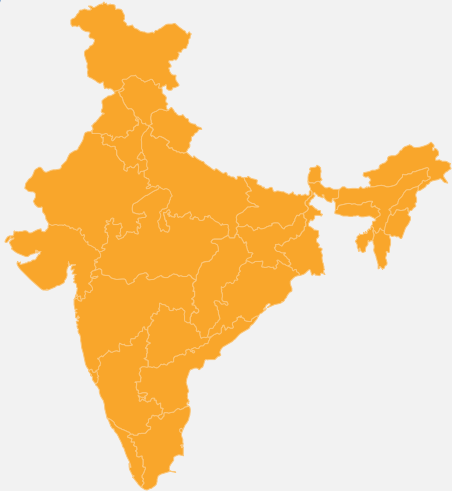




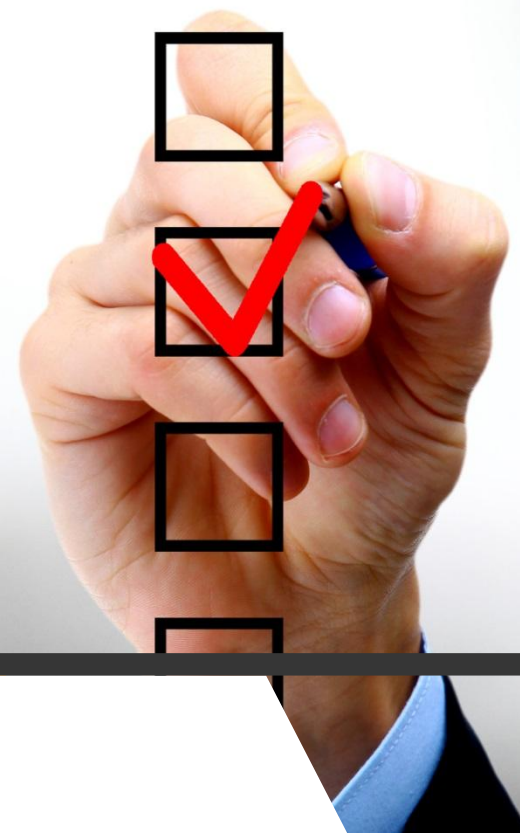
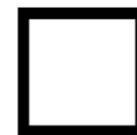
CEMENT



INDIA BRAND EQUITY FOUNDATION
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Second largest cement market

- India's overall cement production capacity was nearly 502 million tonnes as of FY19 and consumption has increased by 5 per cent in the FY19 due to the high growth in housing segment and higher infrastructure spending.
- India's cement production capacity is expected to reach 550 million tonnes by 2025.
- India is the second largest cement producer in the world and accounts for over 8 per cent of the global installed capacity, as of 2018.

Dominated by private players

- Of the total capacity, 98 per cent lies with the private sector and the rest with public sector.
- The top 20 companies accounting for around 70 per cent of the total production

Higher share of large plants

- 210 large cement plants account for a cumulative installed capacity of over 410 million tonnes, while over 350 mini cement plants have an estimated production capacity of nearly 11.10 million tonnes.

Large concentration in south and west

- Of the total 210 large cement plants in India, 77 are situated in the states of Andhra Pradesh, Rajasthan & Tamil Nadu.

Source: Cement Manufacturers Association, Ministry of External Affairs, DIPP, Heidelberg Cement Investors Presentation November 2018

ADVANTAGE INDIA



- India's cement demand is expected to rise 8 per cent in FY20, according to rating agency ICRA.
- Initiative to build 100 smart cities and boost to affordable housing projects to give a further stimulus
- 18-20 million tonnes per annum (MTPA) will be driven for the growth of domestic cement demand during FY20.
- High cement demand to be driven by government's focus on infrastructure and housing for all by 2022.

Robust demand

- The North-East, which is witnessing a construction boom, offers attractive investment opportunities.
- Opportunities available in areas such as housing, dedicated freight corridors, ports and other infrastructure projects.

Attractive opportunities

ADVANTAGE INDIA

- Oligopoly market, where large players have partial pricing control.
- Low threat from substitutes.
- Long-term cement demand growth rate is estimated at 1.2 times of GDP growth rate.
- Per capita cement consumption of cement at 235 kg is currently the lowest among developing countries while the world average is 520 kg.

Long-term potential

- Robust investments are being made by the existing players to expand their capacity
- FDI inflow in industry related to manufacturing of cement & gypsum products reached US\$ 5.28 billion between April 2000 and June 2019.
- As of December 2018, Raysut Cement Company is planning to invest US\$ 700 million in India by 2022.

Increasing investments

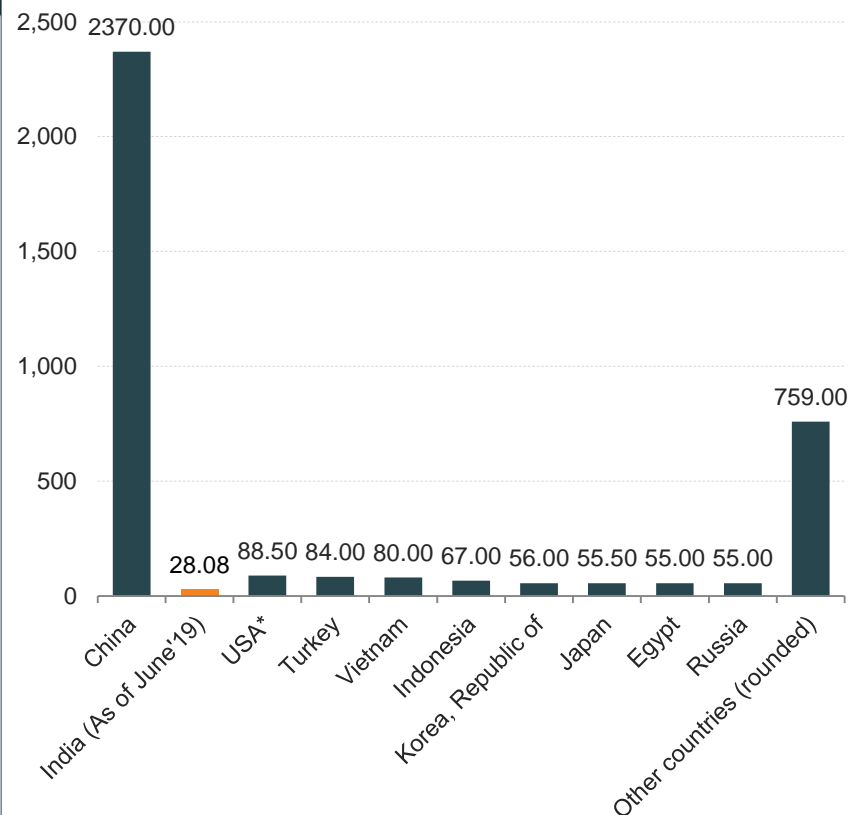
Source: Budget 2019-20, News Articles, TechSci Research, DIPP, *Ultratech investors presentation May 2018

MARKET OVERVIEW AND TRENDS



- India - world's 2nd largest cement market, both in production and consumption.
- Supported by high level of activity going on in real estate and high government spending on smart cities and urban infrastructure.
- Cement production capacity was 509 MTPA as of 2018.
- Capacity addition of 20 million tonnes per annum (MTPA) is expected in FY19- FY21.
- The outlook for domestic cement sector is stable for October 2018 to March 2019 as overall demand conditions remain steady.
- As of July'19, the production of cement stood at 28.3 million tonnes.

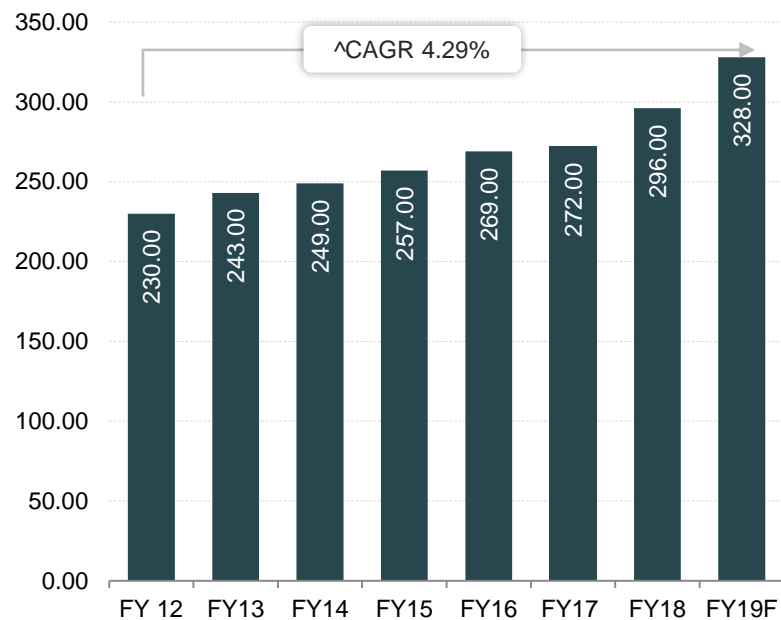
Top Cement Producers in 2018E (in MTPA)



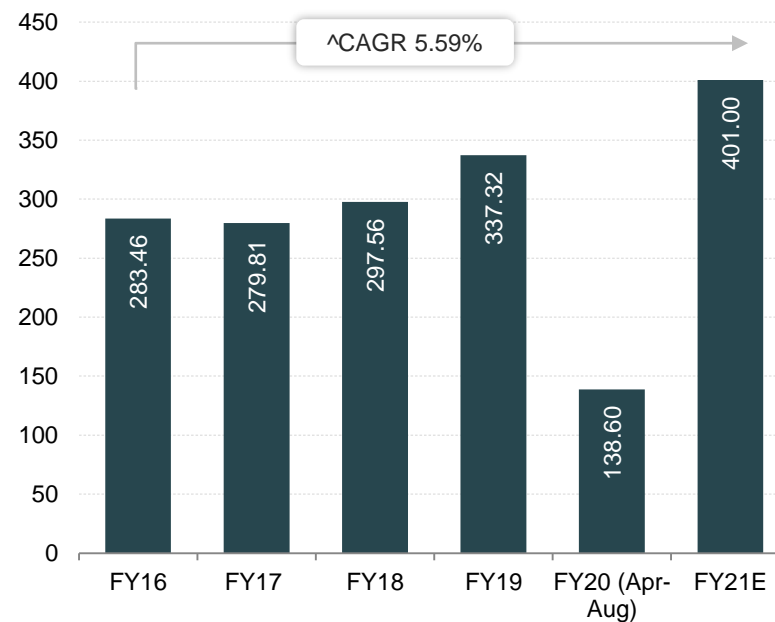
Note: E – Estimate, * Includes Puerto Rico,

Source: Cement Manufacturers Association, USGS Mineral Commodities Summary 2019, Crisil,

Cement consumption (million tonnes)



Cement Production in India (million tonnes)



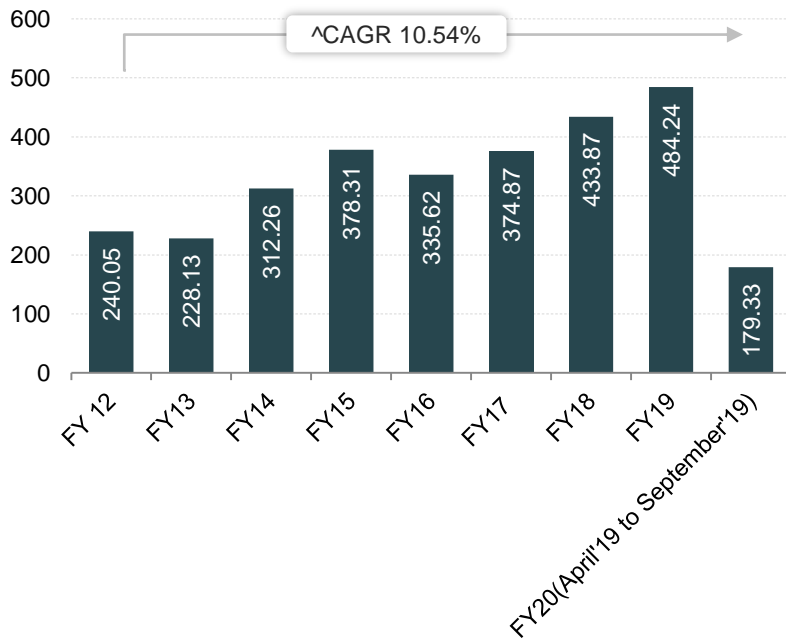
- India's cement production is expected to rise between 5-7 per cent in FY20, backed by demands in roads, urban infrastructure and commercial real estate.
- Cement production is expected to grow to 316 million tonnes in 2018-19. It reached 304.20 million tonnes between April 2018 -February 2019.
- Sales of cement in India grew at 13.6 per cent year-on-year to 275.7 million tonnes during April 2018-January 2019.

Note: #As per CRISIL, ^CAGR is up to FY18, F-Forecast,

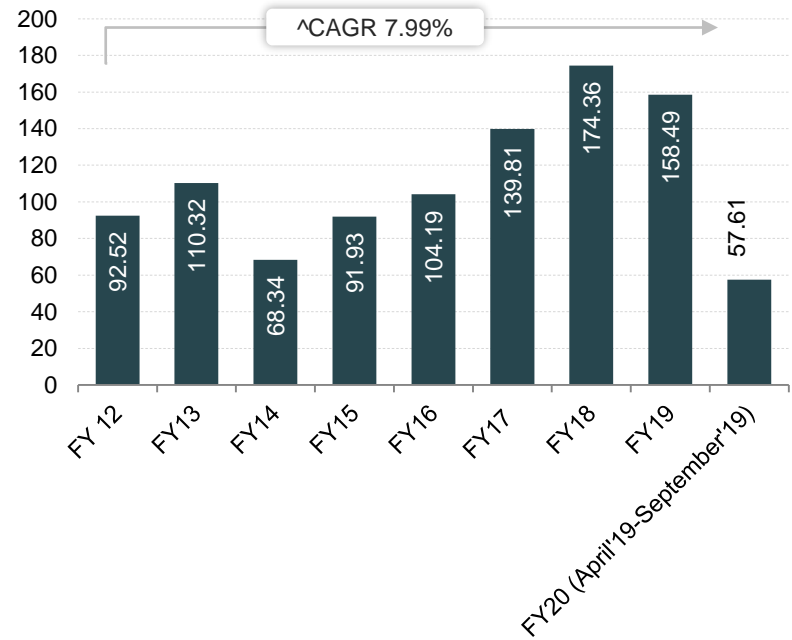
Source: Media sources, TechSci Research, CRISIL, CARE Ratings, Ultratech Cement, ICRA

EXPORT AND IMPORT OF CEMENT

Cement Exports from India# (US\$ million)



Cement Imports to India# (US\$ million)

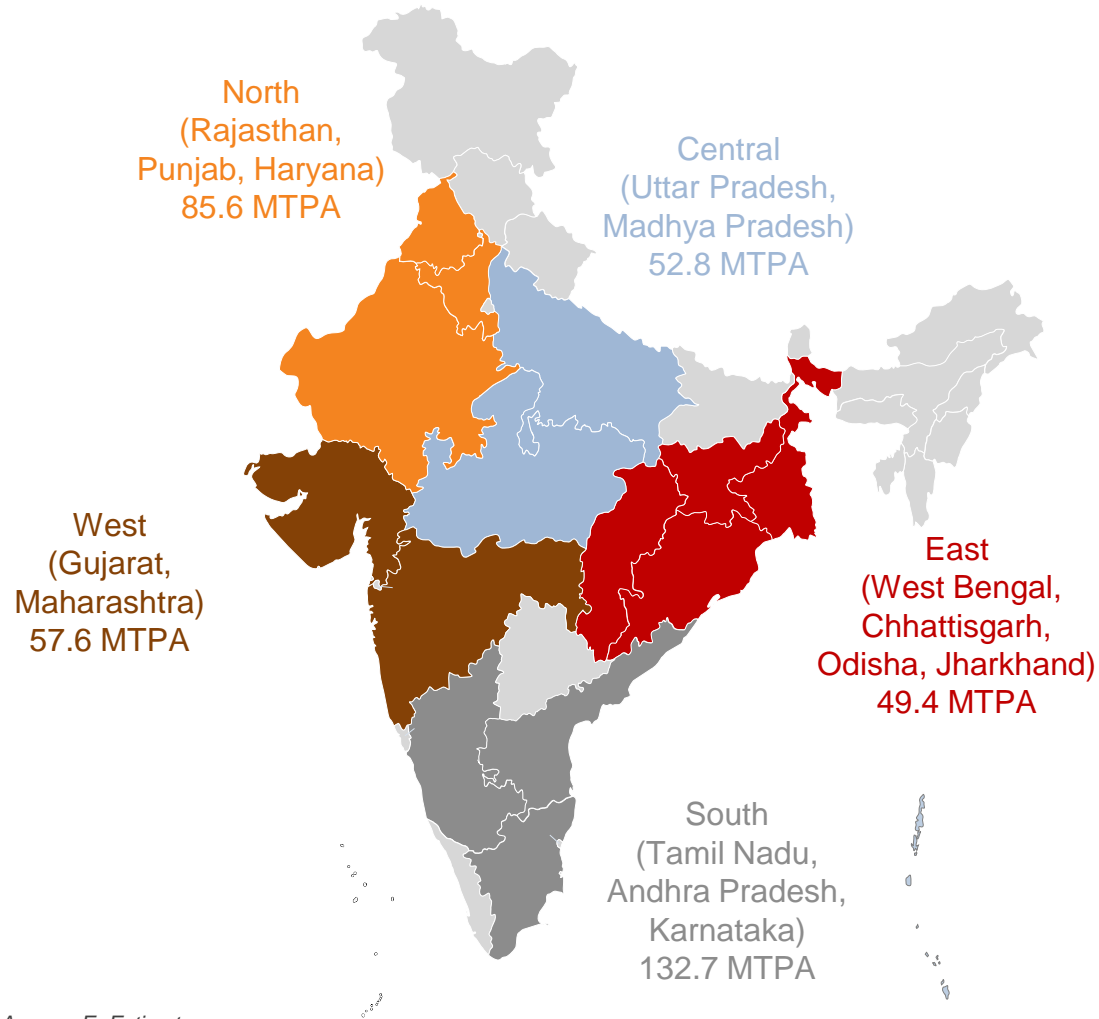


- India's exports of cement, clinker and asbestos cement increased at a CAGR of 10.54 per cent between FY12-FY20 (April-July 2019) to reach US\$ 177.93 million. During the same period imports of cement, clinker and asbestos cement increased at a CAGR of 7.99 per cent to US\$ 57.61million in FY20.
- The country's top export destinations for cement, clinker and asbestos cement in FY18 were Nepal, Sri Lanka, USA, Maldives and UK.
- The country's top five import sources for cement, clinker and asbestos cement in FY18 were Pakistan, Bangladesh, Japan, Vietnam and Thailand.

Note: #Including Cement, Clinker and Asbestos Cement, ^CAGR is up to FY19.

Source: DGCIS

INSTALLED CAPACITY AND KEY MARKETS IN EACH OF THE GEOGRAPHIC REGIONS



Notes: mtpa - Million Tonnes Per Annum, E- Estimates

Source: Indian Minerals Year Book by Indian Bureau of Mines, TechSci Research

STRATEGIES ADOPTED



Increasing presence of cement players

- Presence of small & mid-size cement players across regions is increasing, which helps to diminish market concentration of industry leaders
- A large number of foreign players have also entered the market owing to the profit margins, constant demand & right valuation.

Tie – up with overseas

- India has joined hands with Switzerland to reduce energy consumption & develop newer methods in the country for more efficient cement production, which would help India meet its rising demand for cement in the infrastructure sector

Housing for All

- In Union Budget 2019-20, the Government of India has extended benefits under Section 80 - IBA of the Income Tax Act till March 31, 2019 to promote affordable housing in India.
- Housing and real estate sectors accounts for nearly 65 per cent of the total cement consumption in India.

Adoption of cement instead of Bitumen and Ready Mix Concrete (RMC)

- 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 & cheaper to maintain than bitumen in the long run.
- Companies are trying to develop a niche market for RMC (Ready Mix Concrete)

Mergers & Acquisitions

- In November 2018, Ultratech Cement received approval for its purchase of Binani Cement for a consideration of Rs 7,950 crore (US\$ 1.10 billion).
- In October 2018, India Cements entered into a share purchase agreement worth Rs 182.89 crore (US\$ 26.06 million) for acquisition of Springway Mining. The acquisition will help the company to enter the Uttar Pradesh market and other markets in North India.

Source: Union Budget 2019– 20, Emkay Global Financial Services, News Articles

SUCCESSFUL USE OF ALTERNATE FUELS IN CEMENT PRODUCTION

| Company/Plant | Strategy | Benefits |
|-----------------------------------|--|---|
| Madras Cement's Alathiyur plant | Use bioenergy through burning of coffee husk & cashew nut shells | Annual cost savings of US\$ 1.7 million |
| India Cements Ltd's Dalavoi plant | Use Low Sulphur Heavy Stock (LSHS) sludge as alternate fuel | Annual savings of US\$ 6,500 approx |
| UltraTech's Gujarat Cement Works | Use tyre chips & rubber dust as alternate fuel | Reduction of about 30,000 tonnes of carbon emissions annually |
| Lafarge's Arasmeta plant | Substitute 10 per cent of coal used in kilns with rice husk | Higher energy savings and lower carbon emissions |

Source: CMA

GROWTH DRIVERS AND OPPORTUNITIES



- India's cement demand is expected to rise 8 per cent in FY20, according to rating agency ICRA.
- “The demand of Cement industry is expected to achieve 550-600 million tonnes per annum constantly by 2025 because of the expanding requests of different divisions i.e. housing, commercial construction and industrial construction.”

Housing and Real Estate

- Government initiatives like Housing For All to push demand in the sector.
- Real Estate market in India is expected to reach US\$ 1 trillion by 2023 from US\$ 120 billion in 2017.
- Strong growth in rural housing and low-cost housing to amplify demand.

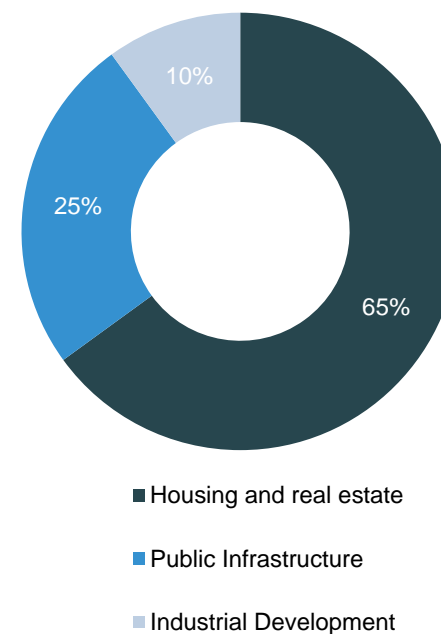
Public Infrastructure

- As per Union Budget 2019-20, Government is expected to upgrade 1,25,000 kms of road length over the next five years.
- Projects like Dedicated Freight Corridors and ports under development.
- Metro rail projects already underway in most major cities.
- Government of India's push with Smart Cities Mission and AMRUT.

Industrial Development

- Strong economic growth is expected to lead to growth of the industrial sector and in turn increase in demand in the long run.

Percentage share of cement demand in FY19



Source: Ministry of External Affairs (Investment and Technology Promotion Division), AT Kearney, CARE Ratings, NAREDCO and APREA

Union Budget 2019-20

- The Union Budget has allocated Rs 139 billion (US\$ 1.93 billion) for Urban Rejuvenation Mission: AMRUT and Smart Cities Mission. Government's infrastructure push combined with housing for all, Smart Cities Mission and Swachh Bharat Abhiyan is going to boost cement demand in the country.
- To enhance the source of capital for infrastructure financing, Credit Guarantee Enhancement Corporation for which regulations have been notified by the RBI, will be set up in 2019-20.

Affordable Housing

- In Union Budget 2019-20, the Government of India has extended benefits under Section 80 - IBA of the Income Tax Act till March 31, 2019 to promote affordable housing in India
- Enhanced interest deduction up to Rs 350,000 (US\$ 5,250) for purchase of an affordable house..

Pradhan Mantri Awaas Yojana - Gramin scheme

- An outlay of Rs 68.53 crore (US\$ 949.83 million) has been allotted under Pradhan Mantri Awas Yojana – Gramin in Union Budget 2019-20.
- Pradhan Mantri Awas Yojana – Gramin (PMAY-G) aims to achieve the objective of “Housing for All” by 2022. A total of 1.54 crore rural homes have been completed in the last five years. In the second phase of PMAY-G, during 2019-20 to 2021-22.

Auction of limestone block

- As of September 2019, two more blocks, Naringpanga graphite block with a reserve of 0.33 million tonne in Rayagada district and Uskalvagu Limestone block in Malkangiri district were auctioned.

Note: RE – Revised Estimate
Source: TechSci Research. News Articles

Emami Cement

- The company is aiming to increase its production capacity to 6 MTPA by 2018-19 and market share to 10 per cent by 2019.
- In October 2018, the company files draft papers for a US\$ 135 million Initial Public Offer (IPO).
- The company is setting up its Kalinganagar manufacturing plant and expects operations to start by April 2019. It also acquired the Bhabua manufacturing plant in September 2018.

Shree Cement

- The company has undertaken two greenfield projects in West Bengal and Odisha to increase its presence in eastern India. These projects will attract an investment of US\$ 78 million and will be commissioned by late 2018.

Ambuja Cement

- As of March 2018, the company is going to invest Rs 1,391 crore (US\$ 214.86 million) for setting up a 1.7 MTPA greenfield clinker plant in Rajasthan which is expected to be operational by second half of 2020. A majority of land is already in possession of the company and the rest is in advanced stages of acquisition.

Ultratech Cement

- During 2017-18, Ultratech commissioned a greenfield clinker plant with a capacity of 2.5 MTPA and a cement grinding facility with 1.75 MTPA capacity in Dhar, Madhya Pradesh. The company is expecting to complete a 1.75 MTPA cement grinding facility and a 13 MW waste heat recovery system by September 2018 at the same location.
- The company is planning to build a US\$ 287 million plant in Rajasthan. The plant will have a capacity of 3.5 million tonnes per annum and is expected to commence operations by June 2020.
- The company has received approval for a US\$ 9.04 million opencast limestone mine project in Gujarat. The project has a capacity of 2.07 MTPA* of limestone which will be used to support a proposed cement plant in Bhavnagar district.

Note: *MTPA – Million Tonnes Per Annum

Source: TechSci Research, News Articles

Ramco Cements

- The company will invest Rs 15 billion (US\$ 213.74 million) to set up a 3.15 MTPA green field cement plant in Andhra Pradesh. With this investment, the company will become the largest cement manufacturer in Andhra Pradesh.

ACC

- ACC will upgrade and expand its Jamul unit in Chattisgarh & its grinding unit in Jharkhand. This will increase ACC's capacity to 38 MTPA from 30 MTPA in a phased manner by 2016 & 55 MTPA in 2020..

Heidelberg Cement

- Heidelberg Cement, a Germany-based cement manufacturer has commissioned Phase-I of its Jhansi grinding unit.
- The company has undertaken an investment worth US\$ 259.4 million for expanding its capacity to 2.9 MT.

Dalmia Cement

- As of November 2018, the company plans to invest Rs 25 billion (US\$ 356.23 million) to set up manufacturing plants in Rajgangpur and Cuttack in Odisha.
- It is the preferred bidder for one block of Limestone (Kesla II) in Raipur, with reserves of 215 million tonnes. The deal is expected to generate cumulative revenues worth US\$ 1.76 billion for the state government.

JK Cement

- JK Cement is planning to invest Rs 1,700 crore (US\$ 235.6 million) by 2020 to increase its production capacity to 15 million tonnes from 10 million tonnes at current, and also entering into new markets like Gujarat and Uttar Pradesh.
- The company is aiming to further increase its production capacity to reach 18 MTPA by 2022.

Source: TechSci Research, News Articles

KEY INDUSTRY ORGANISATIONS



Cement Manufacturers' Association (CMA)

CMA Tower, A-2E, Sector 24 NOIDA – 201 301
Uttar Pradesh, India
Phone: 91-120-2411955, 2411957, 2411958
Fax: 91-120-2411956
E-mail: cmand@vsnl.com
Website: www.cmaindia.org/index.html

Indian Concrete Institute

Ocean Crest 79, Third Main Road, Gandhi Nagar, Adyar, Chennai – 600 020
Phone: 91-44-24912602
Fax: 91-44-24455148
E-mail: ici3@vsnl.in, ici4@airtelmail.in, vj6314@gmail.com
Website: www.indianconcreteinstitute.org

National Council for Cement and Building Materials

34th Milestone, Delhi-Mathura Road, Ballabgarh – 121 004 Haryana, India
Phone: 91-129-2242051/52/53/54/55/56; 4192222
Fax: 91-129-2242100; 2246175
E-mail: nccbm@vsnl.com; info@ncbindia.com

USEFUL INFORMATION



- CMA: Cement Manufacturers' Association
- GDP: Gross Domestic Product
- Gol: Government of India
- Rs: Indian Rupee
- MTPA: Million Tonnes Per Annum
- NE India: North-East India
- FY: Indian Financial Year (April to March)
- (FY10 implies April 2009 to March 2010)
- US\$: US Dollar
- Wherever applicable, numbers have been rounded off to the nearest whole number

EXCHANGE RATES

Exchange Rates (Fiscal Year)

| Year | INR Equivalent of one US\$ |
|---------|----------------------------|
| 2004-05 | 44.95 |
| 2005-06 | 44.28 |
| 2006-07 | 45.29 |
| 2007-08 | 40.24 |
| 2008-09 | 45.91 |
| 2009-10 | 47.42 |
| 2010-11 | 45.58 |
| 2011-12 | 47.95 |
| 2012-13 | 54.45 |
| 2013-14 | 60.50 |
| 2014-15 | 61.15 |
| 2015-16 | 65.46 |
| 2016-17 | 67.09 |
| 2017-18 | 64.45 |
| 2018-19 | 69.89 |

Exchange Rates (Calendar Year)

| Year | INR Equivalent of one US\$ |
|------|----------------------------|
| 2005 | 44.11 |
| 2006 | 45.33 |
| 2007 | 41.29 |
| 2008 | 43.42 |
| 2009 | 48.35 |
| 2010 | 45.74 |
| 2011 | 46.67 |
| 2012 | 53.49 |
| 2013 | 58.63 |
| 2014 | 61.03 |
| 2015 | 64.15 |
| 2016 | 67.21 |
| 2017 | 65.12 |
| 2018 | 68.36 |

Source: Reserve Bank of India, Average for the year

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