

# [Frozen food business in bangladesh](https://assignbuster.com/frozen-food-business-in-bangladesh/)

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Abstract This paper is a review of Bangladeshi FrozenFoodBusiness. Frozen Foods in Bangladesh encompass from fishes to ready-to-cook foods. However, fishes and shrimps are exported and generate foreign exchanges for Bangladesh, whereas, the semi-processed foods are imported and produced locally. Indeed, it is a potential business where rural people can be benefited by investing little amount ofmoney, and producing and meeting the emergence demand in the market.

This paper additionally concerns on the constraints of business such as lack of properly trained people, stiff competition for the home made processed foods. Therefore, this paper identifies new scope for the growth and development of this segment. Since this segment has got little concerns, we hope that this paper would meet the requirements for the development of the frozen food business and aid the base for further research on this segment. Introduction Though Bangladesh is an agricultural based country, its aquaculture is developing and contributing to the export of the country.

In fact, the frozen food is one of largest contributor to the foreign exchange earnings and occupies fourth position among the export items in terms of total export earnings (Bureau of Statistics, 2004). In Bangladesh, frozen food includes shrimp and fish, and shrimp contributes to the majority of earnings from the frozen food. However, in recent years, the frozen food business has become diversified, and traditional thinking about it has also changed. In Bangladesh, it has been developing based on the fishery along with processed meat and chicken.

Indeed, in Bangladesh, new trend in the frozen food business is emerging in silence, which is semi or fully prepared food in retail outlets. But unfortunately, there is not much research work on this segment of frozen food business done, which is developing and growing a new innovative concept in the vacuum space of frozen food business. In fact, this development and its policy implications have received little attention in the literature on export-led industrialization in developing countries (Athukorala & Sen, 1996).

Therefore, for our research work, we are focusing on processed frozen food found in the retail outlets, and hope that this work would help for the further development of this segment in frozen food business in Bangladesh. In Bangladesh, fishes, shrimps and prawns are exported as frozen food to various parts of the world. The frozen seafood sector is booming by exporting. Earnings from this area are increasing and have the potential to increase more. The value of these exports in 1996-97 was US$342. 26 millions (Bureau of Statistics, 1997).

However, the shrimp belt of Bangladesh is always the subject of debates on law, order, safety and production process and food quality and environmental issues. As such, in 1997, the European Union (EU) imposed a ban on Bangladesh’s frozen food exports after an EU inspection team report condemned shrimp processing plants in Khulna and Chittagong for theirfailureto comply with EU quality control regulations (http://www. ifpri. org). However, the agenda of concern is with the semi or fully prepared frozen food that is an emerging market in Bangladesh.

These food items have been commercialized recently under company labels like Bombay Sweets, Rich and Aftab. In addition, there are other concerns that supply with this type of frozen food and they are called homemade items. The range of frozen food can contain prepared or semi-prepared food like parathas, pizza, franks, samucha, chops, shami kabab, puri, nuggets, and many more exquisite delicacies. The increasing demand for these types of products has given rise to domestic production of these food items, whereas, a couple of years back everything was imported (PersonalInterview, Nandon).

Origin of the Study Basically frozen food can be a processed or semi-processed food that is kept in freezer to preserve it for later use. However a better explanation may include, Frozen food is food preserved by the process of freezing. Freezing food is a common method of food preservation which slows both food decay and, by turning water to ice, makes it unavailable for bacterial growth and slows down most chemical reactions (http://www. wikipedia. com). Moreover, the condition required to keep frozen food is diifferent. Foods may be preserved for several months by freezing.

Long-term freezing requires a constant temperature of -18 °C (0 degrees Fahrenheit) or less. Some freezers cannot achieve such a low temperature. The time food can be kept in the freezer is reduced considerably if the temperature in a freezer fluctuates. Fluctuations could occur by a small gap in the freezer door or adding a large amount of unfrozen food. A special kind of freezer is required to constantly cool the food and in this manner the texture of the food remains the same (http://www. wikipedia. com). Food preserved by freezing or preserved by the process of freezing, is termed as frozen food.

Preserving food by freezing is a widespread method of preservation as it slows both food decays. It happens by turning water to ice, which makes it unavailable for bacterial augmentation and slows down most chemical reactions. It is not possible to grow or produce all kinds of food throughout the year or every where around the world. The need for storage and keeping food fresh for a long period of time arises to make them available in all season and everywhere. It is the blessing ofsciencethat now it is possible to keep food frozen for our betterment. Today, frozen food products are making our frantic life-styles seem a bit easier better.

In fact, successfully evolving and adapting to the needs of consumers, frozen foods have been around a lot longer than we think (http://www. reference. com). History of Commercialization of Frozen Food Business The frozen food industry that we see today can be traced back to several years back to the past. Obviously, the existence of frozen food has always been on earth; in climates that were cold enough for the food to freeze. The Chinese were the first to harness the power of freezing foods beyond the winter months. Later, the Greeks, Romans, Egyptians and Indians also discovered that (http://www. fraweb. org). Even though ice-refrigerated railroad cars allowed perishable food products to be shipped as early as the 1860s, major innovations in refrigeration engineering after World War II gave birth to the frozen food industry. Scientists also developed techniques to control the ripening of fruits, vegetables, and other perishables that further extended shelf-life. Advances in transportation came particularly fast – steamships in the mid-1800s, railroads and refrigerated trucks 19th century – and combined with falling oil prices to dramatically reduce the cost of shipping food.

It now costs 70 percent less to ship cargo by sea, and 50 percent less to ship by air, than it did 20 years ago. Furthermore, invention of frozen orange juice concentration and artificial organic food items also cause the consumers located in different geographical area to enjoy seasonal fresh foods at any time season (Halweil, 2002). With the course of time, many people developed innovative techniques of food-freezing, including Enoch Piper, William Davis, and Daniel E. Somes. But, Clarence Birdseye (1886 – 1956), an American taxidermist by trade, is credited for his quick freezing method that he invented in 1924 (http://www. oc. gov) and considered the father of the frozen food industry. He invented, developed, and commercialized a method for quick-freezing food products in convenient packages and without altering the original taste (http://www. wikipedia. com). Before the quick-freezing technique came along, foods were frozen at a fairly slow rate, making the foods loose their taste and texture. However, Birdseye theorized that food must be frozen very quickly so that its taste and texture can be maintained. His theory covered the packaging, type of paper used, and related innovations along with the 'freezing technique'.

In fact, this quick-freezing process actually ended up creating 168 patents (http://www. loc. gov). The modern frozen food industry was born over 70 years ago, in 1930, when frozen foods were being traded commercially (http://www. nfraweb. org). Objectives of the Study This study attempts to identify the current condition of frozen food business in Bangladesh, especially the semi-processed food segment of frozen food. Therefore, our agenda focuses on the semi-processed food found in the retail outlet.

Therefore, this study will identify the future perspective of the frozen food business, space of growth, employment opportunity and scope of developing frozen food business country wide to develop the market and export for foreign earnings. Significance of the Study As we have seen from the earlier segment, frozen food business has become very important for Bangladesh due to its capability of foreign earnings and employment opportunity in this sector. However, the semi-processed food segment in the frozen food has not got any attention; consequently no proper research work is available.

Therefore, we hope our study would help the frozen food sector as it would reveal the future perspective of the frozen food business and develop the ideas on what the entrepreneurs and government should do for the development and expansion of this particular segment the. Methodology To prepare the report, we will go for massive research on the frozen food business throughout the semester. The study is mainly based on secondary data and documentary methods. Documents are an important source of information and such sources of data might be used in various ways for the research work.

To attain the study different books, journals have been studied. Different websites and portals have been visited when required. Furthermore, we took interview of Deputy Manager at Nandan. Lastly, we have concluded the study by providing some recommendations based on our findings. Limitations of the Study Everything is its limitations as it has opportunities to develop. There still exist some limitations in our study. The limitations are we only focused on the secondary source but not able to visit any production facility.

There is also time constraint as for any research work it requires more that two to three years; but within three month semester, we had to complete the study on the frozen food business. Literature Review International business is defined as 'transactions that are devised and carried out across national borders' and has existed since the national borders were formed and has shown growth throughout the history with greater peace and security, economic prosperity through development in transportation andcommunication, andtechnological progress, especially advent of Internet, liberalization of trade policies and reduction in ariffs, and creation of global institutes and agreements (GATT or WTO). During the last 30 years of twentieth century (1970-2000), the volume of international trade in goods and services has expanded from a level of US$200 billion to over US$6. 8 trillion - a 34- fold increase, which is faster than world output. Direct foreign investment (FDI) reached a level of US$4. 7 trillion by 2000. The sales of foreign affiliates of multinational corporations (MNCs) recorded a level twice as high as global exports.

The driving force behind the growing/changing international business is the process ofglobalization, which has been accelerated during the last 2-3 decades (Hussain, 2002). A noteworthy recent development in world trade is the rapid expansion of processed food exports and it is the fastest growing component in food products (Athukorala & Sen, 1996; Australian Food Statistics, 2001). The impetus for export expansion has come from new agro-based manufacturing activities, in particular various fish preparations and processed foods.

While labor-intensive manufactures too have demonstrated impressive growth dynamism in absolute terms, this has been dwarfed by the more dramatic growth record of processed goods. There is evidence that these new product lines have many positive attributes according to which the contribution of manufactures to the objectives of industrialization is normally evaluated (Athukorala & Sen, 1996).

These include economy-wide linkages, important learning effects emanating from the mastery of new productiontechnology, higher productivity, international marketing effort and entrepreneurial skills involved in export success (Meller, 1995). Based on the conventional definition, export of manufacturing (Appendix A) share in total exports of world trade merchandise increased to 81 percent in 1994 and closely associated with the rapid expansion of manufacturing exports form developing countries those shares in world manufacturing exports increased to 24 percent in 1994.

On the other hand, share of processed food in world non-manufacturing (Appendix A) trade increased to 37 percent in 1994, and this share is sharper for developing countries compared to that of developed countries with increased to 38 percent compared to an increase to 36 percent recorded by developed countries in 1994. However, mong the 37 countries, some countries have performed far better than others in this area such as Bangladesh, Bolivia, Chile, Indonesia, Korea, Malaysia and Thailand; and among the low-income countries, Bangladesh is a notable exception, with a growth rate of processed food exports that is more than double that that of any other low income developing country (Athukorala & Sen, 1996). Foreign direct investment has been increasing at a faster rate than direct exports of processed foods over the past decades.

Although its impact is currently not quantified, national-level regulation is frequently cited as a potential source of non-tariff barriers to trade for food products. These barriers may be intentionally aimed at favoring domestic production, or merely be the innocent by-products of a country’s attempt to serve its consumers by assuring various food quality attributes. FDI allows food processors to avoid rules intended to disadvantage imported products by setting production within particular markets.

It may also allow more precise and rapid adaptation to domestic quality regulations (Hooker & Caswell, 1996). A priori reasoning and some scattered evidence suggest a number of factors, which results in growing share of processed food in the world trade. A widely observed feature of consumer behavior in the global economy has been an increasing `internationalization of food habits’ - the increased importance of processed items in food consumption patterns in developed countries as well as in large sections of the populace in many developing countries.

Factors such as international migration, the communications revolution and international tourism have contributed to this phenomenon. This may have provided a significant demand-side impetus to the growth of processed food exports from developing countries. On the supply-side, improvements in food technology, refrigeration facilities and transportation have made processed food items easily tradable across national boundaries (Athukorala & Sen, 1996). Furthermore, strategic choice of FDI or export the processed food in the international market is also influenced by national-level regulation on the ood quality standard. FDI allows food processors, by setting production within a market, to avoid rules intended to disadvantage imported products and to adapt rapidly to domestic quality regulations through greater flexibility, better designed plants, shorter shipping distance, less need for preservatives, packaging or refrigeration, superior understanding of the rules or better appreciation of local demands for goods with differing attributes to direct food quality benefits to both firms and consumers (Hooker & Caswell, 1996).

The emphasis on manufactured exports expansion in developing countries is rooted in the belief that compared to primary commodities, manufactured goods have some intrinsic characteristics, which contribute to superior growth performance. As such employment potential, terms of trade gains, knowledge and technology spill-over are among the most emphasized of these characteristics (Athukorala & Sen, 1996).

However, in general, the employment potential of resource-based manufacturing, based on standard trade theory (Heckscher-Ohlin model), is that an abundant supply of labor is not a key determinant of comparative advantage in international production (Findlay, 1985; Roemer, 1979). The Heckscher-Ohlin model (1933) was first conceived by two Swedish economists, Eli Heckscher and Bertil Ohlin at the Stockholm School of Economics. The Heckscher-Ohlin model is a general equilibrium mathematical model of international trade.

It builds on David Ricardo's theory of comparative advantage by predicting patterns of trade and production based on the factor endowments of a trading region. The model essentially says that countries will export products that utilize their abundant factor(s) of production and import products that utilize the countries' scarce factor(s). However, this generalization in processed food is debatable as there is no clear relationship between income levels and processed food export growth.

Furthermore, unlike in the case of further processing of resources such as minerals and timber, final stages of food processing appear to be labor-intensive. Besides, terms of trade gains from export diversification depends on the degree of income and price elasticity of demand for the commodities concerned, and processed food exports are superior to primary products in terms of these criteria. Furthermore, processed food would be even superior to conventional manufactured goods, hich are by their very nature, are highly import-dependent. On the other hand, processed food industries have large domestic resource content and tend to be closely related to activities in the rural sector (Athukorala & Sen, 1996). It is very likely that recent trade agreements and developments will significantly influence national-level regulation of food quality. NAFTA, GATT and WTO are the first attempt to specifically address food quality standards as potential barriers to trade.

National-level quality regulation takes on many dimensions or regimes because product quality itself is multidimensional. Trade theory provides a foundation for analyzing the impact of food quality regulation on FDI and trade. In its basic form, economic theory suggests that gains from trade arise when countries specialize in production of those goods to which they are best suited, thereby earning export income that allows for increased consumption.

Trade theory’s recent focus on analyzing rent seeking and rent shifting associated with national regulation, the benefits to individual sectors of an economy from trade agreements, and the divergence of outcomes between countries with different per capita income levels are also useful. New trade theory, on the other hand, discusses the effects on trade and investment patterns of imperfect competition, economies of scale, and distortions in factor markets.

It advances two quite different explanations of Intra-industry Trade – one emphasizes the interaction of product differentiation and economies of scale and second one emphasizes the literal two-way trade of identical products, with pricediscriminationbeing the driving force. It is useful for analyzing quality regulation because it focuses on the many factors that affect the welfare impacts of trade policy (Hooker & Caswell, 1996). Barriers to freer trade arising from non-tariff sources have become more prominent as progress has been made worldwide on tariff reduction.

Parties to recent trade agreements have sought to lower non-tariff barriers or at a minimum to assure that progress toward freer trade is not thwarted by increases in non-tariff barriers. Regulation of product quality can be a major source of non-tariff barriers to trade. If such barriers are to be lowered, trading partners must develop methods of regulatory rapprochement. For processed food products the level of regulatory rapprochement on quality regulation will have significant impacts on patterns of international trade in the next decade (Hooker & Caswell, 1996). Hirschberg et al. 1992) investigated the bilateral trading patterns of 30 countries and found that various market size variables (Appendix B) such as gross domestic product (GDP) per capita and the comparative size of GDP between trading partners shared border and membership in either the European Community or European Free Trade Area proved to be significant determinants of intra-industry trade. Similarly, the study of Hartman and colleagues (1992) on processed food and beverage industries resulted stressed the positive effect on intra-industry trade of US total trade and economies of scope.

The study on processed food of Handy and MacDonald (1989) found that product differentiation cultural ties, and firm size were significant determinants of FDI. Connor (1989) expanded on this evidence to suggest the importance of tariffs and non-tariff barriers to trade and domestic and foreign market structure, and stressed effects of the host country's regulatory practices, patent protection and trademark laws as likely factors in determining FDI levels. Ning and Reed (1995) highlighted the importance of factors such as host market size, growth rate, and membership in a trading bloc in explaining FDI patterns.

In addition, research by Sheldon and Witzke (1992) provided various quality models to trade in food products and highlighted the key role played in the market by consumers' ability to verify standards set by another country. National-level quality regulation and within trade bloc rapprochement influences firms’ choice of strategies to increase sales abroad such as export sales, joint ventures, FDI, and licensing although not yet quantified. The demand for food quality will continue to increase as incomes increase. National-level performance expectations will increase in the future.

Demand for higher quality products increases as income increases. In addition, National governments are the first in line to respond to this demand with new regulations. The demand and new national regulations are likely to outstrip harmonization efforts on an ongoing basis, leaving national regulations with an enduring influence on patterns of trade in processed food products. Quality regulation has momentum, in both more and less developed countries, making keeping up very difficult for firms and cooperating countries.

For firms working under national-level quality regulation, a very significant problem is that the regulation is dynamic, changing, and in many cases ratcheting up (Hooker & Caswell, 1996). In addition to the national-level quality regulation, many countries have implemented labeling requirements for foods. Labeling provides processor and retailers’ choice, not necessarily consumer choice. The decision of these intermediaries is central to the outcome of any food labeling policy. Consumers will be part of their labeling decision, because retailers and processors will conduct marketing studies on consumer perception (Carter & Gruere, 2003).

However, the food label is an important tool for improving the public understanding of thehealthbenefits of following a nutritious diet. The Center for Food Safety and Applied Nutrition (CFSAN) of the Food and Drug Administration (FDA) has continued to study food labels with its Food Label and Package Survey (FLAPS). Data from the 2000–2001 FLAPS characterize various aspects of the labeling of processed, packaged foods, including nutrition labeling and various types of label claims. The final FLAPS database consists of 1, 281 foods. An estimated 98. % of FDA-regulated processed, packaged foods sold annually have nutrition labels, with an additional 1. 7% of products exempt from nutrition labeling requirements. Health claims, structure or function claims, and nutrient content claims were identified on food labels. In addition to the resource this, survey provides to CFSAN in assessing health and nutrition information on the food label, registered dietitians and other health professionals can use FLAPS data to assist consumers in choosing a more nutritious diet to improve their health and well-being (http://www. sciencedirect. com).

Food safety and Environmental Requirements in International Market It is useful to distinguish between two kinds of food safety and environmental requirements. Mandatory requirements formulated by national or local governments are here referred to as ‘ regulations’, while voluntary requirements formulated by the private sector, NGOs or other organizations are referred to as ‘ standards’. The latter category includes those voluntary requirements drawn up by National Standards Organizations and international bodies (United Nations, 2007). Food-safety standards and regulations tend to cover multiple issues.

Apart from food safety, they cover issues such as plant and animal health, product quality, environmental protection and social welfare. Government regulations applied to imports of FFV sector largely focus on food safety, labeling and marketing requirements. Private-sector standards tend to focus on food safety, environmental protection and social welfare (Geneva, 2006). A number of factors have contributed too increasingly stringent food safety regulations and standards imposed by governments and the private sector, in particular: • Recent food scares and scandals in developed countries; Demographic developments in developed countries (i. e. ageing of population, which gives rise to be more risk-averse and quality-conscious consumer behavior); • Risk minimization efforts by retailers; and • More sophisticated detection and testing methods. Food safety standards and regulations tend to cover multiple aspects. Apart from food safety, they cover issues such as plant and animal health, product quality, environmental protection and social welfare (United Nations, 2007). Requirements laid down in government regulations are often transmitted to producers and exporters in developing countries through the supply chain.

For example, EU legislation tends to hold importers accountable for compliance with its provisions with regard to imported products. The need to takeresponsibilityfor the safety of the food they import into the EU market places importers under an obligation to exercise due diligence over supply chains (Geneva, 2006). Possible Implication for Developing Countries Developing countries face considerable constraints in meeting food safety regulations and private-sector requirements due to weak institutions, lack of infrastructure, high compliance costs, lack of information, and other factors.

One can even go so far to say that the new mandatory and voluntary requirements act to reinforce other strengths and weaknesses at production unit and supply-chain levels, i. e. in terms of technical or transport infrastructure (Geneva, 2006). Adoption of the HACCP approach to assuring safety Developed countries are increasingly requiring adoption of the hazard analysis and critical control point (HACCP) approach to assuring food safety. In the EU, the use of HACCP has become mandatory for all food categories.

The use of HACCP is not mandatory in the case of primary production. However, the use of HACCP is mandatory in packinghouses in the case of semi-processed and processed food, vegetables, and products that are pre-packed in the exporting country (United Nations, 2007). EconomicEnvironmentof Bangladesh During the last few years, Bangladesh made considerable progress in stabilizing and liberalizing its economy. As a result, inflation was much lower than previously, and average annual real GDP growth was above 5%, largely led by exports.

Indeed, one of the most striking features of Bangladesh's trade is that textiles and particularly clothing dominate exports. This dramatic change in the composition of exports is the consequence of Bangladesh's increased integration into the multilateral trading system. On the structural policy front, the Government has continued to pursue, inter alia, trade liberalization, financial sector reform, and privatization (www. wto. org). Unfortunately, real annual GDP growth, averaging around 6. 7% during the review period, has not been sufficient to make much of a dent in thepovertythat pervades Bangladesh.

Given Bangladesh's high incidence of poverty, its dense population, and its vulnerability to natural disasters, including periodic flooding and cyclones, food security is a major policy objective of the Government. Trade Policy Framework The Ministry of Commerce (MOC) is responsible for coordinating trade policy matters through its agencies, as well as in consultation with other Ministries and governmental bodies; national committees are formed to address specific issues on trade and industrial development.

Private sector representatives, including business groups andacademicinstitutions, are consulted in the policy-making process through their participation in the national committees. A major institutional change involves the upgrading of the Tariff Commission under the purview of the MOC; the Commission is now empowered to conduct anti-dumping and countervailing investigations (http://www. wto. org).

Local regulations, standards and good agricultural practices (GAP) can assist developing countries in promoting safe and sustainable production systems and in supplying products for domestic, regional and international markets that meet the quality, safety and environmental standards of those markets (United Nations, 2007). Trade Policy Measures In an effort to encourage investment, the Government offers a wide range of open-ended tax incentives, notably tax holidays and accelerated depreciation.

However, the effectiveness of such incentives in attracting investment is doubtful, particularly in the absence of fiscal transparency, which would involve a detailed account of tax revenues forgone and systematic evaluation of the impact of these incentives in relation to forgone taxes. The existence of incentives complicates tax administration and taxpayer compliance, while increasing the scope for tax avoidance and evasion, both of which are reflected in Bangladesh's low overall level of tax collection relative to GDP (http://www. wto. org). Frozen Food Business in Bangladesh

Bangladesh as a third-world country poses poverty, unstructured business environment, conservative social values for living as an inherent quality. Since this country has achieved independence, it started to changing slowly and now its changing rapidly to cope with the modern and so called western country. Its business has got new dimensions and the whole country economy has started to play a good role in shaping the worlds future to some extends. The participation of developing countries in world trade is much lower than their participation in world production, as the main producers (China, India and Brazil) have huge domestic markets.

Although China is the world’s largest producer, only a relatively small proportion of its production is exported, but its exports are increasing rapidly (United Nations, 2007) GDP growth of broad Industry sector was 9. 56% in FY 2005-06. The performance of the industrial sector was mainly based on the growth in textile and wearing apparel, drugs and pharmaceuticals, fertilizer, petroleum products, glass products, cement, electronics, footwear and food & beverage industries. In addition to that, we can see that the total export earnings registered a 21. 3% increase during 2005-2006 and rose to US$ 10156 million (16. 03% of GDP) from US$ 8655 million (14. 18 of GDP) in 2004-2005. Exports increased chiefly due to higher demand in both developed and developing countries. Garments had the major share (38. 86%), followed by knitwear and hosiery (35. 43%), frozen foods (4. 43%), jute goods (3. 94%) leather (2. 31%), chemical products (2. 52%) and raw jute (1. 03%) (Export Promotion Bureau Bangladesh, 2005-2006). Bangladesh is not well prepared to address the new requirements in international markets.

Existing mechanisms for gathering, processing and disseminating information are not working properly and there is hardly any coordination, follow-up and monitoring. Largely, stakeholders are mostly unaware, uninformed and unconcerned. However, some private foundations and NGOs are raising awareness among producers of quality requirements and providing them with training. They are also exploring non-traditional markets (United Nations, 2007). The processing industries in the Region’s countries (Asia and Pacific region) are essentially agro-based enterprises.

There is a huge range of ethnic and traditional food products in each of the countries. The local food industry has evolved around domestically available agricultural raw materials, such as maize or corn, paddy rice, fruits, vegetable, root crops, sugarcane, coconuts, oil palm, spices, beverages (tea, coffee, cocoa) and honey. Modern food processing plants have been introduced in developing Region’s countries, initially centered on processed foods derived from processed meats, wheat and flour products, and dairy products. This has led to an increase in imported raw materials ingredients and packaging, for the roduction of this type of food. In more recent years, however, indigenous companies have set up, often in joint venture with multinational corporations, to process local raw materials such as pineapples, cassava, fruits and vegetables to be packed, labeled and exported under the corporations’ brand names. These operations include food canning, carbonated beverages, frozen food manufacture, and flour and starch production. The companies apply total quality assurance as well as comprehensive research and development procedures to ensure high quality innovative products (Hicks, 2001).

Bangladesh has been involved in frozen food business for a long period of time. During the 1970s, our frozen food industry started with rapid expansion of seafood processing and exporting. Now, the industry has come a long way with the frozen foods export is the second largest export sector of the country. Currently, many firms are involved in both import and export of frozen food. Imported goods include various fruits, semi cooked food, full cooked foods, whereas, exported goods encompass frozen shrimp, lobster, crab, and various vegetables.

Although the industry involves both exports and imports, it is actually an export-oriented industry with an average annual growth rate of about 28% in the export area. In 1997, the fourth leading export item in Bangladesh was frozen shrimp and fish, with a 7. 3 percent share of the total export market (www. ifpri. org). The industry includes the following sub-sectors: Hatcheries, Sustainable aqua-culturetechnology, Feed meals plants, and processing unit for value-added products. The frozen food could be categorized into – (1) Fresh Foods, (2) Semi Cooked/Processes Food, and (3) Full Cooked/Processes Foods (http://www. oi. gov. bd). •Fresh Foods: Fresh foods are those which has not cooked or baked but has done some modifications where necessary. For example, Sea Food, Beef, Chicken, Fishes, Mutton etc. •Semi-Cooked/Processed Foods: Semi Cooked/processed foods are those which has made or shaped or cooked in such a way that it can be eaten/use just by a simple cooking process at home. That means, these types of foods are already cooked to some extend and made ready to use after a short cook/bake. For example, Samucha, Singara, Noodles, Porota, etc. Full-Cooked/Processed Foods: Full Cooked/processes foods are those which has made or shaped or cooked in such a way that it can be eaten/use instantly at any time. That means, these types of foods are already cooked/processed to use instantly. For example, Ice-Cream, Juice, etc. The government of Bangladesh and many other national and international organizations have been actively participating for the quality control of the industry. Bangladesh Frozen Foods Exporters Association (BFFEA), a company with limited liability, is the main organization that is involved with this industry and established in1984.

Its main job is to promote and protect the interest of Frozen Food processors, Packers and Exporters in Bangladesh. It also involves in establishing and Promoting, contacts with foreign buyers, business association and the Chamber of Commerce and Industries for developing export marketing and marketing of Frozen Foods (http://www. bangladeshembassy). A Fish and Fish Product Ordinance (Inspection and Quality Control) was created by the Bangladesh government and in 1985 upgraded the inspection laboratory and its personnel (www. ifpri. org).

Among the international organizations, the Food and Agriculture Organization of the United Nations (FAO) has helped this industry too. It has developed product standards, regulations, and fish inspection schemes. Based on the Hazard Analysis Critical Control Point (HACCP) approach, FAO initiated a 1996 project to give a hand in the preparation of a fish safety and quality control program for the seafood plants in Bangladesh, Intergovernmental Organization for Marketing Information and Technical Advisory Services for Fishery Products in the Asia Pacific Region (INFOFISH) also aided the industry several times.

It has carried out projects that focused on the export promotion of value-added products and their sustainable development (http://www. ifpri. org). Another international organization, International Technology Development Group (ITDG), promotes food processing to help the rural poor in developing countries to secure sustainable livelihoods. This is part of ITDG’s goal to build the technical skills of poor people in developing countries to improve their lives (O. Yu, 2002).

ITDG links up with local organizations to provide training and support to food processors and entrepreneurs emphasizing on flexibility, little capital investment requirement, and operating in the home without the need for sophisticated or expensive equipment. Among the projects of are cereal milling in Peru, snack food production in Bangladesh, and fruit and vegetable drying in the Sudan (Halweil, 2002). ITDG began operating in Bangladesh in the early 1980s, but the ITDG–Bangladesh (ITDG-B) program was not formally established until 1990.

ITDG-B provides technical assistance to small producers and local organizations, including training, product research and development, disseminating information, networking and policy advocacy (O. YU, 2002). Food processing could help the rural poor in Bangladesh, especially women, who are among the most disadvantaged. Food processing often requires only a little capital and can use local produce. Many Bangladeshi women, ITDG-B found, were already processing snack foods such as home made samucha, singara etc. Building on their own know-how, women could increase their household income by using local resources to process foodstuff.

Food processing can serve several development objectives for households and small business: increased income, greater savings, food security and better nutrition (ITDG, 1999). Agro processing in the broad sense is important to the national economy, having shown a purported 32 per cent annual growth in past years (Bangladesh Economic Review, 1995). While large companies have now entered the snack food market, small producers serve local markets and boost local economies. Preserving food stretches the utility and productivity of farm produce, which is often wasted during peak seasons but scarce during lean seasons.

Food processing helps to make food available during lean seasons and helps to stabilize household income (O. Yu, 2002). The Food and Agriculture Organization (FAO) has pointed out that the value realized from processing and marketing farm products can surpass primary production (FAO, 1995). The present market for these products is a sellers’ market dominated by a number of firms. Consumers have choices of different quality and price. Producers with appropriate marketing strategies are receiving market acceptance in the domestic market.

The market for processed food products is becoming highly sophisticated and consumers are becoming more quality conscious. Major local markets include Dhaka and Chittagong cities. Apart from a growing domestic demand, the government is encouraging the export of processed foods, which is important for this sector. Processed food products in the local market move from processors to the consumers through a chain of wholesalers and retailers. Distribution to the export market is through direct exporting or through trading companies (Hossain & Sheel, 2001). Constrains and Scope for Development

While small-scale food processing offers numerous opportunities for improving livelihoods, several constraints that hamper development need to be addressed. A major one is that large companies such as Bombay Mix, Aftab, Rich etc. have begun producing myriad processed foods, including snacks, pickles, jelly and jam. Therefore, there is a stiff competition among the large and small scale producers in the domestic market (Hossain & Sheel, 2001). According to the Bangladesh Rural Development Board (BRDB), by April 2000 approximately ten large companies were manufacturing it.

Another problem is that small producers have limited know-how in the technology of preparing food products, as mentioned by Azam Ali, coordinator of agro processing programs at ITDG, lack of proper information and expertise seems to be a particular problem in the case of small-scale food processing even though it can be a major source of jobs and additional income. A number of other concerns that inhibit small-scale food processing in Bangladesh (ITDG, 1998) need to be addressed: •There is a significant difference between having the ability to produce for home consumption and establishing a small business based on this product.

A range of skills (both technical and business) is needed to make the transition from home production to the running of a small-scale enterprise. •Linked to this is the ability to locate and target markets. This is a dynamic sector. Rural producers need to learn how to monitor change, develop markets and sell their products. Know-how in selling and locating wider markets was a common limitation. •Consumer perception is an important issue faced by small-scale processors. There is a common perception that foods produced by small-scale operators are unhygienic and unsafe.

This may be somewhat true but is commonly exaggerated. Nonetheless, processors need to be more conscious of hygiene, quality and consistency in food handling, including dangers of adulteration. • Lack of access to raw materials, appropriate equipment and packaging materials are obstacles that small-scale processors frequently face. •Access to credit is lacking. Many of the small-scale processors belong to the most marginalized sector of the population and do not have disposable income. To enable them to put their skills into practice, most need access to credit to purchase equipment and raw materials. They also lack access to appropriate and timely information on a range of topics. To compete effectively, small-scale food processors need reliable technological information and information on suppliers and prices of materials, equipment and packaging, and marketing information. •Recording transactions is a problem because of low literacy. In the 1990s, only 34. 4 per cent of Bangladesh’s population was literate. Literacy among women was 25. 5 per cent. In rural areas it was as low as 13 per cent (BBS, 1999). Most problems were market related: competition with large companies, inconsistent quality, inferior packaging and labeling, marketing and selling, insufficient access to quality raw materials, and lack of confidence among consumers in products of small-scale producers (Azami et al. , 1996; Azmi & Chowdhury, 1996). •The value-added tax imposed by the government to the processed food industry and limited promotional activities for the small scale business due to the high cost ofadvertisementin mass media (Hossain & Sheel, 2001).

The changing role of multinational companies and demographic factors, and more globalization of production and market are likely to enforce developing countries like Bangladesh to face increased competition emanating from liberal trade regimes, big MNCs enjoying economies of scale by virtue of their global operation, and lack of access to global market because of no brand name and heavy expense of advertising for local firms (Hussain, 2002). As such in case of Malaysian processed food, they have the technology and the means to locally process food into higher-value products where there is ess competition from other exporting countries such as Bangladesh (http://www. delmys. cec. eu. int). Furthermore, there is a lack of modern infrastructure and equipment for food processing in many developing countries of the Region. Inadequate transportation, poor distribution, inadequate cold storage and freezer capacity, lack of potable water and unreliable power supply are the main shortcomings. There is a shortage of trained, skilled labor and technical competence in agriculture especially in the traditional food industry sector.

This coupled with poor management, leads to inefficiency and poor competitiveness. Labor costs have risen markedly in newly industrialized countries, in the last decade. This results in higher production costs, for labor-intensive operation. Moving the operation to lower labor cost countries, or automation, is the response of modern food companies (Hicks, 2001). To compete with these challenges developing countries should create employment through economic development and promoting technologies that suit the resource endowment.

A country like Bangladesh has large populations. Best way to achieve economic development by using the most abundant resource - labor. Developing countries, therefore, have to supplement the R&D effort and modify technologies to their advantage, at least in sectors where most of the population draws its living such as agriculture, aquaculture, tourism, etc. Local business and enterprise development is important for adding value to local resources, creating employment, and improving traditional products for the global market.

Taiwan's herbal teas, dried/pickled fruits, India-Pakistan cooking spices, pickles and chutneys, Malaysian ready-to-cook traditional foods and paratha, are interesting innovations in business development. The potential for further development is vast and should be exploited (Hussain, 2002). The local business development also offers huge economic opportunities. Developing nations that emphasize greater food self-reliance can thereby retain precious foreign exchange and avoid the whims of international markets. There is strong evidence that local food often costs less than the quivalent foods bought on the international market or from a supermarket, because transportation costs are lower and there are fewer middlemen. In fact, rebuilding local food systems might offer the first genuine economic opportunity in farm country in years, a pressing need in view of the huge amounts of money leaking out of rural communities. To the extent that functions associated with food production and distribution are relocated in the community under local ownership, more money will circulate in the local community to generate more jobs and income.

This is particularly true if crops are not only grown locally, but also processed locally or served in local restaurants. This sort of alliance can help arrest the positive feedback loop that makes it harder and harder for independent players to survive. Cornwall in England is an icon that link local food to local food business: In Cornwall, the Cornwall County Council’s in-house meal service provider is backing local food suppliers as part of a ? 1 million contract to supply school meals to 32 countyprimary and secondaryschools for fresh meat, frozen food and vegetables (Halweil, 2002).

A study on food processing in Bangladesh assessed the market and the potential of each activity (Chowdhury ; Sarker, 1989). Their study considered snack foods as secondary food processing. Some interesting findings included the following: •Many crops were produced throughout the year. Yet because the farms and production were small, the volume of crops that could be processed was smaller than the capacity of even the smallest machines. In 1996, for example, 52. 85 per cent of holdings were small, 0. 05 to 2. 49 acres. Medium-sized farm holdings, 2. 5 to 7. 9 acres, made up 11. 65 per cent, and large holdings were only 1. 67 per cent (BBS, 1999). •Most crops, except jute and tea, were produced for the local market, but production was still less than the country’s total demand. Some crops, therefore, were imported. •Crop processing could provide employment for women and the rural poor. However, without appropriate equipment, modern capital-intensive production could overrun the industry and displace women and landless workers. Furthermore, snack foods were identified as a focus, along with rice and sugar cane products.

ITDG-B determined that there was a need to train fieldworkers on how to make snack foods so that they could guide beneficiaries in running food processing businesses. Post-workshop consultations with development organizations emphasized the need to train fieldworkers further in establishing sustainable small-scale food processing businesses, particularly since the business orientation of these organizations and their staff was inadequate. When ITDG-B looked at existing suppliers of technology and training, it found that the existing training courses were oriented towards large-scale operations (O.

Yu, 2002). The search for improved quality and reliability of supply tends to create certain governance structures in the private sector along the supply or value chain. Private sector requirements function as value chain governance tools: by specifying, communicating and enforcing compliance with key product and process parameters along the value chain, large buyers and retailers can benefit from control without ownership. Specific requirements on food safety, quality, and environmental or social issues substitute, to some extent, for direct monitoring and ownership by buyers.

These requirements transfer the direct costs of monitoring and control from the buyers to the suppliers, who have to bear the costs of certification yet are rarely compensated through higher prices (United Nations, 2007). Food Quality and Standard in Bangladesh Quality of products is ensured through using appropriate raw materials, the right type of equipment and qualified technical personnel. Bangladesh Standard and Testing Institute (BSTI) standards and rules are followed to ensure high quality (Hossain ; Sheel, 2001). The BSTI can play vital role to develop and harmonize food standards for ensuring food quality and security in the country.

They also emphasized fixing a standard level to promote food standards up to international level and norms to facilitate both the domestic and international trade for boosting the export earnings (http://www. newagebd. com). The BSTI, the national standards body, is an autonomous organization under the Ministry of Industries. BSTI performs the task of formulation of national standards of industrial, food and chemical products. Quality control of these products is done according to Bangladesh Standards. Till date BSTI has come up with over 1800 national standards of various products adopting more than 132 International Standards (i. . ISO) and food standards set by the Food and Agriculture Organization (www. thedailystar. net). BSTI certifies the quality of commodities including food items for local consumption, which applies both for export and for import. Currently, 142 products are under compulsory certification marks scheme of BSTI including 54 agricultural and food items (http://www. bsti. gov. bd). The country needs food quality testing facilities because big international corporate businesses cannot purchase many Bangladeshi food products in the absence of such facilities.

One of the major issues that prevent the corporate businesses in the food sector from purchasing from small and medium enterprises (SMEs) in Bangladesh is the lack of quality testing facilities (http://www. sdnbd. org). BSTI has made it mandatory to mention six facts regarding the product on the package. This includes the date of production, date of expiry (best before use), net contents or weight, address of the producers or marketing companies, maximum retail price (MRP) and the ingredients (http://www. bsti. gov. bd).

BSTI collects random samples from the factories and buys products from the market to test. If they find sub-standard product they do not have the power to take action against the company or the industry. The BSTI Ordinance 1985 has been amended to Act 2003 for consumers' protection against low quality products (http://www. thedailystar. net). Only the government food testing laboratory at IPH works on food safety and water quality issues. The legal provisions to ensure proper quality control of food are inadequate (world health organization, 2002).

The Institute of Public Health (IPH) organizes its activities of quality control of drugs, food and water, production of vaccines, intravenous fluids, antisera anddiagnosticreagents, diagnosis of infectious diseases and related research facilities. IPH is formed to assist the government to prevent and control major health hazards caused by contaminated and adulterated food and water. Besides this, it organizes training programs in the field of diagnosis, control and prevention of infectious diseases and food and water safety.

It also conducts various research activities in related fields of public health, and to collaborate and co-operate with other national, international organizations and agencies in the promotion of public health (http://www. thedailystar. net). It is therefore essential to enhance awareness and understanding of the possible implications of quality, food safety and environmental requirements for the food sector in Bangladesh, and to carry out an assessment of the compliance costs and the costs and benefits of a proactive adjustment strategy for the sector, including its impact on competitiveness (United Nations, 2007).

Recommendations The new product range of frozen food has put forward the market for semi processed or processed food on the run. As people are becoming more work-based, especially women, there is very less time for cooking or preparing Tiffin for children. It is a relive for working mothers and even easy for bachelors to prepare snacks or such items in no time and with less hassle. The frozen food industry has recently begun in Bangladesh, concentrating in major cities like Dhaka and Chittagong and directing towards only superstores.

The growing demand from foreigners residing in cities previously to new generation working moms and other working people has opened a huge opportunity for potential players to join in this appealing industry. Blooming companies are trying to gain awareness for market share at recent times. This benefits customers in terms of superior quality products and better customer service. Thus, the industry has to devise innovative strategies so as to attract and retain more customers. Availability: To gain more customers the companies need to reach out to retail outlets or departmental stores at various corners of the city.

Although the product needs to be kept in special freezers, these companies can make it happen. They can provide incentives for retailers or even at potential customer bases can provide with freezers themselves! In order to sustain in this competitive arena, where lot of frozen food imports are pouring in, the industry in Bangladesh needs to be strong in distribution. Export: Companies should spread its boundaries to outside country to gain more revenue. Things like shrimps and prawns and vegetables are already good frozen exports and are earning good amount of revenue. So, exporting can be good choice to expand.

Science and Technology: Distribution and mass customized production may be in the form of acquiring new and advanced store equipments. Such things would increase the pace of goods delivered to customers. Specialized equipment for preserving frozen foods may be acquired. Equipment is being developed that will give both visibility and attractiveness to both frozen food, made possible by new advances in refrigeration which permit visibility but retain low temperature. Modern machinery and technology can help in product design and development, mass production, standardization and quality control, packaging and transport.

Promotion: At this point, the frozen food companies should do rigorous promotional activities in order to increase awareness level in probable customers. Different programs may include in-store demonstrations of how easy the food is to prepare, leaflets of the items given to the parents when they wait to take their kids from schools. Leaflets in newspapers and colorful ads in the TV during drama time, 9: 00 pm to be shown in various satellite Bangladeshi channels can also be good starting. Another ground to show off is during the international trade fairs.

Placing: The cities are big and to create a place there one needs to be different. The people to be targeted are literate working people with white color jobs or students. Therefore to reach this mass a company needs to set up somewhere from where distribution is easy to retailers. Another daring step can be to have a forward linkage or integration. That is to say to have a retail outlet of only company made frozen food. This is company owned and can have a small cafe serving only snacks out of their items. The shop should have people from the company who can answer to any queries the people ay have. Innovation: Constant rendering is required to have a strong hold on the market share. Outside of Bangladesh frozen food has ranged from snacks to whole meals. The frozen food companies should develop new products through research and development to match with the ever changing demands. They should always try to make ways to lower cost without hampering quality much so to compete with the imports. Installment of Training Programs Manpower: Manipulative skills are available to the agro-industries in the Region.

However, inadequacy of in-depth technical understanding and lack of management skills in the workforce restricts innovation and consistent performance. Therefore, government as well as private sector should develop a sound technological and industrial base, human resources in science, technology administration and management. Institutes for research and development working on the needs of frozen food industries should be established at different levels of development. Infrastructure Development and Favorable Trade Policy: Both institutional and physical, is a component of most national development plans.

Establishment of basic infrastructure such as roads, distribution system, power supply, and favorable and supportive policy to have adequate cold storage and freezer system is recognized as essential for the growth of semi-processed food industries. There should be a modern infrastructure and equipment for food processing. Conclusion It is very much clear that Bangladesh potential country to produce frozen food due to its resource endowment – abundant labor force that is suitable for the production of frozen food. The essence of the frozen food business is that it becomes an income source for the local and rural people.

There are large organizations associated with this industry, and thus a huge number of employees are employed. That is how this industry is keeping a great deal of contribution in removing unemployment rate and creating more employment opportunity, and, shaping its future. Furthermore, increasing demand both in local and in overseas for the frozen food and little investment requirement make this business more attractive and profitable for small-scale and larger producers. However, massive pressure from imported semi-processed foods is affecting the local small-scale producers such as home made foods.

Therefore, frozen food businesses require achieving the quality standard and government should aid small-size business with tax reduction, and facilitate more investment. Here, the private sectors or larger organization can play an important role by facilitating the small producers in the value creation activities. Furthermore, consumer awareness is also a big factor to develop the frozen food industry. Unless and until the consumes are willing to buy locally produced semi-processed food and help the local producers produce quality products, the development of frozen food business country wide might not take place.