

Competition Dynamics of SME Plastics Industries in Bangladesh Using Triple Triangle Framework Model: An Assessment

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Abstract : Starting as a backward linkage industry, the plastics sector in Bangladesh is achieving a remarkable growth and expansion to become one of the most promising sectors contributing 1.20 per cent of the country's GDP with a total investment of Tk 185.5 billion holding a market share of only 0.01% against the global demands of \$590 billion with the ranking of 89 in world exports. Out of available 5,000 plastic industries almost 98 percent belongs to SME. Despite having remarkable achievement with almost 500% growth in export over the past twelve years, Bangladesh plastics industry has been suffering from lack of strategic planned direction towards achieving long-term sustainable inclusive growth. In this study, a thorough analysis of the relevant issues using Triple Triangle Framework (TTF) model helped to understand the competition dynamics of the Bangladesh SME Plastic Industry through the identification of challenges and opportunities relevant to the sector.

Keywords: Plastic; Triple Triangle Framework; SME; Industry

1.0 INTRODUCTION:

The use of plastics has become an integral part of today's life by way of its use as material solutions for most of the useful elements of our life. Starting as a backward linkage industry, the plastics sector in Bangladesh is achieving a remarkable growth and expansion to become one of the most promising sectors along with other fast growing industries like leather, electronics etc. Since its inception as an industry in the 1920s, plastic production has exploded in the 1940s and started contributing to the world economy as one of the fastest growing industry. The beginning of World War II in 1939 has raised the demand of plastic significantly. From 1950 to 2012, the world's plastic industry has witnessed a remarkable growth averaged 8.7 percent per year with a rapid increase in its production from 1.7 million tons to the approximately 300 million tons of today (The Plastics Industry Trade Association, 2016). According to Grand View Research (2015),

global plastics market is expected to grow at an average growth of 8.1 percent from 2014 to 2020 towards market value of \$654 billion by 2020.

According to Bangladesh Plastic Goods Manufacturers and Exporters Association (BPGMEA), in Bangladesh plastic product industry contributes 1.20 per cent of the country's GDP with a total investment of Tk 185.5 billion. Despite having a very good potential, Bangladesh holds a market share of only 0.01% against the global demands of \$590 billion with the ranking of 89 in world exports. Per capita use of plastic goods in Bangladesh is very low (only 5 kg) comparing to the world average of 80 kg (Moazzem & Sehrin, 2016). Despite all sort of limitations, the product range of plastic in Bangladesh is always increasing and has been able to grab attention of the world market. A blending of institutional support and innovative entrepreneurial effort may lead to flourish with a

diversified product base for both local and foreign markets.

2.0 STATEMENT OF THE PROBLEM:

Despite having remarkable achievement with almost 500% growth in export over the past twelve years, Bangladesh plastics industry has been suffering from lack of strategic planned direction towards achieving long-term sustainable inclusive growth. As a result, this sector is facing difficulty in the international competition despite having a great potential. A thorough analysis of the relevant issues using Triple Triangle Framework (TTF) model may help to uncover the challenges and opportunities of the plastic industry under the scope of SME in Bangladesh.

3.0 OBJECTIVES OF THE STUDY:

The General objective of this study is to analyze the competition dynamics of plastic industries in Bangladesh with the context of SMEs and to uncover the challenges and opportunities using the TTF model. To achieve the general objective, the following specific objectives will be addressed:

1. To reveal the current status of the plastic industry in Bangladesh;
2. To identify the key issues relevant to the firm level factors on the value chain of the plastic industry;
3. To identify the key issues relevant to the industry level factors on the value chain of the plastic industry;
4. To identify the key issues relevant to the macro level factors on the value chain of the plastic industry;
5. To draw an overall concluding remark.

4.0 METHODOLOGY OF THE STUDY

The nature of the study is empirical and exploratory. To fulfill the research objectives this study has used the triple triangle framework (TTF) technique to analyze the competition dynamics of the plastic industry in Bangladesh.

TTF helps to assess the impact of macro, industry and firm level factors on the competition dynamics of an industry where the inner triangle explains the internal, mostly controllable dynamics of firms, middle triangle enumerates the immediate, industry level context in which firms work and the outer triangle represents the macro environment i.e. largely non-controllable setting in which firms have to operate. The following figure illustrates the TTF (Jahan, 2008):

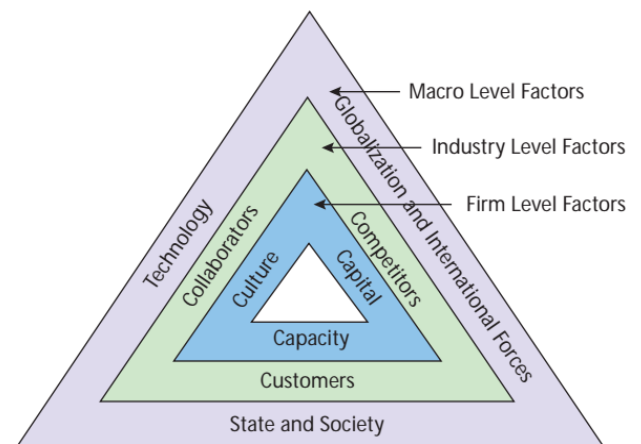


Figure – 1: Triple Triangle Framework (Jahan, 2008)

The study has used data from both primary and secondary sources. Primary data has been collected through interviews with twenty five manufacturers in Dhaka as around 65 percent of the plastic factories are situated in Dhaka. The authors have also attended the Annual General Meeting of Bangladesh Plastic Goods Manufacturers and Exporters Association (BPGMEA) that took place on December 17, 2016 to collect information from the key informants involved in the industry. Secondary data has been collected from both local and international publications provided by the government and different agencies like BPGMEA, ESCAP, CPD etc. Both content analysis and tabular analysis have been used to enumerate the findings.

5.0 AN OVERVIEW OF BANGLADESH PLASTIC INDUSTRY

5.1 Bangladesh: A Brief Idea about Current Economic Status

Bangladesh is highly populous country with current estimates of its population being around 161 million in an area of 147,570 square kilometers (Bangladesh Ministry of Finance, 2016). However with limited land area it has a population density of around 1,091 persons per sq. km. It is the eighth most populous country in the world and has the twelfth highest population density.

Bangladesh falls within the category of “least developed countries” by the UN and has an estimated GNI per capita of US\$1,190 per person

which places it 183rd in the world based on World Bank 2015 figures. Illiteracy is a problem with estimates by the United Nations Development Programme of adult literacy rates being around 56.8%. About 48% of the population is employed in the agricultural and primary sectors. Bangladesh is dependent upon a limited range of exports of which textiles and garments contribute the maximum share (around 80%). Despite these disadvantages, Bangladesh has experienced reasonable levels of economic growth (by developing county standards) over the past two decades and with a corresponding reduction in poverty levels.

Table – 1: Bangladesh Macro Economic Indicators

Macro Economic Indicators	2011-12	2012-13	2013-14	2014-15	2015-16
GDP at current market price	Tk. 10,552.0 billion	Tk. 11,989.2 billion	Tk. 13,436.7 billion	Tk. 15,158 billion	Tk. 17,295.7 billion
GDP at fixed price	Tk. 6884.9 billion	Tk. 7299.0 billion	Tk. 7741.4 billion	Tk. 8248.6 billion	Tk. 8830.5 billion
GDP growth at fixed price	6.52	6.01	6.06	6.55	7.05
Per capita GDP at current price	Tk. 69,614	Tk. 78,009	Tk. 86,266	Tk.96,004	Tk. 108,172
Overall budget deficit (including grants)	Tk. -418.7 billion	Tk. -443.8 billion	Tk. -536.0 billion	Tk. -706.2 billion	Tk. -808.6 billion
Overall trade deficit	Tk. -737.2 billion	Tk. -560.3 billion	Tk. -529.0 billion	Tk. -456.6 billion	Tk. -315.1 billion
Rate of inflation	8.69	6.78	7.35	6.41	6.01
Revenue GDP ratio	10.9	11.6	11.7	10.8	12.1
Tax GDP ratio	9.1	9.7	9.7	9.9	10.5

Source: Bangladesh Economic Review – 2016

According to the Bangladesh Economic Review, Bangladesh's gross domestic product (GDP) growth over the past six years has averaged over 6.0 per cent. Indeed Bangladesh has been growing consistently over the past two decades, resulting

in its poverty levels declining from 57 per cent in 1990 to an estimated 24.8 per cent in 2015 (MDG Bangladesh Progress Report, 2015). A brief idea about the current economic status is presented above providing some statistical information for

the most recent five years covering the period from 2011-12 to 2015-16.

5.2 Plastic Industries under the scope of SME

Small and medium size enterprises are businesses that maintain revenues, assets or a number of employees below a certain threshold. Unfortunately, there is no commonly accepted definition of SMEs either universally or regionally. Different countries use different parameters to define SME such as number of

employees, amount of capital invested, amount of turnover or nature of the business. Every country and economic organization has its own definition of what is considered a small and medium-sized enterprise. In Bangladesh, National Industrial

Policy defines small and medium enterprises based on Fixed Asset and Employed Manpower and they are definitely not Public Limited Co. and require the following characteristics –

Table – 2: Scope of SME under Bangladesh National Industrial Policy - 2016

SI	Type of Industry		The amount of investment (Replacement cost and value of fixed assets, excluding land and factory buildings)	Number of employed workers
1.	Cottage Industry		Below 10 lakh	number of workers not exceed 15
2.	Micro Industry		10 lakh to 75 lakh	16 to 30
3.	Small Industry	Manufacturing	75 lakh to 15 crore	31 to 120
		Service	10 lakh to 2 crore	16 to 50
4.	Medium Industry	Manufacturing	15 crore to 50 crore	121 to 300
		Service	2 crore to 30 crore	51 to 120
5.	Large Industry	Manufacturing	More than 50 crore	More than 300
		Service	More than 30 crore	More than 120

Source: National Industrial policy (2016)

5.3 Emergence of Bangladesh Plastic Industry:

In Bangladesh, the humble beginning of plastic products took place in the 1960s as a small industry but has registered a slow growth since then. The growth accelerated in the 1990s and with the introduction of the free market in

Bangladesh economy in 1991, it has shown notable progress and growth. Annual sales of plastic products in Bangladesh is estimated approximately Tk. 200 billion with a growth rate of over 20 percent per year over the past several years (BPGMEA, 2016).

Table – 3: Milestones of Bangladesh Plastics Sector

Year	Milestones
1960's	Small products such as toys, bangles and photo frame were made using hand made molds. Plastic spare parts for jute mills.
1970's	Automatic machines were installed to manufacture household utensils such as plastic jugs and plate
1980's	Film blowing machines to manufacture plastic bags.
1990's	Plastic accessories especially hangers for exportable garments.
2000's	Molded plastic chairs and tables. Water tank made by rotation molding. Locally developed machines (shredder, extruder, pelletizer) for recycling plastic wastes
2010's	Relatively mature markets for plastics and are driven by new technology

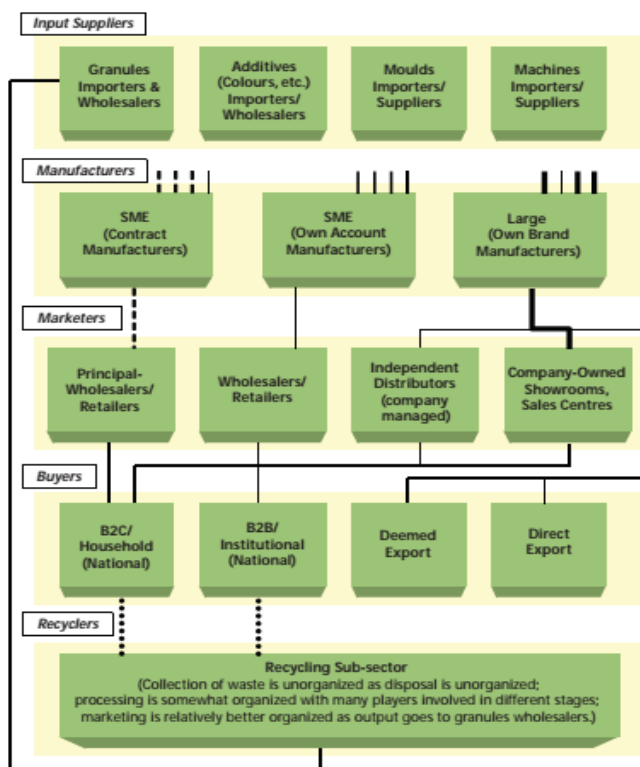
and innovation in the field of bio-based and sustainable alternatives.

Source: Hasan, 2015 & BPGMEA

5.4 Value Chain Dynamics of Plastic Industry in Bangladesh:

UNESCAP (2011) has identified the following value chain dynamics of the Plastic Industry in Bangladesh which has been matched with the findings from the study.

Figure – 1: Value Chain Dynamics of the Bangladesh Plastic Industry



Source: UNESCAP (2011)

According to UNESCAP (2011), the value chain for plastic products in Bangladesh consists of five stages. The first stage of the value chain is input suppliers such as raw materials, machines which

are almost fully import based with an indication of weak backward linkage. In case of manufacturing of plastic industry, almost 98 percent of the players are SME. Not only the existing companies are expanding their operation but also many new enterprises are entering into this sector taking its big global and local potential markets into consideration. In Bangladesh, manufacturing units in the plastic industry follows two business models: own account manufacturing (OAM) or contract manufacturing (CM). Most of the micro and small industries follow CM business model whereas medium and large manufacturers mainly rely on the OAM business model. Large manufactures sale their products to the domestic market and global market whereas the SMEs concentrate on local market.

5.5 Categorical Dimensions of the Plastic Factories in Bangladesh based on the Location of Factories:

At present, there are about 5,000 plastic industries in the country of which 3,500 are small and 1,480 are medium & 20 are large sized that employ around 1.2 million people. Around 65 percent of these factories are situated in Dhaka, followed by 20 percent in Chittagong, 10 percent in Narayanganj and remaining 5 percent are in the rest of the areas in the country. Out of the available units, almost 98 percent belongs to SME (Pintu, 2016; Islam, 2011). The following table depicts the categorical dimensions of the plastic factories based on their location:

Table – 4: Plastic Factories based on Location

Category	Number of plastic factories	Percent (%)	Location
Small	3500	70.0	Dhaka (Islambagh, Sutrapur, Lalbagh, Posta, Bongshal, Chawkbazar, Shohidnagar, Begumbazar,

			Azimpur, Kamrangirchar, Koilarghar, Rahmatgonj, Hazaribagh, Mirpur, Uttarkhan, Dakkhinkhan, Ashulia, Hemayetpur); Keraniganj, Naraynganj, Khulna, Chittagong)
Medium	1480	29.6	Dhaka (Lalbagh, Siddiqbazar, Azimpur, Mohammadpur, Tejgaon, Mirpur, Uttarkhan, Dakkhinkhan, Ashulia, Hemayetpur, Savar); Tongi, Gazipur, Munshiganj, Naraynganj; Chittagong (Jubli Road, Kalurghat, BayezidBostami, Nasirabad; Pahartali; Potia); Khulna
Large	20	0.4	Dhaka (Tejgaon, Mirpur); Ashulia; Savar; Tongi; Gazipur; Naraynganj; Chittagong.
Total	5,000	100.0	

Source: BPGMEA

5.6 Categorical Dimensions of the Plastic Factories in Bangladesh based on Potential Market:

In Bangladesh, nearly about 83 percent plastic factories are purely engaged in the production for

local market. Only 16 percent factories are involved with the indirect and direct export with customs bonded facility

Table – 5: Plastic Factories based on Target Market

Categories	No. of Factories	Percent (%)	Current Market Size (BDT)
Factories engaged in the production for domestic market	4150	83.0	200 billion (Local)
Factories engaged in indirect export (customs bonded)	500	10.0	40 billion (Export)
Direct exporter (Customs Bonded)	300	6.0	
Indirect and direct exporter	50	1.0	

Source: EPB & BPGMEA

5.7 Total Investment and Workforce in the Plastic Industry in Bangladesh:

According to BPGMEA, approximately 1.23 million people are directly and indirectly involved in plastic industries of Bangladesh of which around 8 million people are directly and indirectly employed in the sector. The total fixed and working capital investment in this sector is around Tk. 18,550 crore. The plastic sector is also witnessing new investments of about Tk 100 to Tk 150 crore every year. Almost 90 percent of the capital machineries of the industries are imported from abroad. Most of the low-end factories import

economy class machineries from India, China, Thailand, and Vietnam, whereas most medium and large sized factories use sophisticated automated machineries imported mainly from Korea, Taiwan, Japan, Germany, European countries and USA. In Bangladesh, plastic goods production has an average growth rate of more than 15% per year. Most of the factory's processing techniques are blowing, extrusion and injection molding. The value addition in manufacturing plastic products lies between 51% and 70%, which is also estimably high (Hasan, 2015). The following table depicts a glimpse of workforce employed in the plastics sector:

Table – 6: Total Employment in Plastics Sector

Categories of Workforce	Average no of workers per factory	Estimated no of worker / people
Working in small factories	50	175,500
Working in medium factories	300	444,000
Working in large factories	500	10,000
Indirectly employed		200,000
Dependents of workers		400,000
Total (Approximately)		1.23 million

Source: BPGMEA

5.8 Trend of Export Earnings from Plastic Goods:

According to BPGMEA (2016), annual sale of plastic products is estimated to be around Tk 200 billion in the local market, which has grown at an average 20 per cent per year over the past several years. Of the domestic market, household items account for nearly Tk 30 billion.

Despite having a very good potential, Bangladesh holds a market share of only 0.01% against the global demands of USD 590 billion with the ranking of 89 in world exports (Hasan, 2015). The export earnings from the plastic sector has been increased by around 500 percent in last 12 years. The exports of plastic sector can be classified into

two forms, namely direct export (finished plastic goods like kitchenware furniture, toys, garbage bags etc.) and deemed export (embedded parts of other exports like packaging materials and plastic accessories used in different industries e.g. zippers, hangers, packaging etc.). At present plastic is exported to almost 77 countries of Asia, Europe, Africa, America and Oceania (Afrin & Lima, 2015). Top five major plastic goods export destinations are China, USA, India, Germany & Belgium representing around 73% of total Bangladesh plastic exports (BPGMEA, Hasan, 2015). The following table represents the trend of plastic export earnings for 12 years covering the period from 2003-04 to 2014-15

Table – 7: Trend of Bangladesh Plastic Export

Year	Direct Export (Billion Tk.)	Deemed Export (Billion Tk.)	Total (Billion Tk.)	Share of Total BD Export (%)	Growth of Export (%)
2003-04	1.30	5.02	6.32	1.41	-
2004-05	2.38	5.91	8.29	1.56	31.7
2005-06	2.98	7.95	10.93	1.57	31.84
2006-07	3.31	9.54	12.85	1.33	17.56
2007-08	3.71	11.00	14.71	1.52	14.47
2008-09	3.60	12.74	16.34	1.52	11.08
2009-10	3.50	13.28	16.78	1.49	2.69
2010-11	4.93	19.73	24.66	1.53	46.96
2011-12	7.36	20.00	27.26	1.44	10.54

2012-13	6.92	19.70	26.70	1.26	(2.05)
2013-14	6.60	27.50	33.70	1.46	26.22
2014-15	7.83	30.00	37.50	1.57	11.28

Source: Author's compilation of data from EPB, BPGMEA, BER - 2016

As the data shows, the contribution of plastics sector in the total export of the country is very insignificant holding only around 1.5%. Of the total plastics effort, around 80% is earned from the deemed export and the rest 20% is from direct export. We see that there is a positive trend in the export amount with a fluctuation growth. At present the rank of the plastics products in the Bangladesh export basket is 12th in terms of direct exports, but if adjusted with the deemed export the ranking improves to 6th position (BPGMEA, 2016)

5.8 Trend of Plastics Raw Material Imported into Bangladesh:

Though most of the factories import their basic raw materials from abroad, they are able to use recycled material produced from plastic waste. Around 20 percent of the raw materials are managed from the recycled material and rest of the materials are imported from abroad. The following table depicts the trend of raw materials import for last 7 years:

Table- 8: Trend of Plastics Raw Material Imported into Bangladesh

Year	Total Import Volume (In Metric Ton)			Total Import Value (In Crore Taka)			
	In Bond Category	In Non-Bond Category	Grand Total	In Bond Category	In Non-Bond Category	Grand Total	Growth (%)
2008-09	135068	526319	661387	1560	5047	6607	-
2009-10	179688	414152	593840	1732	3490	5222	(20.96)
2010-11	215644	480896	696540	2455	4891	7346	40.67
2011-12	262912	478481	741393	3347	5700	9047	23.16
2012-13	196404	305242	501646	2505	3643	6148	(32.04)
2013-14	450948	164782	615730	5532	1753	7285	18.49
2014-15	365689	458600	824289	4567	4500	9067	24.46

Source: BPGMEA

Some fluctuations have been observed from the above table in case of the import, which indicates the inconsistency in the plastic manufacturing sector. Mostly, the raw materials are imported

from China, India, Korea, Malaysia, Germany, UAE, USA, Japan etc. But considering the last two years data, it is expected that the industry will be able to maintain a steady growth.

6.0 MAJOR FINDINGS FROM THE STUDY: CHALLENGES AND OPPORTUNITIES OF BANGLADESH SME PLASTICS SECTOR UNDER THE PURVIEW OF TTF MODEL

Firm Level Factors:

Factors	Challenges	Opportunities
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Culture	<p>Inherited family businesses are mainly run by family members who don't have any prior training or expertise.</p> <p>Around 98 percent of the plastic factories belong to SME, which are mainly owner-managed sole-proprietorship units.</p> <p>Although in some cases partnership is prevalent but registered partnership is noticeably absent.</p> <p>Almost all of the entrepreneurs seems to have been exposed to specialized training relevant to their businesses.</p>	<p>Despite having lack of expertise, infrastructure and funding, the entrepreneurs are showing positive attitude towards work.</p> <p>Taking the training opportunities offered by the Bangladesh Institute of Plastic Engineering and Technology Center (BIPET), the entrepreneurs will be able to enhance their expertise.</p>
Capacity	<p>Due to lack of gas and electricity, capital and skilled manpower, the industry is not able to run at its full capacity.</p> <p>The current capacity of Bangladesh Institute of Plastic Engineering and Technology Center (BIPET) is not sufficient due to lack of own campus.</p> <p>There is no testing laboratory to issue quality certifications that is required for export. Currently the plastic exporters are obtaining certification from Germany and Hong Kong.</p>	<p>The government has taken initiative to establish a separate industrial park for Plastic sector in Munshiganj, containing 50 acres of land. The estimated cost has been set Tk. 133 crore.</p> <p>348 industrial units will be established, where employment opportunities will be created for 17, 400 people.</p> <p>The government has donated Tk. 10 crore for BIPET in the 2014-15 budget. 125.87 decimals of land has been purchased at Keraniganj to construct its own campus.</p> <p>Through allocating more resources, the institutional capacity of BIPET can be enhanced to impart appropriate technical and vocational education needs for the sector.</p>
Capital	<p>Cost of fixed capital and working capital is high. The average interest rate on loan disbursed to SMEs is 15.6 percent (INSPIRD SME Survey 2013)</p> <p>For the entrepreneurs of the SME plastic firms, equity including retained earnings appears to be the dominant source of start-up capital.</p> <p>In case of shortage of funds, the owners manage fund through informal sources</p>	<p>Capital adequacy will help the firms to upgrade their production process and enter into the market for high quality products.</p> <p>To mitigate the financing problems, the pre-finance and refinance scheme jointly funded by Bangladesh Bank, IDA, ADB and JICA can be a good source of financing for the new plastic</p>

	<p>like members of the family, friends and close acquaintances.</p> <p>Trade credit is another important source for working capital to many SME plastic factories.</p> <p>SME plastic factories are reluctant to obtain formal funding through bank and non-bank financial institutions, as they require collateral of tangible assets (lands, buildings etc.). Moreover, the terms and conditions are often not suitable for the SME entrepreneurs.</p> <p>Lack of proper documentation, proper feasibility study and proper business plan are also hindrances to obtain formal funding.</p> <p>Lack of necessary and comprehensive publicity of available financing options for the SME Plastic sector.</p>	<p>entrepreneurs.</p>
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Industry Level Factors:

Factors	Challenges	Opportunities
Customers	<p>Most of the small firms target the local market for low quality product and produce goods with traditional less expensive machines and cheaper raw materials.</p> <p>Most of the own account manufacturing SMEs sell their products to wholesalers.</p> <p>Most of the SME plastic firms do not use a formal distribution channel to reach the customers.</p> <p>Contract manufacturing plastic firms sell their products directly to other firms.</p>	<p>Annual sale of plastic products is estimated to be around Tk 200 billion in the local market, which has grown at an average 20 per cent per year over the past several years.</p> <p>Bangladesh has earned BDT 37.5 billion through export of plastics goods.</p> <p>The export earnings from the plastic sector has been increased by around 500 percent in last 12 years.</p>
Competitors	<p>The SME Plastic factories face fierce competition among themselves, as well as with large scale industries.</p> <p>VAT on Plastic Toys hinders the local factories competitiveness with imported Chinese and Indian products.</p> <p>Most of the plastic SMEs do not have any clear strategy to deal with price and</p>	<p>Cheap labor cost, fast developing plastic waste recycling facilities can help the local producers to compete with the imported goods.</p>

	product competition.	
Collaborators	<p>BPGMEA, through its 6 separate Standing Committees, plays its main role as the representative of Bangladesh Plastics Industry in Bangladesh to negotiate with all other institutions in policy building.</p> <p>Some other institutions like SME Foundation, Ministry of Industry, Bangladesh Bank, NBR, FBCCI, Ministry of Finance, Ministry of Commerce, Ministry of Planning, BUET etc. also play vital role in the policy making of this industry.</p> <p>The SME Foundation conducted a sectoral study on plastic sector to prepare a time-bound sector specific action plan with prioritized recommendations in 2012. Due to the absence of clear guideline regarding institutional collaboration and mandate of different relevant organizations, the implementation of the action plan is suffered.</p>	<p>A collaboration between Bangladesh Bank and SME foundation can potentially result in identification of needy plastic organizations aiming for SME credit.</p> <p>Effective collaboration between BPGMEA and other stakeholders will help to draft the favorable and effective policy initiatives for the sector to implement the action plan.</p>

Macro Level Factors:

Factors	Challenges	Opportunities
Technology	<p>Most of the factories do not use high quality machines due to lack of low cost financing option and adequate information about the latest technology. Most of the factories are tremendously dependent upon imported machines purchased mostly from China, Taiwan, Japan and South Korea.</p> <p>The R & D facilities are not very effective due to lack of high quality technology and design facilities.</p> <p>Most of the SME Plastic factories do not have Effluent Treatment Plant (ETP), hence causes environmental pollution. In case of recycling industry, most of the factories are dependent on locally</p>	<p>The light engineering industry in Bangladesh can support the sector with low cost alternative technology which may help the SME plastic factories.</p> <p>Environment friendly technology is used by the new entrepreneurs to establish the compliance factories.</p>

	<p>developed technologies like, cutter, shredder/grinder, extruders Pulitzer, etc. to convert reusable plastics wastes into recycled plastic resins.</p>	
State & Society	<p>According to the Jute Packaging Act 2010, the use of jute bags has become mandatory from October 25, 2015 for packaging six essential goods like paddy, rice, wheat, maize, fertilizer and sugar. This Act has affected the plastic / PP Oven bag factories significantly. Infrastructure bottlenecks, limited yard space and equipment shortages at Chittagong Port cause container congestion which results the increase in cost and time of shipment and delivery of raw materials.</p> <p>Around 30% duty is imposed on the import of raw materials for plastic goods that causes high cost of production. Export-oriented plastic sector does not enjoy similar kinds of facilities like other major export oriented products like RMG, Jute etc.</p>	<p>The government has offered 10% cash incentive against the export of plastic goods.</p> <p>The government has declared plastics sector as one of the prioritizing 12 ‘most potential’ thrust sectors in the latest export policy 2015-18.</p> <p>Income of the SMEs engaged in production of any goods having an annual turnover of not more than Tk. 36 lakh, has been declared free from income tax. BPGMEA and Ministry of industry are working together to draft the Plastic Sector Road map – 2030, highlighting the key issues to uncover the untapped opportunities of this sector.</p>
Globalization & International Forces	<p>Due to the withdrawal of GSP in US Market, Plastic sectors facing stiff competition.</p> <p>Gradual relief in the cross-border trade restrictions by most of the countries has put more competition in international plastic trade.</p> <p>Unlike other sectors, Bangladesh Plastic Sector struggles to cope up in the era of globalization and adjust its business models accordingly.</p>	<p>BPGMEA, SME Foundation and government is working together to set relevant strategies for the development of the plastic sector through identifying niches where Bangladeshi plastic factories can utilize their comparative advantage to capitalize higher growth potential.</p>

7.0 CONCLUSION

This paper has identified the key issues relevant to the competition dynamics challenges and opportunities of the Bangladesh SME Plastic sector under the purview of the Triple Triangle Framework. It is expected that an effective collaboration among the related stakeholders including BPGMEA, SME Foundation, BB and

several government bodies will lead the sector towards its successful positioning in the global market place. The findings of this paper can help the policymakers to formulate effective policies in this regard.

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