Cement industry in India witnessed revival during FY18 backed by Government spending on infrastructure. Cement Production grew at 6.3% in FY18 vs -1.2% during FY17.

Construction of houses under the “Housing for All” Scheme and Pradhan Mantri Awas Yojana (PMAY) Scheme has been a major driver of demand from the housing segment especially in the rural areas. Infrastructure projects under Bharatmala, Sagarmala and Smart Cities continued to drive demand from infrastructure segment.

Real Estate sector witnessed disruption in the construction and sales activity beginning demonetization exercise in November 2016. The disruption continued with builders taking a cautious approach to RERA implementation, temporarily halting new sales or construction. Implementation of RERA in May 2017 impacted the demand for cement from real estate segment in Q1 and Q2 of FY18.

Global cement statistics:

Globally, the Asian region continued to lead cement production accounting for 75% of the world total. At a distant second was the Middle-East and African region accounting for 10% followed by Americas and Europe.
Asian countries namely China & India dominate cement production on account of demand from large scale public infrastructure development and meeting housing needs for a large population. On the other hand, developed economies in Americas and Europe have well-developed and adequate infrastructure and additionally, use of composite and other materials for housing construction, which has led to lower cement demand.

Among sub-regions, Africa (6.8%) reported highest growth followed by South-Asia (5.2%) and Indian-subcontinent (4.1%). China, the single largest producer of cement in the world witnessed de-growth in production.

**Graph 2. India: Supply, demand (in million tonnes) and capacity utilization (in %)**

Source: CMIE, CARE Estimates

**India: FY18 Updates**

Cement production during the year stood at 297.6 MnT, 6.3% higher than the previous year’s (280 MnT). Total installed capacity stood at approximately 455 MnT. The demand-supply trend and capacity utilization in cement industry is exhibited in Graph 2.

FY18 witnessed implementation of Union Government backed mega-infrastructure projects such as Bharatmala for roads, Sagarmala for ports and development of dedicated freight corridors and smart city project. Additionally, two successive years (FY17 & FY18) witnessed above average monsoons ensuring steady demand from housing segment especially rural housing. The demonetization exercise impacted the demand from rural and retail real estate segment during the second half of Q3 and, Q4 in FY17. But the same has evidently recovered during FY18.

**Demand Drivers:**

Cement consumption can be broadly classified into demand from three segments:
- Housing and real estate (65%)
- Public infrastructure (20%)
- Industrial development (15%)
The housing and real-estate segment is driven by demand from rural housing and affordable housing in urban areas. Last year’s monsoon ensured steady demand from the rural segment. In the residential real estate segment, the demand was subdued in comparison to previous year due to introduction of RERA in May 2017. RERA led to disruption in construction activity and real estate developers went slow on launching new projects in Q1 and Q2 FY18. This dip in demand was offset by demand from construction of affordable housing units by Government for economically weaker sections and low income group. Retail Segment or Mall property and commercial real estate construction picked pace during FY18 with some realtors looking to offset the stagnation in residential business.

<table>
<thead>
<tr>
<th>Table 1. Affordable Housing (Gross Budgetary support)</th>
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<tbody>
<tr>
<td><strong>2017-18</strong></td>
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<tr>
<td><strong>2018-19</strong></td>
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<tr>
<td><strong>Budgetary support</strong></td>
</tr>
<tr>
<td>PMAY-Grameen</td>
</tr>
<tr>
<td>Rs. 23,000</td>
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<tr>
<td>PMAY-Urban</td>
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<tr>
<td>Rs. 6,043</td>
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<tr>
<td><strong>Budgetary Support</strong></td>
</tr>
<tr>
<td>Rs. 21,000</td>
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<tr>
<td>Rs. 6,500</td>
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</tbody>
</table>

All figures in Rs. crores

Demand from affordable housing is expected to sustain on the back of Government allocating Rs. 65 billion for urban housing. Achievement of target in these schemes seems unlikely keeping in view the previous year’s track-record, but above average implementation and completion of the same, would lead to an incremental demand of 1-1.5% (3-4.5 Mnt) for cement in FY19. Additionally, the monsoon forecasts for the year indicate normal rainfall, which should lead to sustained demand from rural housing segment. We expect the housing and real estate segment to grow by 6-7%.

Infrastructure segment may continue to remain in focus during the year as far as demand for cement is concerned. Development of national highways is expected to contribute 2-3 Mnt of incremental demand for cement.

Demand from various projects at proposed smart-cities, under-construction metro rail projects at various stages of development in 14 cities including Mumbai, Nagpur, Bengaluru etc., development of new international airports and terminals under UDAN-RCS, development of industrial corridors and freight corridors between Delhi-Mumbai and Delhi- Howrah; and development of India’s first bullet train line between Mumbai-Ahmedabad are some of the projects expected to drive demand for cement during the year. The development of the above-mentioned projects across the geography is expected to improve capacity utilization of cement plants across the 5 regions. Election in some of the key states in Southern, Northern and Central regions followed by the General Election in 2019 would ensure faster implementation of sanctioned projects. We expect the infrastructure segment to grow by 8-10.

The overall private investment in industrial segment has been low, with very low capacity addition in new thermal power plants, hydel power projects and other large capital expenditure. The segment is expected to witness 1-2% incremental growth in demand for cement in FY19.

Pricing- Regional capacity and demand key to prices
Cement prices have remained range bound in the past 4 years. They are mainly driven by regional capacity, utilization levels and demand within the region. The price variation across regions contract when there is steady demand from both retail and institutional cement consumers.

- Western and Eastern regions with favourable demand continue to record higher price for cement. These regions are driven by demand from infrastructure, housing and commercial real estate.
Southern region with the highest installed cement capacity in the country (approx. 158MnT) continued to witness lowest cement prices. Overall capacity utilization in the Southern region has been in the range of 55-57% post-2014. The same could be attributed to lower than expected growth in demand from housing and infrastructure development in the region. Additionally, eastern region witnessed considerable capacity addition, making it self-sufficient, which was previously met by supply from the southern region. The prices in Southern region are expected to remain subdued over the next 12-18 months. The prices would strengthen once capacity utilization moves above 60%.

Other factor affecting demand: Availability of sand
Availability of sand is a major challenge globally which affects construction activity. India has been facing acute shortage of sand across states especially in Northern and Southern region. Even though sand seems to be an abundant resource, the availability of sand required for construction is scarce in these regions.

Sand is largely illegally mined across many of the states in Southern and Northern regions, and the respective State Governments have been trying to curb the same, in order to boost their tax-revenues. This has led to a sudden drop in sand availability for construction.

Few states have been trying to implement sand-mining policy in order to cut-down on illegal mining. But these initiatives have turned out to be counter-productive leading to scarcity of sand and hence stalling of construction activity, which in turn affects both housing as well as infrastructure projects. The sand prices have doubled over the last 2-3 years due to disruption in sand-mining.
Capacity addition:
MP, Rajasthan, Andhra Pradesh, Gujarat, Chhattisgarh, Tamil Nadu and Karnataka are the largest limestone producing states in the country which is an essential raw material for cement.

Graph 4. Regional Installed Capacity Mix

![Graph 4. Regional Installed Capacity Mix]

- Around 100-105 MnT of new cement production capacity was added between FY12-16. Capacity addition in FY17 & FY18 has been around 32-36MnT, mostly brownfield expansion.
- With real estate sector witnessing sustained downturn since 2012-13, the capacity utilization fell from 70-71% in 2012 to 65-68% in FY 15, FY16 & FY17.
- During FY19, capacity addition of around 8-10 MnT is expected in Eastern and Western region. Central, Northern and Southern regions combined are expected to witness an addition of 10-15 MnT of production capacity. The top 6 cement manufacturers have been expanding into newer geographies, which can be inferred from the latest round of limestone blocks auctions. They would continue to add sizeable capacity across new regions.
- During the last 2 years, the industry witnessed consolidation with existing large players taking-over assets of both regional as well as large players. The industry witnessed three such take-over- Jaypee Cements and Orient Cement by Ultratech Cement (28 MnT in 2017), Lafarge Cement by Nirma Group (11 MnT in 2016) and Reliance Cement Company by Birla Corporation (5 MnT in 2016). The trend is expected to continue and the expected future capacity addition would be in the form of brownfield expansion in these acquired assets. Acquiring cement assets is cost affective for the acquirer and provides access to new market and a ready-made supplier network.

Cost drivers:

Breakup of major costs in cement industry is shown in Graph 5. Among the major costs, change in prices of few raw-materials, feedstock and fuel are expected to drive costs and hence affect the operating margins of cement producers.

- Pet coke (raw material): Petcoke is used as feedstock for production of clinker. India imports around 45% of its petcoke requirement and the remaining demand is met by domestic refineries.
Saudi and U.S. are two of the largest petcoke exporters to India. Petcoke prices have firmed up during 2017-18 to multi-year high due to steady demand globally and limited supply on the back of disruption in refinery operations in the US and Middle East. Domestic prices of remained in the range of Rs. 7,200-8,500 per tonne. The prices are expected to stabilize as refinery operations resume over the next few months across Saudi and the US.

Manufacturers may have to switch to imported coal in order to sustain margins given the prices of imported coal remain at suitable levels which at the moment is equally priced as petcoke.

- **Freight:** Rising diesel prices have a direct impact on the margins of cement manufacturers. Freight costs as per our estimates account for 22-25% of the total costs for cement manufacturers. Diesel price has risen by around 18% in FY18 and has impacted the operating margins of cement manufacturers. With crude production being tightened by OPEC nations, crude prices are expected to remain steady. Cement manufacturers with higher dependence on road freight for transportation of raw materials and finished cement to markets would be impacted in case of a further increase in diesel prices.

- **Revision in Goods and Services Tax (GST):** Cement being a high volume and essential commodity for housing and infrastructure sector, the government revised the tax slab to 18% from the earlier 28% GST applicable. Prior to implementation of GST, cement was taxed at 25-27%. The new tax rate has further softened prices of cement which in turn would lead to an incremental demand for cement especially in the retail segment.

**Outlook:**

- The cement production is expected to cross 310 million tonnes during FY19. We expect cement production to grow by 5.5-6.5% during FY19. Housing and real estate segment demand is expected to grow by around 6-7% whereas demand from Infrastructure segment is expected to grow by 8-10%.
- With two major states (Rajasthan and Madhya Pradesh) going into Assembly elections followed by General Elections in Q1-Q2 CY2019, the demand from infrastructure and construction is expected to peak in central, eastern and western region. Utilization in cement capacity across regions is expected to improve during the year to around 67%.
- Prices are expected to remain range bound and may fall further with addition of new capacity especially in the Southern region. We expect the all-India prices to remain in the range of Rs. 317 (+/- 5% per bag post GST) during the year.
- Further fall in prices may be indicative of improvement in installed capacity utilization especially in Southern region.
- Increase in pet-coke prices in the global markets and global crude oil price leading to increase in domestic diesel prices would impact operating margins of major players during the year.