# Table of Contents

Introduction: .......................................................................................................................... 1
Types of Cement used in Bangladesh: .................................................................................. 2
Raw materials: ......................................................................................................................... 2
Cement Production: ................................................................................................................. 2
Demand, Consumption and Export: ....................................................................................... 3
Division wise Consumption: ................................................................................................. 4
Major Users Groups of Cement: ............................................................................................ 4
Market share: .......................................................................................................................... 4
  Local: ................................................................................................................................. 4
  Global: ............................................................................................................................... 5
Risk Factors: ........................................................................................................................... 5
Seasonal Impact: .................................................................................................................... 5
Environmental Impact: ........................................................................................................... 5
Conclusion and Recommendation: ......................................................................................... 5
Bibliography ............................................................................................................................ 6


Cement Industry of Bangladesh

Nabihatul Afrooz¹ and A.B.M. Qudrot-E-Khuda²

Industry Classification:

<table>
<thead>
<tr>
<th>International Standard Industrial Classification</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement Industry</td>
<td>239</td>
</tr>
</tbody>
</table>

Introduction:

Cement industry in Bangladesh is playing a very important role in the development of infrastructure as the economy is growing over the years. Although, the actual growth of cement industry started only about a decade ago, the development of cement industry in Bangladesh dates back to the early-fifties. The magnitude of cement demanded by a country is an indicator of the development of construction sector which also points to economic growth (Hossain, 2015). Since 1990, about 95 percent of the country’s demand for cement had been met through import. The country has been experiencing an increasing trend of cement production domestically for the last 6/7 years. In 2010, local entrepreneurs started setting up factories and around 100 factories had been incorporated as cement manufacturers.

Currently, only 45 factories are in operation, including 5 multinational companies. Many small factories have shut down among brutal competition (Royal Capital Limited, 2015). Cement producers, who have been going through a tough time for the last two years, now expect the demand to return next year, riding on some big infrastructure projects.

The cement sector accounted for 3.2 percent of the day’s total turnover on the Dhaka Stock Exchange (DSE) of Tk 4.35 billion in the end of September, 2015. The sector’s overall price earning (PE) ratio stood at 35.38. The cement sector accounted for 6.90 percent of the DSE’s total market capitalization of Tk 3,364 billion as on the end of September, 2015. Meanwhile, the listed cement companies witnessed mixed trend in their profits in the first half in 2015, compared to the same period last year as businesses faced disruption due to political turmoil in the first quarter (The Financial Express, 2015).

¹ Research Associate, Research Department, Emerging Credit Rating Limited, Email: nabiha@emergingrating.com
² Junior Research Associate, Research Department, Emerging Credit Rating Limited, Email: qudrot@emergingrating.com
Types of Cement Used in Bangladesh:
In Bangladesh, only one type of cement (Ordinary Portland Cement) had been available till 2002 which followed the American Standard Method (ASTM). From 2003, many types of cement became available in Bangladesh which has helped the cement industry provide differentiated and improved products to customers. The cement which is widely used from 2003 is the Portland Composite Cement (PCC) which is made following European Standard Methods (EN), called BDS EN. Now the ratio of production of PCC and OPC is around 95:5 (Kabir, 2013).

Raw Materials:
Two types of materials are needed for the production of cement - one is calcium or calcareous materials such as limestone, chalk etc and other one is silica or argillaceous materials. There are also different types of raw materials used for cement manufacturing (i.e. fly ash, slag, gypsum etc). From the basic raw materials Clinker, Gypsum and Fly are the main ingredients for producing cement. The cement producing companies in Bangladesh import their raw materials from Thailand, Indonesia, Malaysia, China, Philippines and India. Clinker plays the most vital role for ensuring the strength and quality of cement. In Bangladesh, only two companies have clinker production facilities at their own plants. On the other hand, 80 percent of the clinker used for cement production in Bangladesh is imported. In 2015, the clinker imported amounted Tk 4632 which had been less than 3.74 percent compared to the previous year.

Cement Production:
There had been no cement factory under private ownership in Bangladesh up to the year 1994. After getting some positive government initiative multinational manufacturers and local entrepreneurs jointly invested to establish the cement industry and it has been increasing day by day. In 2003, aggregate production of cement in Bangladesh exceeded its demand. From FY11 to FY15, the total production of public sector has been decreasing which is almost linear but the production trend of public sector has caught the pace of rising trend since FY14 which has been increasing at an increasing rate. Total scenario of this production sector in Bangladesh reflects privatization (BBS, 2015).
Demand, Consumption and Export:
The shifting of traditional low rise building to high rise ones has pushed up the use of cement. Increase in demand for cement has soared up mainly due to the boom in the property sector and infrastructure development concentrated in Dhaka city and other major urban areas of the country. With the implementation of large-scale infrastructure projects, accelerated pace of urbanization, construction of apartment buildings and multi-storied shopping complexes in urban areas, changes in the taste and economic condition of a large number of rural people with the aspiration for modern houses, the demand for cement has been gaining momentum by the day (Kabir, 2013).

However, in the global context Bangladesh is one of the lowest consumers of cement in the world with its per capita consumption being 105 kg, while it is 217 kg in India, 265 kg in Pakistan and 310 kg in Sri Lanka. The per capita cement consumption is 705 kg in South Korea and 1,700 kg in China. The market is likely to grow 20-25 percent over the next five years, according to industry insiders. The sector grew 11 percent in 2013-14, down from its peak of 31 percent in 2009-10 although, the growth rate dropped to a single digit in 2014-15. Political turmoil in the first quarter of 2015 along with the bad time for the real estate sector, the cement industry had been hit hard affecting the cement producer (Rahman, 2015).

The total capacity of the cement factories in Bangladesh stands at around 35 million tons a year, but the current demand is only half the capacity. In 2014, the total capacity of the factory had been 28 million MT which is 3 million MT higher than previous year. On the other hand, in the same year the total consumption stood at 17.5 million MT which is 1.5 million MT higher than the previous year.

Optimism among the cement producers stems from the start of construction of several big infrastructure projects, including the Padma Bridge that will create a direct road link between 19 districts of the southwest region and Dhaka. The completion of the project by 2018 will generate new demand in the southern and western districts (Rahman, 2015).

So far, several Bangladeshi manufacturers have exported their own brands to West Bengal of India and Myanmar according to data from Bangladesh Export Promotion Bureau, it confirms that cement exports had witnessed a 21 percent increase in the first seven months of FY12 (Worldcement.com, 2012). In view of the situation, recently some local producers visited Sri Lanka, Myanmar and some of South African countries on market-exploration mission. Moreover
every year on an average 180000-240000 MT of cement is being exported by the industry (Royal Capital Limited, 2015).

**Division Wise Consumption:**
In 2015, out of total production, 50 percent of the cement is consumed in Dhaka & 23 percent of the cement is consumed in Chittagong divisions and the rest in other divisions. The Governmental projects, through ADP, consume around 45 percent of the total cement production. Around 85 percent of the cement is transported by road and the remainder by scow.

**Major User Groups of Cement:**
There are three main groups in Bangladesh to consume cement:

a) Individual Home markets  
b) Real estate developers  
c) Government organization

Government Projects and Real estate developers are the main key users of cement. Recently Government has started several large infrastructure projects, including the Padma Bridge and also construction of some roads, flyovers and bridges that will create an increase in the demand level for cement.

**Market share:**  
**Local:** Right now, there are more than 125 companies incorporated as cement manufacturers in Bangladesh. Among these, 45 cement manufacturers are in operation, including 5 multinational, and they are supplying the domestic market of more than 18 million metric tons a year. Most of the cement industries are fairly small as 85 percent of total market share is held by top 10 manufacturers. The Bangladesh cements industry benefit from the participation of the top 4 global cement producers: Lafarge, Holcim, Cemex and Heidelberg Cement. The cement sector of Bangladesh has been considered as the 40th largest market in world (Kabir, 2013).
**Global:** World production of cement is 4100 million tons in 2015. In 2015, only China contributed more than 50 percent of the total global production of cement which is 2350 million tons, followed by India (270 million MT), United States, Japan and Russia. The production in the two major economies has been driven by rapid growth of urbanization and a better scope of infrastructure development. The largest players are Lafarge (France), Holcim (Switzerland) and Cemex (USA) (Revill, 2014).

**Risk Factors:**
Although it is a booming sector with great potentiality, cement industry has also some risk factors. Firstly, it is threatened by over supply resulting from huge capacity expansion by almost all leading industry players. Secondly, almost all raw materials of cement are imported, if the supplies of the same are cut-off due to adverse political cause or other disturbance, the industry may face serious challenges, even the risk of shutting down. Another risk predicted is the risk of global competition while exporting especially regarding cement prices (Kabir, 2013).

**Seasonal Impact:**
The seasonal impact is quite high. At the time of rainy season the demand is really low as there is no construction works going on. After this season the demand starts speeding up. Usually, the peak season starts from September to February. Dhaka has the highest demand and South Bengal has very low demand for cement (Royal Capital Limited, 2015).

**Environmental Impact:**
Cement industry can harm the environment at all stages of production, use and also packaging. It creates airborne pollution emitting carbon in the form of dust gases. Concrete causes damage to the most fertile land. It creates a lot of dust at the time of packaging so it needs an Environment Clearance Certificate (ECC). Companies will be charged with fines or compensation for creating pollution.

**Conclusion and Recommendation:**
Cement Industry in Bangladesh has a potential future for growth. Despite of many hurdles, this industry is producing more than its local demand as the government is providing many export facilities to the local producers. If the Bangladeshi Government make the duty structure friendlier by exemption of some duties on exportable cement and granting cash incentives to Sri Lanka, Nepal, Bhutan and Middle Eastern countries will be feasible in future. On the other hand, almost all the manufacturers produce cement by importing clinker mainly from China and Indonesia, at a high rate of transportation cost and also higher duty fees. If our local manufacturers are producing these raw materials locally then the production cost will be reduced.
Bibliography


Royal Capital Limited. (2015). *CEMENT SECTOR REPORT.*


Emerging Credit Rating Limited (hereinafter referred to as ECRL) began its journey in the year 2009 with the motive to deliver credible superior & quality credit rating opinion in various industry segments around Bangladesh. ECRL obtained credit rating license from Bangladesh Securities and Exchange Commission (BSEC) in June 2010 as per Credit Rating Companies Rules 1996 and also received Bangladesh Bank Recognition as an External Credit Assessment Institutions (ECAI) in October 2010.

Emerging Credit Rating Limited's team is oriented towards the continuous improvement of processes, striving for an important role in the leadership of the business world. Every individual in ECRL is committed to providing topmost ingenious Credit Rating Services and Comprehensive Research Services in Bangladesh. ECRL’s rating services and solutions reflect independence, professional, transparency and impartial opinions, which assist businesses in enhancing the quality of their decisions and helping issuers access a broader investor base and even smaller known companies approach the money and capital markets. The Credit Rating process is an informed, well-researched and intended opinion of rating agencies on the creditworthiness of issuers or issues in terms of their/ its ability and willingness of discharging its financial obligations in a timely manner. Issuers, lenders, fixed-income investors use these risk assessments for the purpose of lending to or investment in a corporation (such as a financial institution, an insurance company, a non-banking corporation or a corporate entity) as well as evaluating the risk of default of an organization's financial obligations in terms of loan or debt.

**Research Team**

**Dr. Jamaluddin Ahmed**
FCA, PhD
Chairman

**NKA Mobin**
FCA, FCS, CFC
MD and CEO

**Arifur Rahman**
FCCA
Chief Rating Officer

**Al Mamun**
Senior Research Associate
Email: al.mamun@emergingrating.com

**Subrata Howlader**
Research Associate
Email: subrata@emergingrating.com

**Nabihatul Afroz**
Research Associate
Email: nabiha@emergingrating.com

**A.B.M. Qudrot-E-Khuda**
JR. Research Associate
Email: qudrot@emergingrating.com

**Emerging Credit Rating Ltd.**
Shams Rangs, House 104, Park Road
Level-A1, A2 & A5
Baridhara, Dhaka-1212
Tel: +880 2 986 0911, +880 2 986 0897
Fax: +880 2 986 0828
Email: info@emergingrating.com
Web: www.emergingrating.com

**Editorial Overview**

**ECRL Research** provides insights, opinions and analysis on Bangladesh and International Economies. 
ECRL Research conducts surveys and produces working papers and reports on Bangladesh’s different socio-economic issues, industries, and capital market. It also provides training programs to professionals from financial and economic sectors on a wide array of technical issues.