





Plastic Industry of Bangladesh



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A. Industry Classification:

International Standard Industrial Classification	Code
Manufacture of plastics products	222
Manufacture of plastics products	2220

B. Industry Analysis:

1. Introduction

Plastics can be used to create almost any items we use in our daily lives that can be noticed just by looking around such as toothbrush, shopping bags, toys, electronic switches, ball pens, artificial flowers and so on (The Daily Star, 2012). By definition, Plastic is a synthetic material made from a wide range of organic polymers such as polyethylene, PVC, nylon and so on that can be molded into shape while soft and then set into a rigid or slightly elastic form (Houser, 2016). During the last few decades, it has become an important industrial sector in Bangladesh. The growth of the plastics industry has a multiplier effect on numerous important sectors of the Bangladesh economy and thus Bangladesh Government has given immense priority to this industry (Hossain, 2016). Even with the growth and export potential, the plastic industry has some challenges to overcome for further expansion.

2. Insights of Bangladesh's Plastic Industry

The macroeconomic performance had been stable for Bangladesh, despite structural constraints and global volatility. According to Asian Development Bank (ADB), plastic industry, with significant growth potential, could play an important role in contributing to industrial growth with higher exports and stronger domestic demand (Hasan, 2015). Plastics-based products currently represent a sizeable sub-sector of the country's chemical industry with the current

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market size of around BDT80.54 billion (US\$1 billion), with BDT57.634 billion (US\$714 million) pertaining to the domestic and the remainder to the global market. The plastic sector has around 3000 manufacturing units employing a total of more than 2 million people either directly or indirectly (Recycling International, 2012). Annual sales of plastic products are estimated at around BDT150 billion in the local market, in which household items account for nearly BDT20 billion. According to the Bangladesh Plastic Goods Manufacturers & Exporters Association (BPGMEA) data, currently, 300 manufacturers export plastic goods worth nearly BDT30 billion annually. Besides, the local market of Bangladeshi plastic products is about BDT200 billion a year.

The plastic industry is a key enabler of innovation of many products and technologies in other sectors of the economy like packaging, textile, healthcare, construction, electronics, energy generation, automotive and so on. Plastic and plastic-based products are making significant contributions to the economy and have become an important segment of the manufacturing industry of the country. Average growth rate of plastic production is more than 20% per year. The trend would continue as the demand for plastic goods has been increasing continuously (Hasan, 2015). Currently, this industry produces 2,500 types of plastic products. Value addition in manufacturing plastic products hovers between 51% and 70%, which is also commendably high. Most of the household plastics and packaging materials that are used in Bangladesh are being manufactured locally. Per capita consumption of plastic is only 5 kg in Bangladesh which is far below than the global average of 80 kg (Recycling International, 2012).

3. Imports

3.1 Molds and Machinery

Nearly all capital machinery for the plastic industry is imported from overseas. Small and lowend product manufacturers usually import cheaper machines from India, China, and Thailand. The high-end industries import their machines from Taiwan, Japan, Europe and America (Uddin, 2015). Each type of plastic product uses a specific type of polymer processing technology and equipment. The major types of processing techniques include blowing, extrusion and injection molding. However, prevailing technology level in the industry is considered to be intermediate



or low in Bangladesh. The whole industry relies on molds supply and the local molds manufacturing covers only 10% of existing demand (Tetra Tech ES India Limited, 2014).

3.2 Raw Materials

Bangladesh has no polyolefin unit and therefore polymers demand is met by imports. At present, consumption of plastic materials composed of imported polymers and local recycled plastic waste is about 750,000 tons (Ahamed, 2014). In the year 2010, 60% of the post-use plastic waste has been recycled in the country resulting in a saving of BDT48.33 billion (USD600 million) of import of virgin raw material (Uddin, 2015).

The commodity polymers mostly used are polyethylene (PE), polyvinylchloride (PVC), polypropylene (PP), polyethylene terephthalate (PET) and polystyrene (PS). Bangladesh's imports represent 0.26% of world imports for plastic related product and positions 59 in the world ranking of imports. Top five supplying markets, namely China, Saudi Arabia, Chinese Taipei, Korea and Thailand represent 65.9% of total Bangladesh plastic raw material imports (Hasan, 2015).

4. Exports

Bangladesh has not yet emerged as an exporter of plastic products with considerable share. It is ranking in the world exports is 89. This is because Bangladesh has only 0.01% share of the global demands. Demand for Bangladeshi plastic products has been increasing as the international buyers are now shifting more to Bangladesh from China and India. Withdrawal of Generalized System of Preferences (GSP) put pressures partially on competitiveness as Bangladeshi products face duty from 3-15% depending on the products (Dhaka Tribune, 2014). Bangladesh could emerge as a global player in the plastics industry by hiking its annual turnover to BDT161.18 billion (US\$2 billion) by 2015 and BDT322.36 billion (US\$4 billion) by 2020, according to a study conducted by the United Nations' Economic and Social Commission for Asia and the Pacific (ESCAP) (Recycling International, 2012). Countries like Poland, China, India, Belgium, France, Germany, Canada, Spain, Australia, Japan, New Zealand, the Netherlands, Italy, United Arab Emirates (UAE), Malaysia and Hong Kong are the major export destinations for plastic industry in Bangladesh (Khan, 2012). Top five supplying markets,



namely China, USA, India, Germany and Belgium represent 73% of total Bangladesh plastic exports. However, there are some potential markets for Bangladeshi plastics exports. These are South Africa, Brazil, Chile, Mexico, Australia, Japan, China, India, South Korea, Russia, and Turkey (Hasan, 2015).

5. Opportunities and Challenges

The plastic sector has opened a new era of manufacturing plastic goods which have an excellent domestic as well as export potential. The plastic industry has many opportunities which suggest a notable development of this industry. Growth rate has averaged more than 20 percent each year in the last two decades, almost all the plastic goods which were imported in the past are now being made domestically with export quality, the plastic production wastage are recycled for re-use, more use of plastics in modern machinery and equipment, and some plastic products are now being made for export. If these opportunities could be capitalized through policy reforms and other support services, the plastic industry in Bangladesh could achieve significant growth in the future (Uddin, 2015).

Although the plastics industry in Bangladesh has made remarkable progress over recent years, it continues to lack a well-designed strategy for achieving long-term and sustainable growth which suggests a consistent and direct policy to be ensured by the government (Recycling International, 2012). It is a challenge for the plastic industry in Bangladesh to be more competitive in the global market. Some of the large-scale plastic industries have demonstrated a capability to be world class in terms of technology, quality, and costs. However, there are 5000 plastic manufacturing units of which 98% belong to the small-medium sector (SMEs). The major challenge facing this sector is to make the SMEs competitive in the global market by upgrading them in terms of innovative technology, product diversity, and operation costs. It is to be emphasized that technology is changing rapidly and the life cycle is short (Ahamed, 2014).

A report of the Center for Policy Dialogue (CPD) suggested that the country can have a global market share but the major challenges or reasons for failing to effectively utilize the gain from profitable market conditions are the supply constraints and unskilled workforce in the sector.



Some of the other major challenges of the Bangladesh's plastic industry are power shortage, waste management and environmental concerns (Chan Chao International Co., Ltd., 2016).

6. Conclusion

Plastic is a very essential material that only help to create daily-used items but it can have a multiple impact on other sectors of the economy. Plastic industry in Bangladesh has grown significantly and has export potential. Nevertheless with the profitable market condition, the industry is failing to achieve it. There are several challenges that this industry is facing. In order to compete globally, the industry should focus to work on the lacking to reap the tremendous level of benefits for Bangladesh. Keeping all these challenges in mind, the government should also take a policy which will favor plastic industry to grow more in Bangladesh.



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