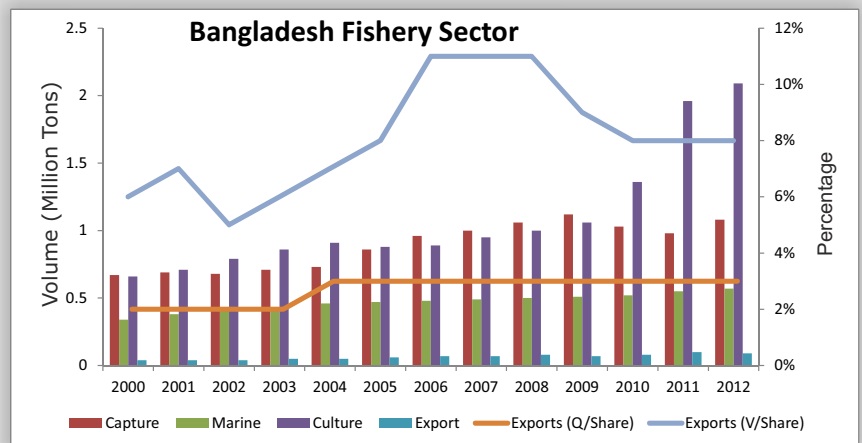
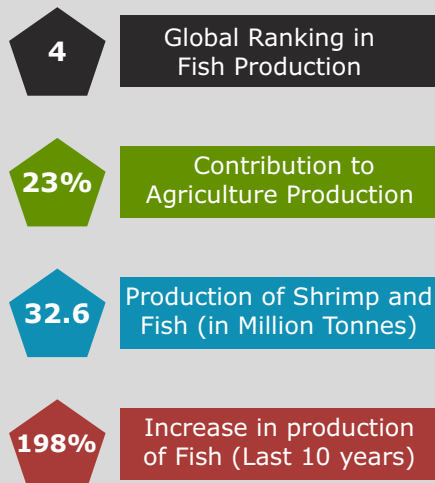


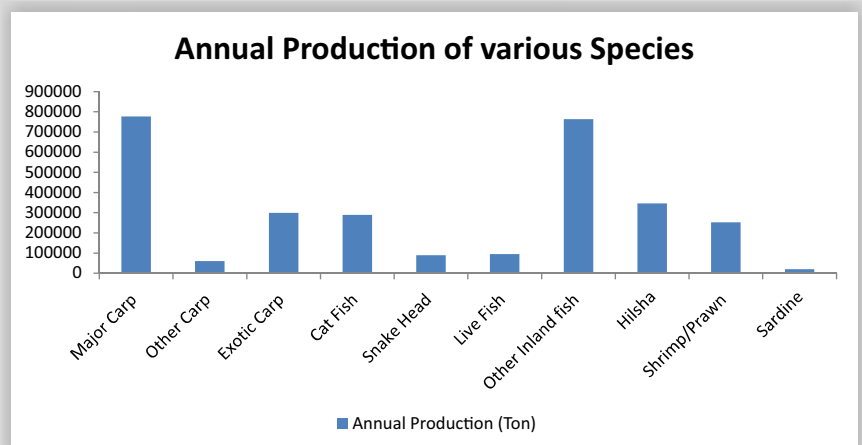
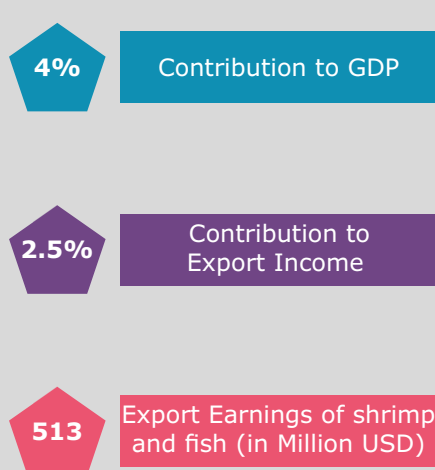
Value Proposition of Fishery in Bangladesh

Bangladesh is the 4th largest fish producing country with a total annual production of around 3.26 Million Tonnes. In 2012, the sector contributed 4.4% of GDP and 23% of total agricultural production. Shrimp export alone is worth more than USD 450 million annually which makes it a top performer among export products in Bangladesh. Furthermore the sector is even more important as it is an easily available source of protein for the workforce in Bangladesh.

Industry Overview



Industry Overview

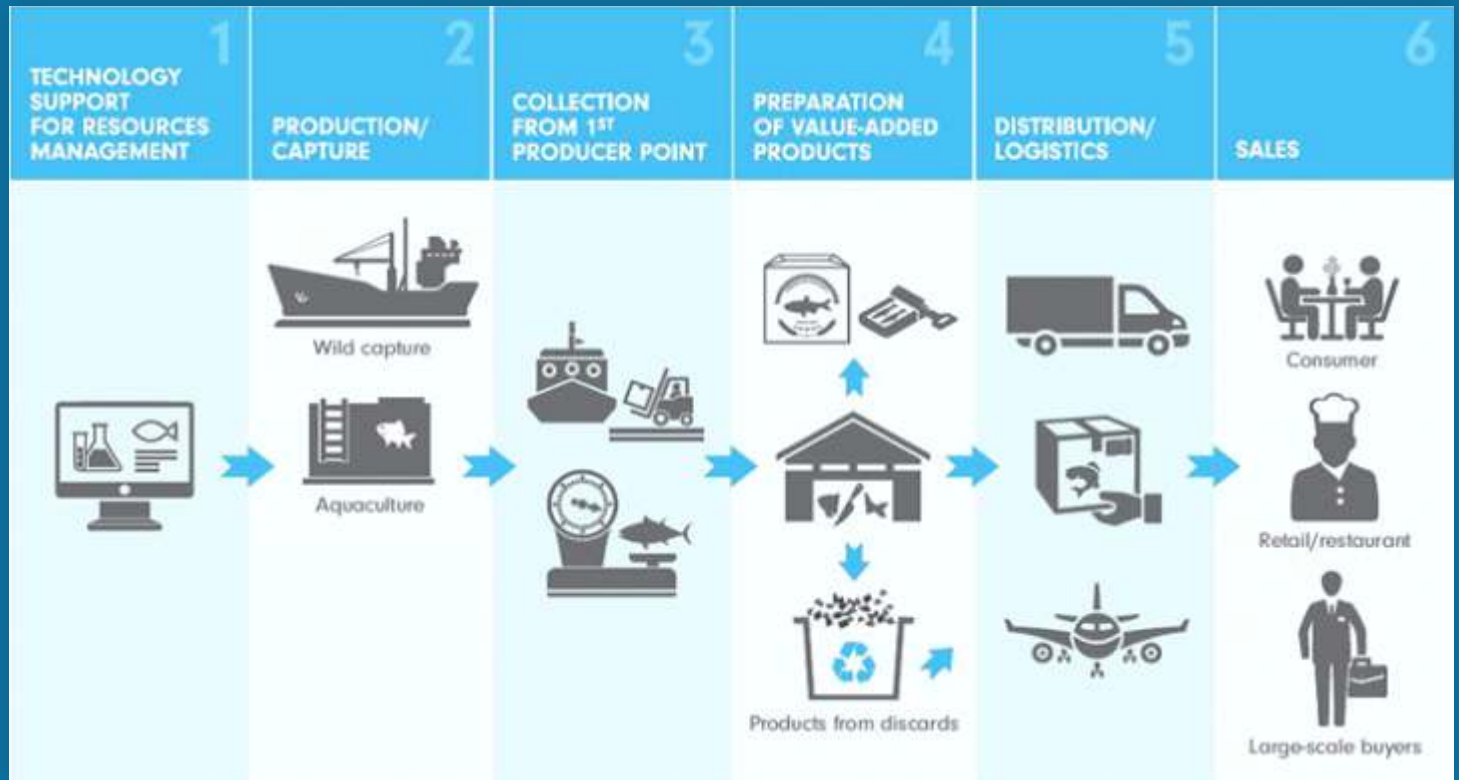


Growth Drivers of Fishery in Bangladesh

- Better farming technology leading to enhanced production
- The demand for supply of animal protein is increasing to cater to the burgeoning population of Bangladesh.
- Scope for improvement in terms of more intensive production of aquaculture.
- Low cost and abundant resources for fish production and processing (human resource, water availability etc.)
- Consumer preference for more convenience in the form of ready to cook food products
- Growth in the food industry like restaurants and food chains that require large amount of fish and fish products

Commercial Supply Chain

Integrated Supply Chain

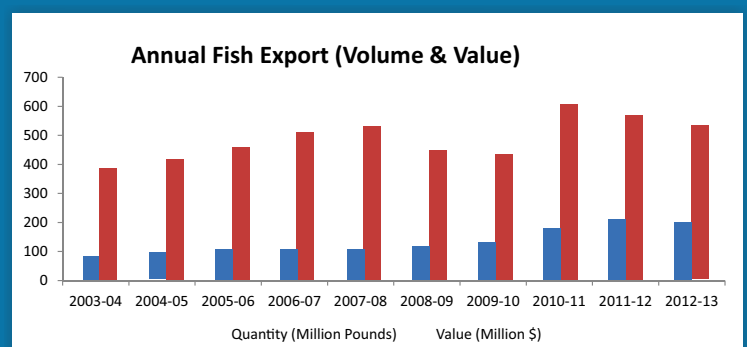


Opportunities in Fish Export from Bangladesh

- Fish export in 2012-13 was USD 58 Million USD and for Shrimps and Prawns was USD 455 Million.
- World market demand for frozen shrimps has, in value terms, grown at an average annual rate of around 4% over the period 2002-2010.
- Shrimps from Bangladesh fetch lower price in the Global market in comparison to other Asian countries like, Thailand and Vietnam. Therefore there is good scope for improvement of quality of Bangladesh's shrimps.

Bangladesh is well positioned in terms of serving the largest segments of the world market – EU and US – but has not yet established significant exports to the third largest importing country, Japan.

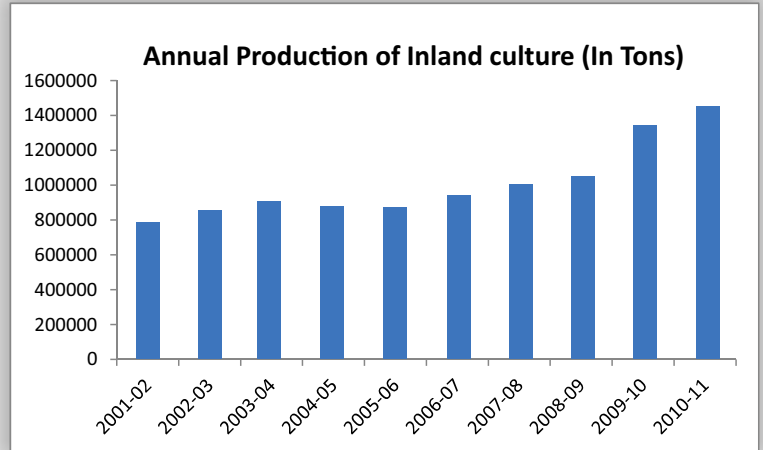
Hence, by increasing the supply of high quality products, total value of shrimp exports could be increased. Exports of agri-food products other than Fish and fish products (including shrimps) are very small in comparison.



The diversified fisheries resources of the country are divided into three groups, i.e., inland culture, inland capture and marine capture.

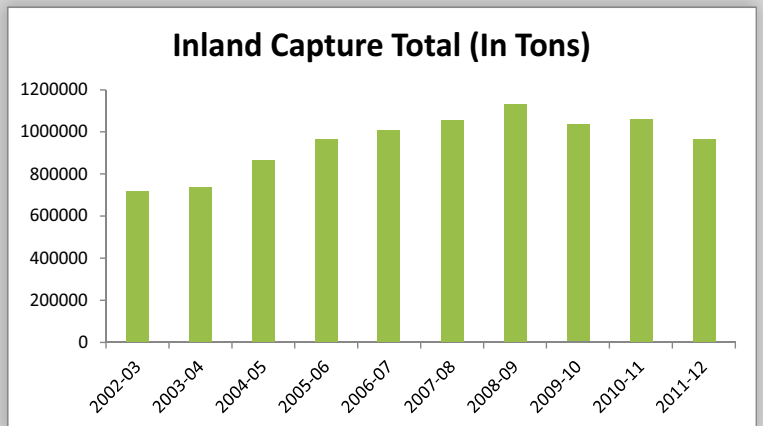
Inland Culture

Culture production of fish is where rural households and entrepreneurs culture fish for their own diet as well as to sell. These can be broadly separated into three categories, being homestead, entrepreneurial and intensive pellet fed systems. Homestead consists of 399,000 tons while entrepreneurial and intensive culture accounts for a significant portion of aquaculture. Combined, culture accounts for 53% of total fish production.



Inland Capture

Capture fish relates to the fish caught in inland water bodies like rivers and lakes. Bangladesh is blessed with huge open water resources with a wide range of variations in nature. The country has more than 200 rivers with a total length of 22,155 km. This category accounts for around 30% of total fish production and Bangladesh with an annual production of around 1.1 million tons is 3rd ranked globally in the inland capture category.



Marine Capture

Bangladesh has 720 km long coastal line along the southern part of the country facing Bay of Bengal.

The total marine water area of the country is 166,000 square km.

The marine waters are rich in nutrient creating suitable habitat for fish, shrimps and other marine production. This category produces around 578,620 tons annually, making up 17% of total production volume.

Fish	Export in 2012-13 (Tons)
Shrimp	1,667
Pomfret	57
Mackerel	182
Cuttlefish	270
Ribbon Fish	73
Eel	9
Others	31
Total Export Volume	2,288
Export Value	132.8 Million USD

Investment Opportunities in Fish Processing

The species of fishes like sole, sardines, cuttlefish mackerels, etc. may be further developed into value added products.

Tongue Sole

Tongue sole may be value added to be made into fillet and exported as value packs.

Sardines

Sardines constitute more than 30 percent of the trawl catch. Sardines are being processed and canned around the world. Given the processing potential of the species, post-harvest handling in the trawler can be improved to suit the latter processing requirements.

Cuttlefish

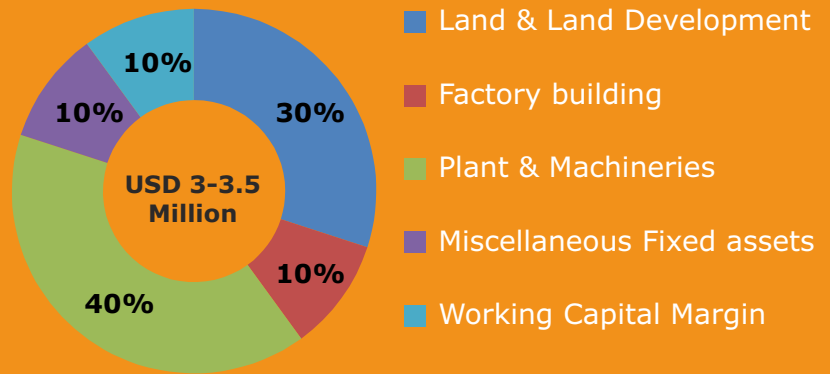
Cuttlefish are being exported from Bangladesh in raw form. About 300 Mt of cuttlefish was exported from Bangladesh during the year 2012-13. Cuttlefish may be value added into various products like whole clean, pineapple cut, baby cuttlefish skewer and cleaned cuttlefish head.

Mackerels

Recent harvesting of mackerel has increased to about nine percent of the total trawl catch. Proper handling of these fish onboard and processing onboard or on shore could open an avenue for value added mackerels as individual consumer packs and also as canned product. Apart from canning mackerel may be processed and packed as individual consumer pack and exported as value added product.

Project Cost

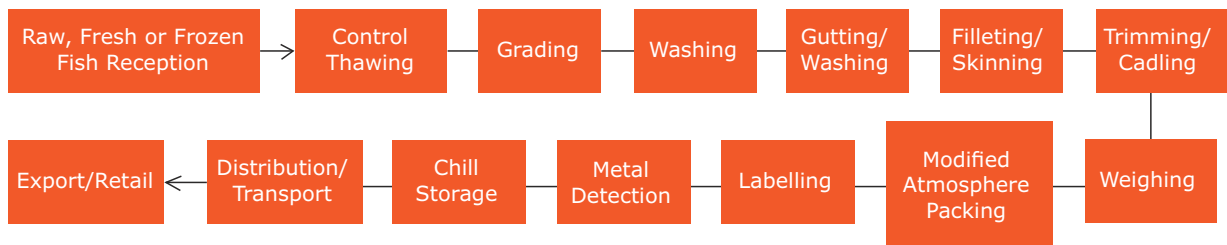
Annual Production Capacity-4000 MT



Other Species

Many other marine fishes that could be exported with good value are tuna and tuna like species. Tuna command high price in international markets. Some species like skipjacks albacore are used in canning and the yellow fin, big eye and other parts of high value species may be used in sushi and sashimi recipes.

Processing Steps



Freezing as process has been used for many years to preserve food including seafood. It slows down the changes that occur where the product inhaled and hence increase the shelf-life of the products.

The types of freezing methods are

Type	Brief Description	Advantage	Disadvantage
Blast Freezing	Airflow is arranged so that the coldest air is flowing over the coldest product	Ability to cope with different shaped products at one time	They may take up a lot of space in the factory
Plate Freezing	Freezing is carried out between hollow metal plates that have a liquid or gas refrigerant circulating through them	Packed products can be frozen very quickly	Only one shape and size products can be frozen at one time
Immersion Freezing	Liquid refrigerants are used to freeze food products	Product freezes quickly as it is completely immersed in liquid refrigerant	Flavor of the product may be changed
Cryogenic Freezing	It uses liquid nitrogen or carbon dioxide to freeze food products	They freeze products very rapidly	Both liquid nitrogen and liquid Carbon dioxide can be very expensive

Business Incentives

- 15% cash incentive offered against shrimp export amount.
- 5% cash incentive to the exporters of frozen fish other than shrimp
- The government is promoting semi-intensive shrimp farming.
- Shrimp processing and export industry is largely dominated by the small business sector.
- Government has developed initiatives of quality assurance for frozen foods in co-operation with exporters.
- Agricultural and Rural Credit Policy and Programme of Bangladesh Bank states that
 - All private banks will have to disburse at least 2.5 per cent of their total loan disbursement to the agriculture and rural sector
 - Loan disbursement target in agriculture for all the state owned and private banks is USD 2 billion
 - Maximum interest rate for agricultural term-loan is 13%

Relevant Stakeholders

Name	Mandate
AHCAB (Animal Health Companies Association Of Bangladesh)	It is the only Apex Trade Body registered with Ministry of Commerce of People's Republic of Bangladesh. It aims to conduct welfare of animal industry consist of poultry, cattle, fish, shrimp and companion animal by promoting, educating and creating awareness to develop the animal industry.
BFFEA (Bangladesh Frozen Foods Exporters Association)	Since its inception the Association has been working to establish and promote contracts with foreign buyers, business association and the chamber of commerce and industries to develop export marketing of Frozen Foods.
BSFF (Bangladesh Shrimp and Fish Foundation)	As a supportive and advocacy organization BSFF's mission is to work for growth of the shrimp and fish industry through closely working with associations, Government and conducting market studies.
GHAB (Golda Hatchery Association of Bangladesh)	Supportive and Advocacy organization for the Fresh Water Prawn hatcheries
BOI (Board of Investment Bangladesh)	BOI encourages investment in private sector and provides necessary facilities and assistance in the establishment of industries.
DOF (Department of Fisheries)	The DoF has the mandate of maximising fish production, Poverty alleviation through employment generation.

Social Impact

The fish sector's contribution to the national economy is much higher than its 4.4% share of GDP, as it provides about 60% of the animal protein intake and more than 11% of the total population of the country is directly or indirectly involved in this sector for their livelihoods.

To learn more about agri-business investment climate in Bangladesh, please visit www.boi.gov.bd