









Light Engineering Industries

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Industry Overview

Light engineering (LE) sector makes significant contribution to the economy of Bangladesh through providing machinery and spare-parts as well as repair and maintenance service to largely manufacturing, agricultural and construction sectors of the country. LE sector in Bangladesh comprises a wide variety of parts/ component, intermediate and final goods including industrial machinery, (spare) parts for transport equipment, bicycle and parts thereof, electrical equipment and parts thereof (such as switch, socket, light, channel, cable, fan, generator, compressor, accumulator, transformer), ferrous and non-ferrous casting products, mold and die, agricultural machinery, printing and packaging machinery, construction machinery, and a number of spare-parts for almost all categories of machinery and equipment.

According to the Bangladesh Engineering Industry Owners Association (BEIOA), around 600,000 people are employed by almost 40,000 LE companies in Bangladesh. LE sector, in general has clusters of companies spread around the country (geographically concentrated in particular area) with major clusters located in Dhaka, Chattogram, Narayanganj, Bogra, Jessore, Gazipur and Kishorganj. According to SME Foundation in Bangladesh, there are 34 LE clusters in 18 districts of the country. Majority of LE companies are categorized as small and medium enterprises (SME) with less than hundred employees. As of 2018, total domestic market size was estimated to be USD 12 billion (according to PwC). While local production has been gradually increasing, they meet only 30% of total demand (Ahmed 2018). Electrical goods such as switch, socket, fan meet 48% to 50% of total demand with the rest being met by imports (according to Bangladesh Industry Technical Assistance Center).

Export performance and potential: Bangladesh exports LE goods worth less than USD half a million annually on an average. In FY2019-20, the sector was adversely hit by the COVID pandemic and barely realized export earnings worth USD 300 million. However, export earnings in FY2020-21 grew by 67 percent YOY to reach USD 489 million. Among those exported goods, bicycle accounts for almost one-fourth of total export with potential to grow further as the demand for eco-friendly transport means increases, especially in the EU countries. Other than bicycle, Bangladesh exports electrical equipment such as lead accumulator, refrigerator, compressor, transistor, diode as well as optical lens.



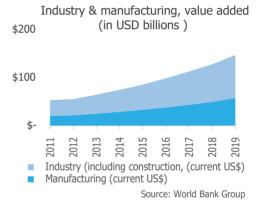


Attractiveness and Advantages

Large domestic market with growing middle-income class: Sustained economic growth over the last decade has enhanced consumers' purchasing power and affordability, leading to the rise in demand for consumer durables. In particular, domestic markets for consumer durables such as motorcycles and electronics (like laptop, mobile-phone, refrigerator, other home appliances) have been increasingly expanding. According to the Boston Consulting Group, 30 to 40 million people will join entry-level middle-income class by 2025, while another 34 million will move to a higher middle-income bracket, enabling them to reach a higher standard of living. Rising income coupled with urbanization, further electrification in rural areas, improved access to credit, is expected to drive the demand for such consumer durable products in the future and boost the need for LE goods.

Growing manufacturing industries: The industrial production has been rising rapidly in Bangladesh with the manufacturing sector growing at a CAGR of 13.7%

since 2011. This indicates an increased need for capital machinery, parts and associated services for repair and maintenance. Expansion of assembly industries such as motorcvcle, electronics, shipbuilding, electrical equipment, coupled with steady growth of export-oriented industries such as garment, pharmaceuticals and plastic, is expected to accelerate the demand for parts and components thereof (including spare-parts) as well as capital machinery, which largely rely for import.



In addition, Bangladesh has been experiencing significant increase in demand for construction materials due to the increasing housing needs of urban dwellers and public expenditure on infrastructure. These are also expected to augment the demand for LE goods of machinery and equipment for producing construction materials (steel, cement, processed woods, rubber, plastic) and associated spare-parts for repair and maintenance purpose.

Competitive workforce: Availability of plentiful young and cost competitive workforce serves as a strong competitive advantage for all export-oriented industries. Currently, the majority of the population is under the age of 27, with about one million people joining the workforce each year. Besides, increasing wages in countries such as China makes Bangladesh more cost efficient.

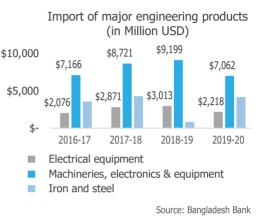
Duty-free market access: Bangladesh has duty- and quota-free access to 52 countries (Generalized System of Preferences: GSP) covering the EU, United Kingdom, Japan, Canada, Russia and Australia, etc. This facility enhances the export competitiveness of goods produced in Bangladesh.

Favorable policy: LE sector as a whole is designated as a high priority sector in the current National Industry Policy (2016) and as a special development sector in the Export Policy 2018-2022 and is therefore eligible for receiving favourable incentives and facilities. Moreover, the government of Bangladesh plans to establish ten dedicated industrial parks for this sector, that are to be provided with common service facilities beneficial for LE goods manufacturing.



Investment Potential and Opportunities

Given the rapid growth of the manufacturing sector in Bangladesh, demand the for machinerv, parts/ components (including spare-parts) are expected to grow in parallel. While there are some variation depending on the type of LE product, at least 50% or more of most LE products are currently imported into the country. Besides, while there are manv LE companies producing spare-parts and even machinery (albeit on a



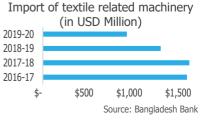
small scale), investments in advanced technologies and sophisticated equipment and tools such as (semi-)automated precision equipment, CNC machine, molds and dies are essential to improve precision and quality of locally made LE goods and improve productivity of manufacturing sector as a whole in the country. Foreign investors in possession of such advanced processing technologies and tooling skills can consider contributing to LE sectors and explore the opportunities in the following segments in particular:

Material processing services for parts fabrication: Foreign investors can consider playing a vital role in establishing the basis for material (metal, plastic, rubber) processing and related services essential for parts fabrication by the upper-tier parts makers such as experienced providers for parts forming and treatment services (including stamping/ pressing, casting/ forging, machining, surface/ heat treatment, sintering, fabrication of molds/ dies and jigs/ fixtures, plastic injection molding/ extruding/ packaging, rubber molding/ extruding, industrial sealing etc.). Foreign investment involving technology transfer to local potential providers, preferably through joint-venture are welcome.

Agricultural machinery manufacturing: The market size of agricultural machineries stood at USD 1.2 billion in 2019 (according to Bangladesh Agricultural University) with potential to grow further. Declining workforce in agriculture has amplified the need for further mechanization. At present, local manufacturers are only meeting 20% of total demand for agricultural machinery, thus providing potential opportunity for import substitution.

Textile machinery manufacturing with spare-parts: Local textile industry has been relying on imported machinery (for weaving, ginning, spinning) of USD one billion every year on average, indicating huge opportunities for import

substitution. With the steady development of local textile industry, the demand for spare-parts for textile (and jute) machinery has been on the rise as well, indicating greater investment opportunity for spare-parts.





Bicycle manufacturing: Bicycles are the largest export goods among Bangladeshi LE sector, amounting to USD 84 million in 2019-20 and rising to around USD 131 million in 2020-2021. At least seven local manufacturers export nearly 900,000 units of bicycles annually. The size of domestic bicycle market is estimated at USD 141 million in 2019 where some 1.5 million bikes are sold annually (according to the bicycle industry association). In 2019, Bangladesh was the fourth largest non-EU exporter of bicycles to EU (Eurostat). Global bicycle market is expected to grow at a CAGR of 7% and reach USD 75.5 billion by 2028 from around USD 54.4 billion in 2020 (according to Grandview Research).

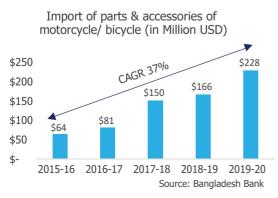
Bicycle manufacturers in Bangladesh see export prospects in EU countries amid the COVID outbreak as a rising number of people have started using bicycles as an alternative to public transport to maintain social distancing. In fact, more than 90% of bicycle export goes to EU countries as local manufacturers enjoy duty-free access to the market. As several European governments are providing subsidy to encourage bicycle purchase, Bangladesh has the opportunity to expand overseas market of bicycles, particularly in developed nations in addition to EU and the vast local market (projected to grow at a CAGR of 30%, according to the industry association).

Parts and components production for motorcycle/ bicycle: The motorcycle market has seen phenomenal growth since 2014 with an annual growth rate of 30 percent from 2014 to 2019. Registered number of motorcycles in Bangladesh has grown from less than 100,000 in 2014 to over 400,000 in 2019. Despite the COVID pandemic, motorcycle sales has remained stable during 2020 and is expected to continue so.



Over 95% of motorcycles sold in Bangladesh are either assembled or manufactured in the country. Currently, many international brands of manufacturers are assembling locally, indicating the growing untapped demand for motorcycle parts. While motorcycle contains around 1,500 parts, very few of those are locally sourced.

Motorcycle assemblers rely largely on import for sourcing the parts but have generally shown their intent to locally source as many parts as possible to minimize manufacturing cost and delivery time. Foreign parts manufacturers are highly welcome to realize more complete motorcycle supply-chain in Bangladesh.

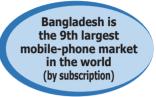


This is also the case for bicycle parts, a large portion of which are still imported, indicating a sizable potential for localized production. In addition, automotive spare-parts market is growing as well but still largely relying on imports, indicating a sizable potential for localization.



Electronics parts and components production: Booming electronics market in Bangladesh provides potential investment opportunities for suppliers of electronics parts and components. At present, Samsung, LG Electronics, Walton, Singer locally assemble their brands of TV, refrigerator, and other home appliances. Moreover,

mobile-phone brands such as Samsung, Oppo, Vivo are currently assembled in the country, while one more international brand plans to commence local production by the end of 2021. Development of electronics assembly industries are expected to boost the demand for electronics parts and components.



While Bangladesh produces and exports transformers, transistors, semi-conductor device, it is on a small scale. Since there is ample space for expanding local production for the growing domestic market as well as export market, foreign investors are also welcome to meet the demand of these markets with higher quality products.

Battery manufacturing: Driven by automobile industry, local battery market has been witnessing a significant growth rate of over 20% annually since 2013, reaching a market size of almost USD one billion in 2018 (according to Bangladesh Accumulator & Battery Manufacturers' Association). While the local battery industry primarily caters to two and three-wheeler vehicles, increasing popularity of hybrid vehicles is expected to boost the demand for rechargeable batteries.

Furthermore, size of global battery market is projected to surpass USD 300 billion in 2027 (according to Grandview Research), driven by the development of lithium-ion battery which is expected to grow at a CAGR of 13% till 2027 due to its high energy density and lightweight. Increasing demand for hybrid and electric vehicles around the world, caused by the shift to lower carbon economy is expected to activate this market segment. In addition, lithium-ion batteries are utilized in electronics devices such as smart-phone, tablet, laptop, digital cameras and other high-tech devices, that are becoming increasingly popular in Bangladesh. This indicates strong reason to choose Bangladesh as a location for producing these batteries.

Supporting Institutions related to Light Engineering Sector

Industrial Technical Assistance Center (BITAC)	As a public-run institute for metal-work and plastic processing industries, BITAC provides training for sector workforce and material testing services, and is currently developing the tool center equipped with modern machining/ tool facilities.
Pilot Plant Process	Testing and R&D institute under the science
Development Center	ministry, PP&PDC delivers testing service and work
(PP&PDC)	for material development and improvement.
Training Institute of	Technical and business training institute specialized
Engineering Industry	for light engineering sector, owned by the
Owners Association	association for light-engineering industries.

Sector-specific Investment Incentives and Restriction

Incentive	 Reduced corporate income tax for 5 to 10 years depending on location for newly established industries engaged in production of automation and robotics design and/or manufacturing inc. parts/ components thereof, automobile parts and components, basic components of electronics (resister, capacitor, transistor, integral circuit, multilayer PCB, etc.), bicycle including parts thereof, boiler including parts and equipment thereof, compressor including parts thereof, electrical transformer, LED TV, mobile-phone, textile machinery. (The Income-tax Ordinance, 1984, 46BB) 10 year exemption of corporate income tax for newly established industries engaged in manufacturing of the following (effective from July 1, 2021-June 30, 2030): Parts and components produced by light engineering industry used in industries. (SRO 166/Law/Income Tax/2021) Agricultural machineries (SRO 164/Law/Income tax/2021), Washing machine, blender, microwave, electronic sewing machine, induction cooker, knivehood, knives. (SRO 167/Law/Income Tax/2021) Institutes providing technical/vocational training to engineering skills development (SRO 168/Law/Income Tax/2021) Import duty exemption on capital machineries. Reduced import duties on brass wire and copper plate (as inputs for mold fabrication (SRO 154-AIN/2019/23/Customs) Reduced import duties on raw materials, tools and equipment used for LE industries (SRO 133-AIN/2017/19/Customs). For exporters: 50% of tax exemption for income derived from export. No VAT imposition on export goods. 15% cash incentive on export value of light engineering goods including accumulator battery.
Restriction	No specific restriction exist upon the entry of foreign investors.

Industry Associations

Engineering Industry Owner's Association (BEIOA)	Representing more than 5,000 companies involved in manufacturing of light engineering goods, BEIOA advocates for favorable policies for the sector development, organizes promotional activities, facilities industrial linkage, and operates training institute for skills development of light engineering workers.
Automobiles Components & Accessories Manufacturers Association (ACAMA)	ACAMA represents the interests of around 10 parts/ components suppliers to automobile and motorcycle assemblers in Bangladesh. The association facilities industrial linkage, provides required support to local parts and component manufacturers and advocates policy framework related to the industry.
Bicycle & Parts Manufacturer & Exporters' Association (BBPMEA)	Representing bicycle manufacturers and exporters in Bangladesh, BBPMEA advocates for favorable policies for the sector development and facilitates marketing and promotion activities.
Electrical Merchandise manufacturer Association (BEMMA)	Representing all electrical goods manufacturers in Bangladesh, BEMMA advocates for favorable policies for the sector development. It organizes promotional events, seminars and facilitates linkages to promote trade.

Notable Light Engineering Companies in Bangladesh



* Disclaimer: This document has been prepared for informational purpose only and does not intend to promote any product.

Bangladesh Investment Development Authority "Bangladesh - We Nurture Your Investment Dreams"



Bangladesh Investment Development Authority

BIDA undertakes the functions of investment promotion and facilitation, and policy advocacy in accordance to the Industry Policy and provides inquiry/ consultation/ licensing facilitation services to the investors outside the jurisdiction of other investment authorities (BEZA, BEPZA, High-tech Park Authority). Those investors registering with BIDA for their investment projects are able to benefit from the following key incentives and privileges:

Category	Notes
Tax holiday	 Phased Corporate Income Tax (CIT) exemption for 32 designated sectors/ products (as per the Finance Act 2020), depending on location of factories Phased CIT exemption for private IPPs (which construct powerhouse after June 2016) and full CIT/ capital gain tax exemption for PPP projects Full CIT exemption for ICT/ software industry
Tax rebate	Applicable for manufacturing industries of which factories i) are located, ii) move, iii) have already operated, outside Dhaka City
Import duty exemp.	 On capital machinery/ spares VAT exemption for imported capital machinery/ spares
Other tax exemption	 On interest payable on foreign loans On royalty/ technical license fees obtained from foreign company/ expert On personal income tax for foreign technician One capital gain from the transfer of shares of listed public companies
Non-tax incentives	- Accelerated depreciation for newly established industries in lieu of tax holiday on their factory, machinery and plant

* The above may be subject to revision upon annually enacted Finance Act and individual regulations. Export-oriented industries regardless of their locations can benefit from additional privileges and facilities.

Bangladesh Economic Zones Authority

"BEZA is a smart way for business in Bangladesh"



BEZA develops and manages economic zones (EZs) in view of generating more spillover effects of investment for industrialization. Currently a number of EZs are being developed throughout nation to cater for investment needs of both foreign and local investors, utilizing a variety of development schemes including BEZA's own initiative, private initiative, public-private-partnership and bilateral agreement with foreign government. The investors tenanted in EZs are able to benefit from the following key incentives/ privileges:

Fiscal incentive	 Phased Corporate Income Tax (CIT) exemption for 10 years VAT exemption for imported machinery/ const. material, utility expense Duty exemption for imported vehicle Duty exemption for import/ export of goods/ materials with bonded warehouse facility Personal Income Tax exemption for expatriate salary Tax exemption for dividend/ royalty and technical license fees, etc. Exemption of local government tax/ land development tax Exemption from registration fee on land transfer/ loan document, stamp duty on loan document/ lease of land and space
Non-fiscal incentive	A variety of privileges and facilities are available. (see the website of BEZA: http://www.beza.gov.bd/)

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