

**Indian Cement Industry: A Road Ahead****Avinash Pareek**

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**Abstract:**

*The cement industry in India is globally competitive as the industry continues to witness positive trends such as cost control, continuous technology up-gradation and increased construction activities. Major cement manufacturers in India are also increasingly using alternate fuels, especially bio-energy, to fire their kilns. This is not only helping to bring down production costs of cement companies, but is also proving effective in reducing emissions.*

*With the ever-increasing industrial activities, real estate, construction and infrastructure, in addition to the onset of various Special Economic Zones (SEZs) being developed across the country, there is remain a growing demand for cement.*

**Key Words:**

Cement Industry, Economy, Infrastructure, Market Size, Sales Volume.

**Introduction:**

Cement is one of the core industries which plays a vital role in the growth and expansion of a nation. It is basically a mixture of compounds, consisting mainly of silicates and aluminates of calcium, formed out of calcium oxide, silica, aluminium oxide and iron oxide. The demand for cement depends primarily on the pace of activities in the business, financial, real estate and infrastructure sectors of the economy. Cement is considered preferred building material and is used worldwide for all construction works such as housing and industrial construction, as well as for creation of infrastructures like ports, roads, power plants, etc. Indian cement industry is globally competitive because the industry has witnessed healthy trends such as cost control and continuous technology up-gradation. The Indian cement industry is extremely energy intensive and is the third largest user of coal in the country. It is modern and uses latest technology, which is among the best in the world. Also, the industry has tremendous potential for development as limestone of excellent quality is found almost throughout the country.

**History of Cement Industry**

In 1914, Indian Cement Industry began its journey with a single plant of 1000 tonnes per annum at Porbandar in Gujarat. Since then, India has emerged as the world's second largest cement producing country after China. At present, there are 81 cement companies with around 206 major cement plants and a total capacity of about 358.64 million tonnes. Besides, there are mini and tiny cement plants, which have an estimated capacity of about 10 million tonnes. The Indian cement industry's existence for the last 100 years is marked by the roller coaster ride it underwent ever since its inception in 1914. From the days of scarcity, rigid controls, and imports, the cement industry today has come a long way from a seller's market to a buyer's market. At present, the Indian cement industry has 81 large companies, which have about 206 major plants with an aggregate capacity of about 358.64 million tonnes. The 206 major plants comprises of about 146 integrated plants and 60 grinding units. This does not include mini and tiny cement plants, which have an estimated capacity of about 10 million tonnes. Further, there are about 50 companies making efforts to set up their cement plants. This phenomenal growth is a result of 100 years of anomalous and gruelling transition.

**Origin**

The first ever reference of cement production in India is recorded in George Watt's Directory of 'Economic Products of India', published in 1889, which stated: "Portland cement was being made in Calcutta from argillaceous Kanker". However, the first organised attempt to manufacture the cement was made in 1904 by the Madras-based South India Industries Limited but this venture failed. It was in October 1914 that the cement produced at Porbandar in Gujarat by Indian Cement Corporation Limited saw the light of the day. It had an installed capacity of 1000 tonnes per annum.

**Facts of Indian Cement Industry (1982 - 2014)**

- The Industry recorded an exponential growth with the introduction of partial decontrol in 1982 culminating in total decontrol in 1989.
- Largest Cement Producing Country in the World, next only to China.
- The capacity, which was 29 Mn.t in 1981-82, rose to 340 Mn.t at the end of FY14.
- While it took 8 decades to reach the 1st 100 Mn.t capacity, the 2nd 100 Mn.t was added in 11 years and the 3rd 100 mn.t. was added in just 3 years.
- The industry has around 65 companies having around 200 cement plants.

- Industry is producing World class high quality& different varieties of cement to suit a host of applications matching the world's best in quality.
- Industry can produce cement conforming to any of the International standards viz. BS, ASTM, DIN etc.
- Industry is extremely conscious of quality, environmental health and safety. Most of the cement plants have received ISO 9000 series of accreditation, ISO 14001 and OHSAS-18001 certification.
- The Industry has been facing a chronic problem of insufficient availability of the main fuel coal, driving the manufacturers to resort to use of alternatives at steep cost.
- Taxes and Government levies on cement are high compared to countries in Asia pacific region.
- Cement Industry, which was branded as the highest polluter of environment, now meets the pollution standards, and no longer a polluter today.
- Contributes to environmental cleanliness by consuming hazardous wastes like Fly Ash (around 30 Mn.t) from Thermal Power Plants and the entire 8 Mn.t of granulated Slag produced by Steel manufacturing units and also using alternate fuels and raw materials.
- The cement industry is using advanced and environment friendly technologies.
- The industry has Implemented Waste Heat Recovery System for co-generation of power in cement plants thereby reducing CO2 emission.
- Performance of best plant of the Industry w.r.t. Power & Fuel consumption of 68 kwh/ton of cement & 667 kcal/kg of clinker compares well with best Japanese levels of 68 kwh and 650 kcal.
- As a part of Corporate Social Responsibility (CSR), the Cement Industry takes care of the social needs not only of the employees in the field of Education, Health, Environment, Water Supply, Power but also adopts several villages around the factories providing free drinking water, electricity, medical and educational facilities.
- Cement Industry employs approx 5 lakh people in direct and indirect employment in the country.
- Contributes approx. Rs. 32500-35000 crore annually to the national exchequer through various taxes and levies Exports Cement/Clinker to around 30 countries across the globe and earns precious foreign exchange.
- The core sector Cement Industry deserves due support from the Government by avoiding imposition of high levies and duties, making available various inputs like fuel, power, transport etc. at reasonable prices and in required quantities and help its growth and improve competitive ability both in domestic and international markets.

### Market Size

The cement market in India is expected to grow at a compound annual growth rate (CAGR) of 8.96 percent during the period 2014-2019.

In India, the housing sector is the biggest demand driver of cement, accounting for about 67 per cent of the total consumption. The other major consumers of cement include infrastructure at 13 per cent, commercial construction at 11 per cent and industrial construction at nine per cent.

To meet the rise in demand, cement companies are expected to add 56 million tonnes (MT) capacity over the next three years. The cement capacity in India may register a growth of eight per cent by next year end to 395 MT from the current level of 366 MT. It may increase further to 421 MT by the end of 2017. The country's per capita consumption stands at around 190 kg.

A total of 188 large cement plants together account for 97 per cent of the total installed capacity in the country, while 365 small plants account for the rest. Of these large cement plants, 77 are located in the states of Andhra Pradesh, Rajasthan and Tamil Nadu. The Indian cement industry is dominated by a few companies. The top 20 cement companies account for almost 70 per cent of the total cement production of the country.

On the back of growing demands, due to increased construction and infrastructural activities, the cement sector in India has seen many investments and developments in recent times.

According to data released by the Department of Industrial Policy and Promotion (DIPP), cement and gypsum products attracted foreign direct investment (FDI) worth US\$ 3,084.89 million between April 2000 and December 2014.

Some of the major investments in Indian cement industry are as follows:

- Dalmia Cement (Bharat) Ltd has invested around Rs 2,000 crore (US\$ 321.12 million) in expanding its business in North East over the past two years. The company currently has three manufacturing plants in the region — one in Meghalaya and two in Assam.
- JSW Group plans to expand its cement production capacity to 30 million tonnes per annum (MTPA) from 5 MTPA now by setting up grinding units closer to its steel plants.
- UltraTech Cement Ltd has charted out its next phase of green-field expansion after a period of aggressive acquisitions over the last two years. Following its takeover of two cement plants owned by the Jaypee group, UltraTech has plans to set up two greenfield grinding units in Bihar and West Bengal, according to Mr O P Puranmalka, MD, UltraTech.
- UltraTech Cement Ltd has agreed to buy two cement plants and related power assets of Jaiprakash Associates Ltd in Madhya Pradesh for Rs 5,400 crore (US\$ 867.28 million).
- JSW Cement Ltd has planned to set up a 3 MTPA clinkerisation plant at Chittapur in Karnataka at an estimated cost of Rs 2,500 crore (US\$ 401.55 million).
- Andhra Cements Ltd has commenced the commercial production in the company's cement plants – Durga Cement Works at Dachepalli, Guntur and Visakha Cement Works at Visakhapatnam.

#### **Objective:**

- To find out the growth and development of cement sector in India.
- To find out the Significance of cement sector in India.
- To examine the role and importance of cement in infrastructure development of India.

#### **Research Methodology:**

The method of study is descriptive. The study surveys from books, reports, journals and from self-knowledge.

#### **Discussion:**

After achieving unprecedented growth of over 9% for three successive years between 2005-06 and 2007-08 and recovering swiftly from the global financial crisis of 2008-09, the Indian economy has been going through challenging times. Gross Domestic Product (GDP) growth drifted down continuously from 8.4% in 2010-11 to 6.5% in 2011-12 and to lower than 5% for two consecutive years, i.e. 2012-13 and 2013-14. GDP growth in the year 2013-14 was 4.7% as against 4.5% in the previous year. The two successive years of sub-5% growth was witnessed for the first time in 25 years. A combination of factors which has contributed to such a low growth include persistent uncertainty in the global outlook, caused

by the crisis in the Euro area and general slowdown in the global economy, compounded by domestic structural constraints and inflationary pressures and cyclical slowdown in both global and domestic economies.

The slow growth of the economy had impacted various segments of the Industry. As per the Central Statistics Office (CSO) data, industrial growth dropped to 0.4% in 2013-14 as against 1% in 2012-13. The industrial revival may be longer and needs stronger initiatives of all stakeholders to emulate the peak growth achieved in the recent past.

The last two years were particularly disappointing for the manufacturing sector, with growth averaging 0.2% per annum. The growth in manufacturing sector during 2013-14 was negative (-0.7%) as compared to 1.1% in 2012-13.

The growth on the Agricultural Sector was 4.7% in 2013-14 as against 1.4% in 2012-13. The Construction Sector grew by 1.6% in 2013-14 as against 1.1% in 2012-13.

The Cement Sector plays a vital role in the economic growth of the country and its journey towards inclusive growth. Cement is an essential item to the Construction Sector and to all infrastructural projects. The Construction Sector alone contributes to over 7% of the country's GDP.

There is change of Govt. in the Centre, for the first time after decades, which an overwhelming majority has mandated. With this change, the Cement Industry hopes that the economy will revive, as the New Govt. has already announced bold steps and measures. Further, there has been optimism in the economy after the 10-point plan charted out by the Prime Minister, which focuses on investments in infrastructure, time-bound action and improved coordination between the Centre and States to ensure smooth implementation of Government policies. With these measures, the growth is surely expected to pick up from the current year onwards.

#### Cement Industry's Performance

The Cement Industry witnessed slowdown in cement demand in the year 2013-14 due to fall in construction activity, prolonged monsoon, with floods and cyclones that hit some parts of the country, financial constraints and increasing rate of interest, and virtual drop in Government spending which had led to slowdown in realty and infrastructure sectors. During the year 2013-14, cement production, as per the Office of the Economic Advisor, Department of Industrial Policy & Promotion (DIPP), was 255.57 Mn.t. as against 248.23 Mn.t. in the previous fiscal, registering a growth of 2.96% as against 7.7% in the previous year 2012-13. New capacities in the pipeline materialized and lack of demand resulted in further decline of capacity utilization of the Cement Industry. Cement is one of the core industries and an important contributor in infrastructure growth. Cement has a direct co-relation of 1:1.2 with the GDP. But, it has witnessed lower growth than GDP. In view of the downward revision of the previous year's production figures from

**Cement Industry's Outlook - (2014-15)**

As per the Economic Survey 2013-14, GDP growth is expected to be 5.4% – 5.9% in 2014-15, and will increase gradually thereafter.

The capacity utilization in the Cement Industry was 94% in 2007-08 which has been declining since then to around 70% mainly due to mismatch between the supply and cement demand. This has created a situation of excess idle capacity of over 100 Mn.t., a dead investment to the magnitude of Rs.62,500 crores in cost. The Cement Industry is optimistic that the thrust and importance given in the Union Budget 2014-15 for the development of National Highways, Rural and Urban Roads, Affordable Housing, Port Connectivity, Development of 100 Smart Cities, etc. should help in boosting the muted growth of the Cement Industry.

The Govt. has finally realized the value of concrete roads over bitumen. Shri Nitin Gadkari, Hon'ble Minister of Road Transport, Highways and Shipping, has unequivocally expressed his preference for cement concrete over bitumen for road construction.

These measures are likely to generate considerable cement demand, which is much needed to bring back Indian Cement Industry on the growth trajectory.

**Government Initiatives**

In the 12th Five Year Plan, the government plans to increase investment in infrastructure to the tune of US\$ 1 trillion and increase the industry's capacity to 150 MT.

The Cement Corporation of India (CCI) was incorporated by the Government of India in 1965 to achieve self-sufficiency in cement production in the country. Currently, CCI has 10 units spread over eight states in India.

In order to help the private sector companies thrive in the industry, the government has been approving their investment schemes. Some such initiatives by the government in the recent past are as follows:

- The Government of Tamil Nadu has launched low priced cement branded 'Amma' Cement. The sale of the cement started in Tiruchi at Rs 190 (US\$ 3.05) a bag through the Tamil Nadu Civil Supplies Corporation (TNCSC). Sales commenced in five godowns of the TNCSC and will be rolled out in stages with the low priced cement available across the state from 470 outlets.
- The Government of Kerala has accorded sanction to Malabar Cements Ltd to set up a bulk cement handling unit at Kochi Port at an investment of Rs 160 crore (US\$ 25.68 million).
- The Andhra Pradesh State Investment Promotion Board (SIPB) has approved proposals worth Rs 9,200 crore (US\$ 1.47 billion) including three cement plants and concessions to Hero MotoCorp project. The total capacity of these three cement plants is likely to be about 12 MTPA and the plants are expected to generate employment for nearly 4,000 people directly and a few thousands more indirectly.
- India has joined hands with Switzerland to reduce energy consumption and develop newer methods in the country for more efficient cement production, which will help India meet its rising demand for cement in the infrastructure sector.

- The Government of India has decided to adopt cement instead of bitumen for the construction of all new road projects on the grounds that cement is more durable and cheaper to maintain than bitumen in the long run.

### ***Road Ahead***

The eastern states of India along with the Border States will be the newer and virgin markets for cement companies and will contribute to their bottom line in future. In the next 10 years, India will become the main exporter of clinker and gray cement to the Middle East, Africa, and other developing nations of the world. Cement plants near the ports, for instance the plants in Gujarat and Visakhapatnam, will have an added advantage for exports and will logistically be well armed to face stiff competition from cement plants in the interior of the country.

A large number of foreign players are also expected to enter the cement sector in the next 10 years, owing to the profit margins, constant demand, and right valuation. Cement companies will go for global listings either through the FCCB route or the GDR route.

With help from the government in terms of friendlier laws, lower taxation, and more infrastructures spending, the sector will grow and will take India's economy forward along with it.

### **Recommendations:**

Fiscal support to housing and roads could accelerate the demand for cement quite substantially. Given the housing shortages in rural and urban areas and given the increase in the cost of affordable house income tax relief for the interest paid on the house building loans may be extended from Rs 1.5 lakh to Rs. 4 lakh per annum.

- Cement is highly taxed commodity in India. The overall rate of tax on cement was estimated to 30% compared to 19% in China and almost negligible in Thailand. Therefore tax burden on cement industry be lowered suitably.
- Excise duty on cement is currently being levied at mixed rates i.e. ad-valorem (on transaction value) plus specific (specific rate to be charged on the basis of MRP).
- Levy of Excise Duty on Cement should be simplified i.e. specific rate or as a per cent to Retail Sale Price with suitable abatement as is available in other commodities.
- There is no import duty for import of Cement into the country. This tax anomaly puts domestic manufacturers at a disadvantage. Thus such differences in tax treatment need to be removed to offer a level playing field to domestic production vis-à-vis imports. The import of cement should also be with a duty of 5 per cent along with the applicable CVD.
- To encourage cement industry and bring it at par with other core and infrastructure industries, it is necessary to rationalize the excise duty rate from 10% to 6 - 8%.
- Two major materials needed for construction of any infrastructure are Cement and Steel. However, the rate of VAT charged on Cement and Steel differs vastly. While VAT on Steel is only 4%, it is charged @ 12.5% even up to 15% in some of the States on Cement and Clinker.

- Current rate of VAT on cement and clinker, be brought in line with similar important construction material like Steel at 4%. This would make cement more affordable
- Import Duty on Coal, Pet Coke and Gypsum be abolished to be in line with the established principle that “Import Duty on Inputs should not be higher than on the finished product.” Further it is also recommended that Cenvat Credit be allowed on Clean Energy Cess.
- Electricity Duty & Water Cess be withdrawn.
- The royalty paid on lime stone should be neutralized for export of cement. This is consistent with the approach that domestic taxes are not exported.

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