2011 were the booming export earnings and the fiscal year 2011-12 and the fiscal year 2012-2013 the export earnings from the fish & shrimp remain poor. In the fiscal year of 2013-2014 fish & shrimp has the highest export earnings of more than \$ 638 million. However there is a decreased flow of export earnings from 2014-2015 to 2017-2018 (Table 5).

**Table 5.** Shrimp & Fish Exported of Bangladesh (2000-2001 to 2017-2018)

<b>Year</b>	<b>Item</b>	<b>Value in Million USD</b>
2000–2001	Shrimp & Fish	363.23
2001–2002	Shrimp & Fish	276.11
2002-2003	Shrimp & Fish	321.81
2003-2004	Shrimp & Fish	390.25
2004-2005	Shrimp & Fish	420.74
2005-2006	Shrimp & Fish	459.11
2006-2007	Shrimp & Fish	515.32
2007-2008	Shrimp & Fish	534.07
2008-2009	Shrimp & Fish	454.53
2009-2010	Shrimp & Fish	437.40
2010–2011	Shrimp & Fish	611.36
2011-2012	Shrimp & Fish	579.72
2012-2013	Shrimp & Fish	543.84
2013-2014	Shrimp & Fish	638.19
2014-2015	Shrimp & Fish	568.03
2015-2016	Shrimp & Fish	535.77
2016-2017	Shrimp & Fish	526.45
2017-2018	Shrimp & Fish	408

*[Data Source: Bangladesh Frozen Foods Exports Association (BFEEA, 2018)]*

After a great export earnings of 638 million USD in 2013-2014, the fish & shrimp export earnings has fallen over gradually. In the year of 2014-2015 the earning was 568 million USD and in the

year of 2016-2017 it was 526 million USD. The percentage change of export performance shows how the export market has been affected by this negative fluctuations (Table 6).

**Table 6.** Frozen Shrimp & Fish Percentage Change of Export Performance

<b>Year</b>	<b>Item</b>	<b>Export Performance (Percentage)</b>
2001–2002	Shrimp & Fish	-24
2002-2003	Shrimp & Fish	16.6
2003-2004	Shrimp & Fish	21.3
2004-2005	Shrimp & Fish	7.8
2005-2006	Shrimp & Fish	9.1
2006-2007	Shrimp & Fish	12.2
2007-2008	Shrimp & Fish	3.6
2008-2009	Shrimp & Fish	-15
2009-2010	Shrimp & Fish	-3.8
2010–2011	Shrimp & Fish	39.8
2011-2012	Shrimp & Fish	-5.2
2012-2013	Shrimp & Fish	-6.2
2013-2014	Shrimp & Fish	17.3
2014-2015	Shrimp & Fish	-11
2015-2016	Shrimp & Fish	-5.7
2016-2017	Shrimp & Fish	-1.7

The following table shows the export performances of Bangladesh Frozen Fish & Shrimp from the year of 2001-2002 to 2016-2017. There is positive performance of export from 2002-2003 to 2007-2008, the percentage changes range from 3 to 20 percent. After that, the performance is negatively affected for the year of 2008-2009 to 2009-2010. There is an impressive improvement of 39.8 percent in the year of 2010-2011 and 17 percent in 2013-2014. Unfortunately, the performance rate is decreasing from 2014-2015 to 2016-2017 that ranges 11 percent to 1.7 percent due to many challenges faced by Bangladesh frozen fish and shrimp industries.

## 7. **CHALLENGES & RECOMMENDATIONS FOR SHRIMP INDUSTRY**

Shrimps of Bangladesh has gained an international reputation by higher demands. Unfortunately the increase for export has not progressed in quantity as the shrimp farming faced a lot of complications.

- The cheap price of Vannamei shrimps that the competing country produces is one of the main causes for the country to suffer loss. Though there is a rise in the export cost of shrimps but exporters are struggling with many internal issues. One of them is the scarcity of ammonia gas that is a necessity to run frozen fish factories. As cylinder prices of 50 kilograms ammonia gas more than doubled from Taka 6,000 in recent years.
- The local customers for shrimp is increasing the demand and also the market can ask for a higher price the price than the global market. Regards to the rising income and purchasing capacity of people, the demand for local shrimp has increased in Bangladesh. If government can manage the banks to give farmers loans that are on relaxed terms it would be very helpful for them to do the business in the local market as well as face the international market.
- Due to Brexit Bangladesh shrimp export market has encountered huge conflicts in Britain market. Hoping that the Brexit issues will smooth out soon and in turn resolve the British market situation as Britain is a large market for the domestic shrimp
- The price of Vannamei is 2 to 2.5 USD which is much lower than the black tiger shrimp in the global market. The prices have declined to 6 USD to 8 USD per for the Bagda and Galda shrimp as Vannamei shrimps demand increased. Bangladesh Frozen Food Export Association (BFFEA) is trying to convince the government to raise the subsidies more than the 10 percent for the farmers.
- Bangladesh has a huge infrastructural space. It has taken a shocking position considering access to infrastructure in the South Asia and the situation is going from bad to worse day by day. Within the worse infrastructural situation, communication specifically the total road networking infrastructure, port, electricity is the main problem in Bangladesh. Agreeing with the World Bank assessment in 2013, Bangladesh has to expend more than billion US dollars for improving the organization by 2020. As per the report, per year

Bangladesh require to provide between 7.4 to 10%, as infrastructure is the key component for productivity and growth.

- Despite of being a potentially successful country for shrimp export, Bangladesh has no foreign investors in this sector. As Bangladesh has huge human resource and they can be employed by poor labor cost, foreign investors may attract to invest in here. The government should be more active in finding foreign funding.
- Diseases that spreads through the shrimp market should be more controlled by the government. The provided vermicide might help the farmers. The results show that farmers cannot fulfill their goals for shrimp farming due to the diseases. Providing better atmosphere for fisheries and by protecting the eco-system is necessary for improving the situation.
- Also it is a huge backward that shrimp farmer has no genetically improved shrimp stocks. Thus a policy that is maintainable for shrimp farm by getting hold of lands also strategic trainings may solve the situation
- Inland water shrimp and fish farming area may expand to the whole prospective area of Bangladesh. Plans should be ready before the fish farming starts to improve the situation. Building trendy fisheries with modern technological support for processing plants will also make this industry practice better. Supports from government and non-governmental industries should help with the modern setup.
- Political instability is playing vital role for loosing this sector. So, political party's morality and ethic should be improved within the all political parties for the sake of economic development.

## **8. CONCLUSION**

Two thousand species of the real shrimp are identified in the world. Bangladesh shrimp industry has a great potentiality for a better boost in the economy. The competition in his sector is increasing in the world market. The progress of shrimp production in Bangladesh is not noteworthy even though there is an increase in the demand and high possibilities in the world market. Nonetheless the point is, it contributes to our poverty mitigation, employment generation and export earnings. Amongst the various items of frozen foods, only shrimp item contribute



about 90 percent of the whole earnings from the fish export sector of Bangladesh. Even with the positive contributions, the shrimp industry is not beyond the criticisms- legal and social including labor issues, environmental sustainability, and food safety explicitly farmer use unpreserved and hazardous chemical highly risk for human health. Thus, it is necessary that public and private institutes work together to support the farmers by providing flexible loans, better organizations, healthy fry and standard food for harvesting. Furthermore, to investigate on the shrimp culture to find out the lacking and problems associated with it and also to provide strategies and precautions for progress and to make the stakeholders more attentive in order to save this sector from criticism and make it more balanced.

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