2.1 CEMENT OVERVIEW

The Oxford dictionary meaning of word cement is “A powdery substance made by calcining lime and clay, mixed with water to form mortar or mixed with sand, gravel, and water to make concrete.” It is actually a bonding material for manufacturing of huge buildings and one of the most interesting facts about cement is that it is the second most usable element on this planet after water, although we don’t use it in our daily life it is a basic building material which is used in all the buildings around you and me. The cement industry is a most important industry for any national development as it helps in infrastructure development and employment creation at large level as it ranks just after the steel industry in construction material as it helps in modern construction. If we talk about Indian cement industry it is one of the most important industry which helps in nation development it contributes a huge amount in GDP. India is a second largest cement producing country after China.

2.2 ORIGIN OF CEMENT:

In 1774 English discovered natural deposit of cement rock and soon recognized its importance in making building they started selling it with the name of Roman Cement, but the people who were not near the natural deposits for them cement
was not available so in 1874 an English bricklayer named Joseph produce cement for the first time by first pulverising limestone and clay and then finally burning the mixture and ground the mixture into fine powder after many trials and errors he succeeded in making cement which he patented with the name Portland cement. Later in 19-century cement production was taken up by many countries.

2.3 CEMENT INDUSTRY OF INDIA:

Indian cement industry originated in 1914 when the first cement plant was set up at Porbandar Gujrat with the capacity of 1000 tonnes and the year after year production just keep on increasing, and today India has become world’s second largest cement producing country after China with annual production of approx 300 MT per annum. Indian cement industry has seen many ups and down as till 1982 it was fully under government control but post liberalization in the year 1989-1999, our cement industry has gone through various phases, Control Regime (1914-1920), Partial Decontrol 1982-1988), Total Decontrol (1989-1999) and Consolidation Phase (1999 onwards)
Indian cement industry has continuously moved onto the road of success as after liberalization many cement companies entered the market which increased the capacity production as in year 2015 there were total 209 large cement plants with installed capacity of 378.1 MTPA and 365 mini plants with installed capacity of 11.7 MTPA.
Indian cement capacity is increasing every day with the increasing infrastructure development to cope up the demand cement companies are expanding their capacity every year currently total capacity production is 420 millions MT which is about to touch approximately 550 MT by financial year 2020. Out of the total capacity only 2 percent is with private sector and remaining 98% with private sector.

The Indian government is more focused on infrastructure development as our Honorable PM announced 10 smart cities to be developed soon and expansion of railways, golden quadrilateral projects which includes highway construction, housing projects and so on all this infrastructure development in our country will definitely boost the demand of Cement.

2.4 STRUCTURE OF THE INDUSTRY:

With an installed capacity of 390 MTPA, large cement plants accounted for 98% of the installed capacity in India. The installed capacity is distributed over across approximately 209 large cement plants owned by around 54 companies
Fig. 2.3 : Production Capacity of Public Sector Cement Plant of India

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.4 : Cement Capacity of Binani Group

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
**Fig. 2.5 : Cement Capacity of Birla Corporation Ltd**

Data retrieved from [http://dipp.nic.in/sites/default/files/ru2653.pdf](http://dipp.nic.in/sites/default/files/ru2653.pdf)

**Fig. 2.6 : Cement Capacity of Cement Manufacturing Company Ltd.(Shyam Group)**

Data retrieved from [http://dipp.nic.in/sites/default/files/ru2653.pdf](http://dipp.nic.in/sites/default/files/ru2653.pdf)
Fig. 2.7 : Cement Capacity of Total Century Textiles and Industries Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.8 : Cement Capacity of Chettinad Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.9 : Cement Capacity of Dalmia Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.10 : Cement Capacity of Heidelberg Cement India Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.11 Cement Capacity of India Cements

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.12 Cement Capacity of J.K Cement Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.13 : Cement Capacity of J.K Lakshmi Cement Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.14 : Cement Capacity of Jaypee cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Figure 2.15 Cement capacity of K.C.P Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.16 Cement capacity of Kesoram Industries Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.17 : Cement Capacity of Mangalam Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.18 : Cement Capacity of Maha Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
**Fig. 2.19 : Cement Capacity of Nirma Group (Nirmax Cement)**

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

**Fig. 2.20 Cement Capacity of OCL India Ltd**

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.21 Cement capacity of Orient Paper Industries Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.22 : Cement Capacity of Penna Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.23 : Cement capacity of Prism Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.24 : Cement Capacity of Rain Industries Ltd

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
**Fig. 2.25** : Cement capacity of Shree cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

**Fig. 2.26** : Cement capacity of UltraTech cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Fig. 2.27 : Cement Capacity of Zurari cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

Fig. 2.28 : Cement Capacity of Ambuja Cement

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
**Fig. 2.29 : Cement Capacity of ACC Cement**

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf

**Fig. 2.30 : Cement Capacities of other Mini Plants**

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
India accounts for cement capacity of almost 390 million tones which makes India second largest producer of cement in the world after China, and it is been estimated that by the financial year 2020 India’s total cement capacity will reach almost 500 million tonnes.

The structure of Indian cement industry is fragmented, there are many cement companies but at the top, there is a concentration of few dominant players. If we take a look at the environmental analysis of cement industry with the help of Michel Porter’s Model we can get to know that Indian cement market of India is highly attractive as there is

Fig. 2.31: Total Indian Cement Capacities

Data retrieved from http://dipp.nic.in/sites/default/files/ru2653.pdf
Threat of New Entrant

High entry barrier because cement industry is very much capital intensive for setting up cement industry huge investment is required as for manufacturing of 1 ton of cement 3500 Rs investment required that is an investment of Rs 3500 million is required for 1 MTPA plant

Threat of Substitutes

The threat of substitute is low because practically there is no substitute for cement because cement is essential bonding material for construction of any building bridge or any type of infrastructure development.
Bargaining Power of Buyer

Bargaining power of buyer is low because of huge competition due to the availability of major dominant players.

Bargaining Power of Supplier

Bargaining power of supplier is moderate because companies have to depend on the railway for transportation of goods to the customer and have to depend on local coal companies for fuel.

Inter-Firm Rivalry

Inter-Firm Rivalry is high because Indian cement market is oligopolistic in nature few sellers dominate the market. Based on the demand and supply price is been set by the leader, each and every company is watchful for the next step of other company

2.5 CEMENT INDUSTRY OF RAJASTHAN:

Rajasthan is the second largest cement producing state of India (due to availability of limestone in abundant quantity) after Andhra Pradesh. More than 20 major cement plants of 12 cement companies are set up in Rajasthan. Rajasthan is the biggest state on the geographical map of India, and due to availability of abundance quantity of limestone most of the cement company’s favorite destination is Rajasthan and another reason is huge potential of cement market to grow because of increasing infrastructural development in the state
Table 2.1 : Top 10 Cement companies in Rajasthan as per their market share

<table>
<thead>
<tr>
<th>S.no</th>
<th>Company Name</th>
<th>Market Share in Rajasthan</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shree Cement Ltd.(Shree Group)</td>
<td>21.33%</td>
</tr>
<tr>
<td>2</td>
<td>Ultratech Cement Ltd.</td>
<td>14.5%</td>
</tr>
<tr>
<td>3</td>
<td>Ambuja Cement Ltd.</td>
<td>12.33%</td>
</tr>
<tr>
<td>4</td>
<td>Birla Corporation Ltd.</td>
<td>8.46%</td>
</tr>
<tr>
<td>5</td>
<td>Binani Cement Ltd.</td>
<td>8.26%</td>
</tr>
<tr>
<td>6</td>
<td>J.K Cement Ltd.</td>
<td>7.93%</td>
</tr>
<tr>
<td>7</td>
<td>Wonder Cement Ltd.</td>
<td>7.60%</td>
</tr>
<tr>
<td>8</td>
<td>JK Lakshmi Cement Ltd.</td>
<td>6.73%</td>
</tr>
<tr>
<td>9</td>
<td>Lafarge Cement Ltd.</td>
<td>4.66%</td>
</tr>
<tr>
<td>10</td>
<td>Manglam Cement Ltd.</td>
<td>4.06%</td>
</tr>
</tbody>
</table>

Source: Average Monthly trade and non trade sale of Year 2014-15 internal company reports, Market share calculated by using formula Average Monthly Sale/Potential sale of that area.(Potential sale of Rajasthan is 1500000)

2.6 Major Cement Companies:

UltraTech Cement Company pvt. Ltd : UltraTech Cement is the market leader of today’s cement company of India and the same was formed with the amalgamation of two major companies Grasim Industries Ltd was incorporated in 1947 as “Gwalior Rayon Silk Manufacturing company Ltd”, the company’s key business areas were viscose, stable fiber, aluminum and cement. The Indian Cement Industry (By AV Bala Krishna)……..”L&T was the largest vertically integrated engineering conglomerate in India was established by two Danish engineers, Henning Holk Larsen and Soren Kristian Tourbo “.
In 2004 Grasim industries with its strategic acquisition of L&T attained biggest competency in the cement market due to extension of its geographical reach with an approx production capacity of 30 billion tones with market share of 30 percent and attained the position of seventh largest cement producing company in the whole world in terms of volume this acquisition proves to be a win win situation for Grasim and finally on 12 October 2004 Grasim launched this amalgamation with the name of ultra tech in order to replace the L&T counters. Today also ultra tech leads the Indian cement market with total production capacity of 64 million tones and is been recently awarded the status of “Super brand” due to its best marketing and branding activities.

**Ambuja Cement**: Ambuja cement is one of the leading cement company incorporated in 1983 by Narrotam saikhsariya and Suresh Neoita formerly known as Gujarat Ambuja Cement.

Presently *1 Ambuja cement has manufacturing capacity of 29.65 million tones with five cement plants and 8 grinding units. Ambuja is a part of global conglomerate Holcim with over 25 years of operations; it holds leading position in Indian cement Industry. Ambuja cement is a environment friendly and a socially responsible company as it is indulged majorly in its corporate social responsibility.

**Shree Cement**: Shree Cement is rapidly growing cement company was founded in Beawer city Ajmer and headquartered in Kolkata, it is leading cement producing cement company of Rajasthan with total cement manufacturing capacity of 25.76 Million tons per annum, within 9 plants operating in a different location of India.
Birla Corporation Ltd is the flagship company of the M.P Birla group. Originated as Birla jute manufacturing company limited in 1919, Birla corporation limited is now primarily engaged in the manufacturing of cement as its core business activity, it has significant presence in jute industry as well. In Cement market Birla corporation is one of the oldest cement company with very good brand image recently company has acquired the 100% shares of reliance infrastructure limited, after this acquisition company has total plant capacity of 15.5 MTPA previously it was 10 MTPA.

Binani: Binani Cement is a BrijBinani group flagship subsidiary established in the year 1997 set up its first cement plant in binanigram Sirohi in Rajasthan, current cement manufacturing capacity of the company is 6.25MTPA, company manufacture 2 cement grades OPC AND PPC with the brand name Binani Cement, Amitabh Bachchan is the face of the company, he endorses the brand and currently company is having market share of 8.26% and enjoys the 5 position in top cement brands of Rajasthan.
REFERENCE


- IBEF, 2017, Cement companies of India, Available at http://www.ibef.org/industry/cement-india/showcase [12 December 2016]

- Li, J, Schultz, P & Anderson, S (2006) How is a Cement company working with marketing within the construction industry? - A case study on an ambitious cement company
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