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INDUSTRY OUTLOOK

CEMENTING GROWTH: OPPORTUNITIES AND CHALLENGES IN INDIA'S CEMENT SECTOR

20 November 2024

Introduction

The Indian cement industry plays a crucial role in the nation's economy, significantly contributing to the construction and real estate sectors while also being closely linked with various other industries. India is the world's second-largest cement producer, following China, which leads by a substantial margin. According to the National Bureau of Statistics of China, China produced a total of 2.02 billion tonnes of cement in 2023.[1] In comparison, India produced 418.34 million tonnes (0.42 billion tonnes) of cement during 2023-24. The cement industry contributes approximately 11 per cent of the input cost to the construction sector in India.

India's cement sector plays a vital role in its economic growth and provides direct employment to more than one million people and many more indirect jobs across the country. It employs about 20,000 people downstream for every million tonnes of cement produced.[2]

Market Size and Installed Capacity of the Cement Industry in India

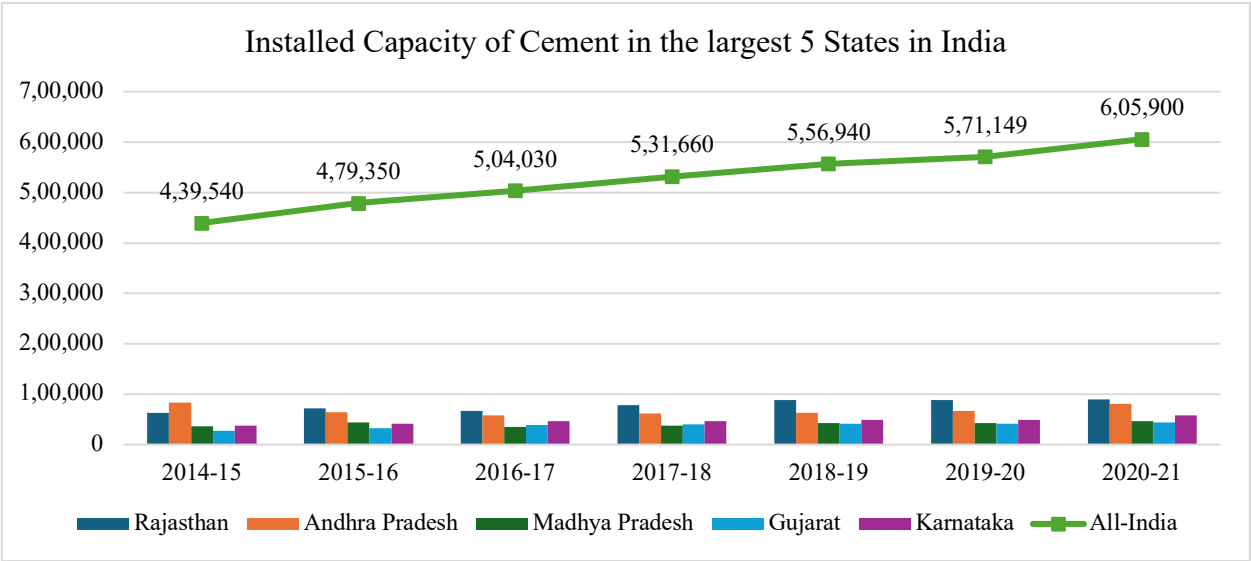
In 2022-23, the market size of India's cement industry was 3.82 billion tonnes, and it is projected to reach 5.09 billion tonnes by 2028-29, reflecting a compound annual growth rate (CAGR) of 4.9 per cent during the period from 2024 to 2029. India holds over 8 per cent of the global installed capacity for cement production, with more than 98 per cent of this capacity owned by private entities, while the remaining share is held by the public sector.

The Indian cement industry has a total 341 cement manufacturing units in India, comprising 159 integrated large cement plants, 120 grinding units and 62 mini cement plants. As the Economic Survey of India 2023-24 stated that India has current annual installed capacity of the cement industry in India is about 622 million tonnes, with cement production of around 427 million tonnes in FY24. Most of the cement plants in India are in proximity to the raw material source. About 85 per cent of the cement industry is concentrated in the States of Rajasthan, Andhra Pradesh, Telangana, Karnataka, Madhya Pradesh, Gujarat, Tamil Nadu, Maharashtra, Uttar Pradesh, Chhattisgarh and West Bengal.[3]

As per the figures of 2020-21, the state of Rajasthan has the largest installed capacity of cement with 89,070 thousand tonnes followed by Andhra Pradesh (80,870 thousand tonnes) and Karnataka (57,660 thousand tonnes). At the country level, India has 605,900 thousand tonnes of installed capacity of cement production. Here is the comparison of top 5 states in India in terms of installed capacity of cement with the all-India installed capacity of cement from 2014-15- to 2020-21 (see Chart 1).

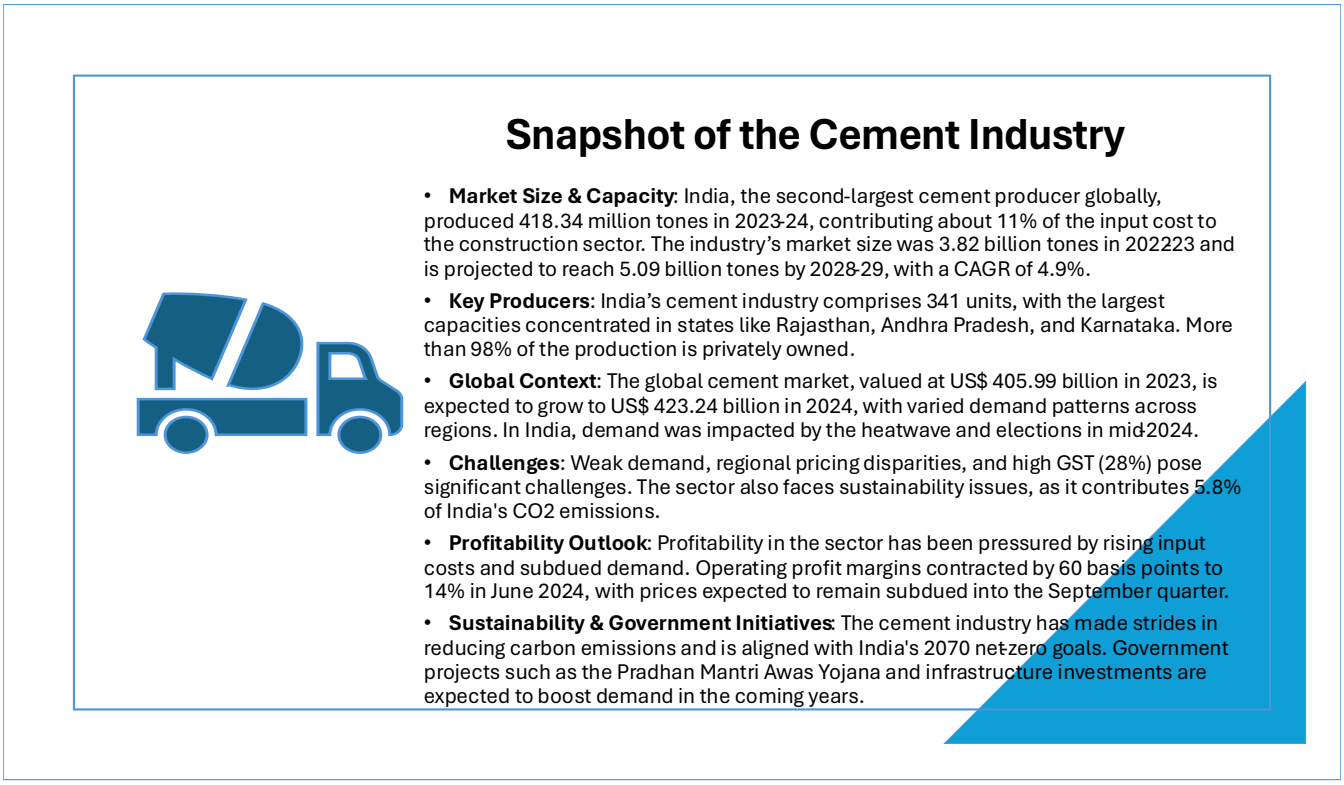
Chart 1: Top 5 States in India in terms of Installed Capacity of Cement from 2014-15 to 2020-21

(*in '000 tonne*)



Source: CMIE Industry Outlook | Infomerics Economic Research

The Indian cement industry has adequate capacity to meet the domestic cement demand; the quantity of cement imported in the year FY23 is about 0.2 per cent of total domestic cement production. The export of clinker and other cement increased until FY19 and then started declining except for other hydraulic cement on account of lower global demand and increasing competition from other countries. In FY23, India exported only a negligible quantity of clinker (Economic Survey of India, 2023-24).



Global Outlook

The global cement market was valued at US$ 405.99 billion in 2023 and is expected to grow to US$ 423.24 billion in 2024, reaching US$ 592.38 billion by 2032, with a compound annual growth rate (CAGR) of 4.3 per cent over the forecast period.[4] According to the World Cement Industry Outlook, global cement consumption is anticipated to see a modest rebound, projected between 1 per cent and 2 per cent.

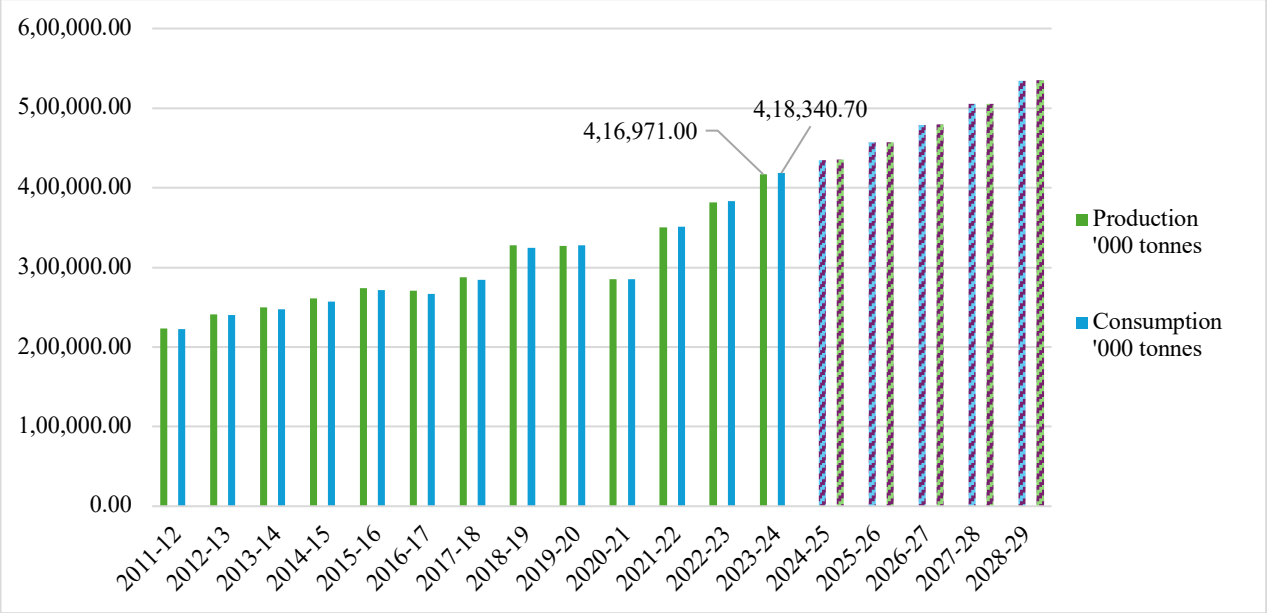
The IMF characterizes global GDP growth as "*limping along*." While interest rates appear to have peaked, they are expected to decline gradually due to persistent inflation, raising the cost of financing new construction projects. Savings accumulated during the pandemic are largely exhausted and mature market economies are weighed down by high levels of debt.

Regionally, cement demand presents a mixed picture. In Western Europe, demand remains weak, while in the US, consumption is supported by the infrastructure bill. Emerging markets show varied demand patterns: China is expected to stabilize despite a continued downturn in its real estate sector, and recovery in Africa and Asia is likely to be uneven. In India, cement demand is slowing due to extended heat waves and a labor shortage linked to the general elections. This seasonal weakness is expected to persist into the next quarter.[5]

Demand and Supply of Cement in India

The industry's production volumes were impacted in the June 2024 quarter. Intense heat wave and general elections slowed down the pace of construction activities in April and May 2024, resulting in a lower demand for cement. Barring few major companies, other cement manufacturers are likely to have reported lower volumes during the June 2024 quarter.

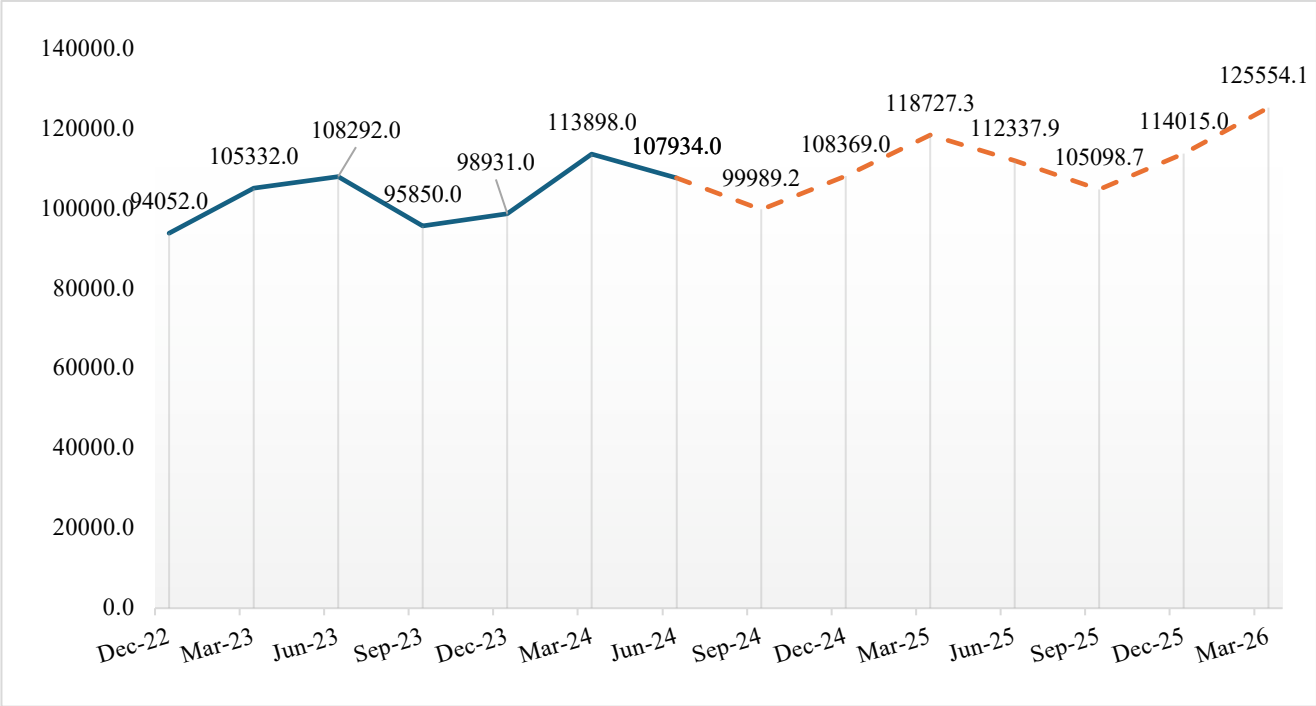
Chart 2: Annual Trend of Production and Consumption of Cement in India



Source: CMIE | Infomerics Economic Research

It is anticipated that construction activities will gain momentum in the September 2024 quarter, which is expected to boost cement demand during this period. Cement consumption is projected to grow by 4.1 per cent in the September 2024 quarter (see Chart 3).

Chart 3: Quarterly Production of Cement ('000)



Note: Projections in dotted line
Source: CMIE Industry Outlook

In the June 2024 quarter, cement prices remained subdued due to lower demand. Although companies implemented price increases at the start of September 2024, they may need to roll back these hikes due to continued weak demand, according to a report by Nuvama. The report noted that price weakness will vary across regions, but the overall trend is expected to remain downward. Despite this, cement prices will still be higher compared to the same period last year, owing to earlier price increases by manufacturers. We expect cement prices to be approximately 1-2 per cent higher on a year-over-year basis during the September quarter.

Performance of Cement Industry

The combined Index of Eight Core Industries (ICI) increased by 6.3 per cent (provisional) in May 2024 as compared to the Index in May 2023. Production of cement (it has 5.37 per cent weight in the index of eight core industries) increased by 5.5 per cent in July 2024 over July 2023. Its cumulative index declined by 1.6 per cent during April to July, 2024-25 over corresponding period of the previous year (see Table 1).[67]

Table 1: Growth Rate of Cement Industry amongst the Eight Core Industries in India (on y-o-y basis in per cent).

Sector	Coal	Crude Oil	Natural Gas	Refinery Products	Fertilizers	Steel	Cement	Electricity	Overall Growth
Weight	**10.33**	**8.98**	**6.88**	**28.04**	**2.63**	**17.92**	**5.37**	**19.85**	**100**
2012-13	3.2	-0.6	-14.4	7.2	-3.3	7.9	**7.5**	4	3.8
2013-14	1	-0.2	-12.9	1.4	1.5	7.3	**3.7**	6.1	2.6
2014-15	8	-0.9	-5.3	0.2	1.3	5.1	**5.9**	14.8	4.9
2015-16	4.8	-1.4	-4.7	4.9	7	-1.3	**4.6**	5.7	3
2016-17	3.2	-2.5	-1	4.9	0.2	10.7	**-1.2**	5.8	4.8
2017-18	2.6	-0.9	2.9	4.6	0.03	5.6	**6.3**	5.3	4.3
2018-19	7.4	-4.1	0.8	3.1	0.3	5.1	**13.3**	5.2	4.4
2019-20	-0.4	-5.9	-5.6	0.2	2.7	3.4	**-0.9**	0.9	0.4
2020-21	-1.9	-5.2	-8.2	-11.2	1.7	-8.7	**-10.8**	-0.5	-6.4
2021-22	8.5	-2.6	19.2	8.9	0.7	16.9	**20.8**	8	10.4
2022-23	14.8	-1.7	1.6	4.8	11.3	9.3	**8.7**	8.9	7.8
2023-24*	11.8	0.6	6.1	3.6	3.7	12.4	**8.9**	7.1	7.6
Apr-July 2023-24	8.2	-2.7	-1.6	0.7	15.7	14.2	**11.3**	-0.1	4.9
Apr-July 2024-25*	8.9	0.2	8	2.2	-1.2	8.2	**1.6**	11.6	6.5

Source: Industry Outlook, CMIE

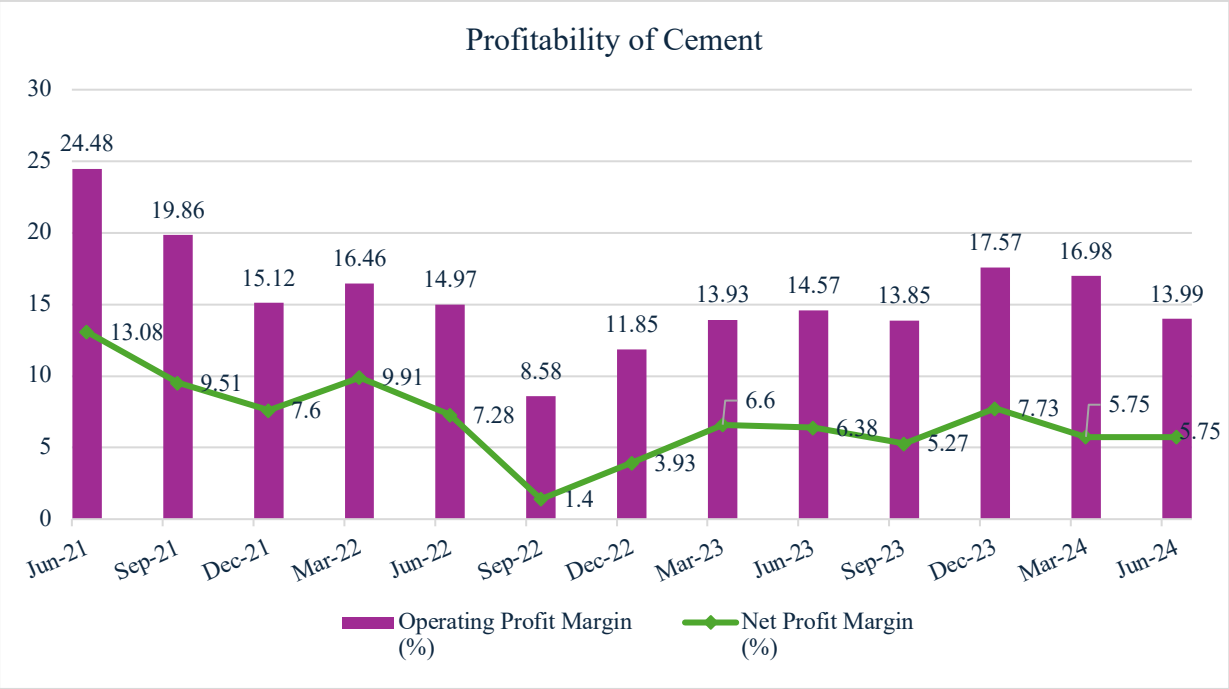
Cement consumption in India is around 260 kg per capita against a global average of 540 kilograms per capita, which shows significant potential for the growth of the industry.

Profitability of Cement Industry

Profitability of the cement industry is likely to come under pressure in the September 2024 quarter. This will be on the back of lower realisations and increase in input costs during the quarter. The industry's sales volumes are projected to be higher as compared to the year-ago period. But the lower realisations will restrict the growth in the industry's sales revenues.

The operating expenses of the industry corresponding to cost-of-goods-sold fell by 3.5 per cent. The decline in operating expenses was slower than the decline in net sales. Accordingly, the operating profit of the industry fell by 8 per cent in the June 2024 quarter. The operating profit margin contracted by 60 basis points to 14 per cent (see Chart 4).

Chart 4: Quarterly Profitability of Cement Industry of India



Source: CMIE Industry Outlook | Infomerics Economic Research

Cement Industry Trade Balance

India exports cement to several countries, including Sri Lanka, the Maldives, Nepal, Bhutan, Australia, and Saudi Arabia. Among these, Sri Lanka is the largest importer, consistently receiving more than half of India's total cements exports. In 2015-16, India's cement exports to Sri Lanka were valued at ₹6,998.9 million, which decreased to ₹2,514.7 million by 2023-24. Over the past decade, the average annual export of cement to Sri Lanka has exceeded ₹5,000 million. The Maldives ranks as the second-largest importer of Indian cement, followed by Nepal and Bhutan (see Table 2).

Table 2: Country-wise Exports of Cement

(₹ million)

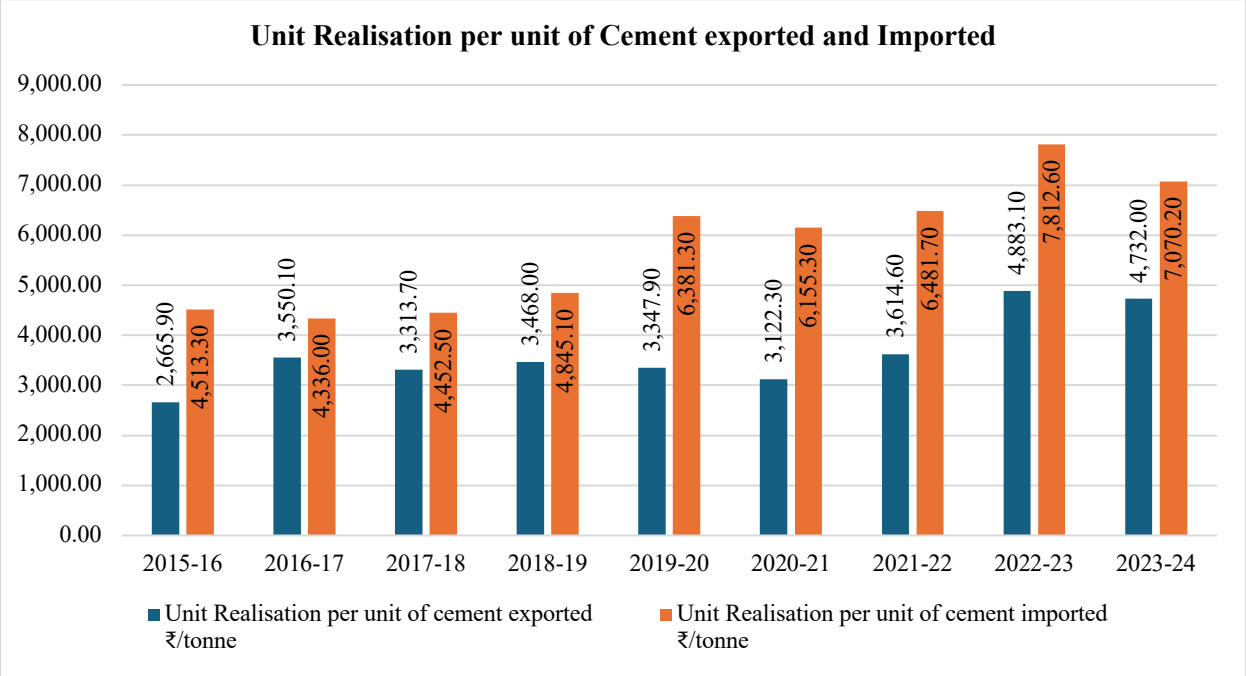
Country	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Sri Lanka	6,998.90	7,987.80	7,109.80	6,245.10	5,672.50	4,423.50	3,506.00	2,176.60	2,514.70
Maldives	476.1	468	445.6	567.8	438.8	294	178.7	593.2	805.3
Nepal	783	618.1	493.8	698.2	380.8	192.5	203.4	195.8	129.4
Bhutan	144.9	6	44.2	22.5	82.3	44.7	30.5	87.8	98.4
Australia		0			0				38.2
Saudi Arabia	1.6	0.1		9.2	22.3	14.8	15.6	31.6	30.6
Taiwan (Taipei)	3.3							4	28.3
Indonesia		0.1				0	0	3.2	27.5

Vietnam	0	1.4					2.8	4.5	23.3
UAE	0.4	2.7	8.7	6.4	10.2	107.2	67.7	28.3	20.7
Malaysia	0.5	0.5	6	8.4	5	9.9	9.1	13	14.7
Qatar	2.7	0.5	13.6	12.9	11.4	13.3	11.8	13	11.3
South Africa	16.6	6.2	0.7	0	1.4	4.6	14.8	3.4	8.7
Thailand	1		1.3		0		0	4.5	7.5

Source: CMIE | Infomerics Economic Research

The data on unit realisation per unit of cement exported and imported (₹/tonne) from 2015-16 to 2023-24 as given in the Chart 5, showing a steady increase for both, though import prices have risen more sharply. Export realisation grew moderately, peaking at ₹4,883.10/tonne in 2022-23, indicating improved external market conditions and demand for Indian cement. In contrast, import realisation jumped significantly after 2018-19, reaching ₹7,812.60/tonne in 2022-23, likely due to rising global prices, supply chain disruptions, and inflation. Export realisation grew moderately, peaking at ₹4000 per tonne in the 2020-21, indicating improved external market. The gap between export and import realisation widened over the years, reflecting the consistently higher cost of imports compared to the revenue from exports, which could place pressure on industries reliant on imported cement. The rising import costs, coupled with moderate export gains, highlight the need for domestic efficiency improvements and a focus on higher-value export markets to maintain competitiveness in the global cement trade.

Chart 5: Unit Realisation per unit of Cement exported and Imported



Source: CMIE Industry Outlook

Industry risks and Challenges

The cement industry in India has recently faced significant pricing challenges, primarily due to weak demand across various regions. Although cement companies implemented a price hike ranging from ₹ 15-30 per bag in September 2024, the prolonged monsoon season, labour shortages, and sluggish construction activities have dampened the sector's ability to sustain these increases. As a result, the price hikes are expected to be rolled back by the end of the month. In particular, demand remained notably subdued during the first half of FY25, leading to pressure on cement companies to maintain profitability despite weaker price realizations.

Regional disparities in pricing trends further illustrate the uneven recovery across the country. In the Eastern region, prices dropped by ₹ 5-7 per bag due to monsoons and labour shortages, while the Southern region saw the steepest decline, with prices falling by ₹ 10 per bag in August. Although Karnataka experienced a modest recovery with a ₹ 20-30 per bag hike, other regions like the North and Central zones also saw minimal price adjustments, with the Northern region expected to reverse recent increases. Moving forward, the sector anticipates a post-monsoon recovery in construction activities by Q3FY25, which could help stabilize prices across regions.

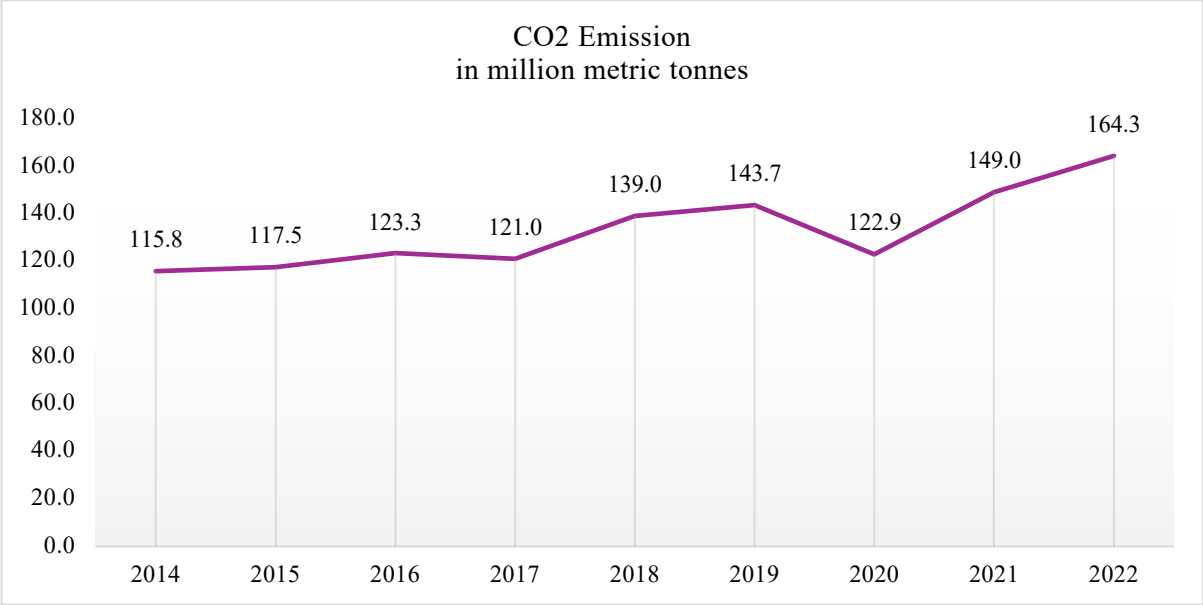
The Goods and Services Tax (GST) on cement, at 28 per cent, is one of the highest rates amongst the major construction materials, significantly decelerating the industry. This high rate has increased cement costs, leading to higher overall construction expenses and a slowdown in demand, especially in the affordable housing sector. The cement industry struggles with input tax credits, as the high GST on cement is not always fully offset by credits on other inputs. But the introduction of GST has brought about some benefits, particularly by streamlining the tax compliance process, which has provided operational relief to businesses in the sector.

The cement industry is a major contributor to carbon emissions in India, accounting for approximately 5.8 per cent of the country's CO_2 emissions in 2022 and contributing 7-8 per cent to the global total of anthropogenic emissions. Acknowledging this impact, the Indian cement industry has been actively addressing the issue. In 2023, greenhouse gas emissions from the sector were reduced to 0.56 tonnes of CO_2 per tonne of cement. Furthermore, the industry has set a target to lower CO_2 emissions to 0.35 tonnes per tonne of cement by 2050, as outlined in the cement industry technology roadmap.

India has committed to achieving net zero emissions by 2070 and aims to generate 50 per cent of its electricity from renewable sources by 2030. Over the past two decades, India's rapid economic growth, driven by oil and coal, has been among the highest in the world.

As the third-largest greenhouse gas emitter globally, India presents a significant opportunity for Carbon Capture, Utilization, and Storage (CCUS) to be deployed as a key strategy in achieving its transformation and emissions reduction goals (see chart 6).[8]

Chart 6: CO_2 emissions by Cement Industry in India



Source: Our World in Data

Institutional Initiatives

The Indian government has made significant progress in infrastructure development, with a capital expenditure allocation of ₹11.11 lakh crore for the 2024-25 fiscal year. This investment, which constitutes 3.4 per cent of GDP, up from 1.7 per cent in 2019-20, plays a pivotal role in fuelling economic growth. Cement, a key material in construction, is expected to benefit greatly from this increased spending, as demand for both real estate and public infrastructure continues to rise. The real estate sector alone accounts for over 55 per cent of cement consumption, while infrastructure projects make up the rest. Leading cement companies such as Ultratech Cement, Ambuja Cements, Shree Cement, and JK Cement stand to gain from these developments.

To further support economic growth, the government has proposed a 56.6 per cent increase in funding for the Pradhan Mantri Awas Yojana, raising its budget to ₹84,700 crore for FY25. This initiative aims to provide affordable housing across urban and rural areas. The Pradhan Mantri Gram Sadak Yojana allocation has increased by 11.7 per cent, reaching ₹19,000 crore, which is expected to further drive cement demand. In the infrastructure sector, the government has allocated ₹26,000 crore for highway construction in Bihar and a special package of ₹15,000 crore for Andhra Pradesh.

Metro projects have seen an 8 per cent budget increase to ₹24,900 crore, and 100 cities will be selected for water supply, sewage treatment, and solid waste management projects. Companies like NCC, IRB Infrastructure Developers, and VA Tech Wabag are well-positioned to benefit from these large-scale infrastructure projects.

On the sustainability front, the Indian cement industry has made important strides in reducing carbon emissions through initiatives like the Low Carbon Technology Roadmap (LCTR), developed in 2013 by the World Business Council for Sustainable Development (WBCSD) and the International Energy Agency (IEA). By 2017, the sector had achieved a 5 per cent reduction in direct CO_2 intensity compared to 2010 levels, demonstrating a strong environmental commitment. The industry's involvement in the Bureau of Energy Efficiency's Perform, Achieve, and Trade (PAT) Scheme has also been notable, exceeding energy-saving targets by achieving savings of 1.48 million tonnes of oil equivalent—1.81 times the original goal. Support from international organizations like the United Nations Industrial Development Organization (UNIDO) and the Swiss Agency for Development and Cooperation (SDC) has helped align the sector with global Sustainable Development Goals (SDGs) and foster sustainable industrialization.

The cement industry is also advancing its sustainability agenda by promoting a circular economy through the use of waste materials such as fly ash and alternative fuels. Its role in the Swachh Bharat Abhiyan, with contributions to waste co-processing, further highlights its commitment to environmental sustainability in India.

The Way Forward

The Indian cement industry, while poised for growth, faces several challenges that need to be addressed for long-term sustainability and profitability. To enhance operational efficiency, cement companies must focus on cost optimization strategies, including the adoption of energy-efficient technologies and improvements in supply chains. Investments in automation and digitalization can further reduce inefficiencies and improve margins. Given the sector's significant contribution to carbon emissions (5.8 per cent of India's total CO_2 output), adopting green technologies is essential. Accelerating the use of carbon capture, utilization, and storage (CCUS) technologies, alongside expanding the use of alternative fuels and raw materials like fly ash, will help lower emissions and promote circularity.

The regional disparities in cement demand across India, driven by climate conditions and infrastructure development, necessitate a region-specific pricing strategy. Companies must also leverage upcoming government-led infrastructure projects in underserved areas to boost growth. Investing in logistics infrastructure in these regions could help stabilize supply and demand dynamics.

While government initiatives, such as infrastructure and housing projects, provide opportunities for growth, high GST rates (28 per cent) on cement hamper affordability, particularly in the affordable housing segment. Advocating for a reduction in GST, coupled with better input tax credit mechanisms, could stimulate demand in key sectors.

Sustainability will be a critical focus for the industry's future. Cement companies must align with global environmental standards and invest in low-carbon technologies to slash carbon emissions in both production and transportation. This is necessary to remain competitive by a renewed thrust on quality, safety and compliance. Ongoing collaboration with government bodies and international organizations will be essential in driving this transition to the avowed goal of optimizing both protection and sustainability. Continued participation in programs like the Bureau of Energy Efficiency's Perform, Achieve, and Trade (PAT) Scheme will further propel the industry towards a greener and more sustainable future. By addressing these strategic areas of product safety, quality, and environmental considerations, the Indian cement industry can boost productivity and quality with integrated solutions**.** This would help the industry to strengthen its growth trajectory, enhance profitability, and contribute to domestic and global sustainability goals in a greater measure.

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