

CEMENT



# Indian Minerals Yearbook 2020

(Part- III : MINERAL REVIEWS)

59<sup>th</sup> Edition

**CEMENT**

(ADVANCE RELEASE)

GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES

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## 5 Cement

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The Cement Industry in India is among the core Industries that is vital for economic growth and development. Ever since the Industry was delicensed in 1991, there has been remarkable growth that metamorphosed it to a globally competitive Market, making India the second largest producer of cement after China in the world. Cement is the basic building material and is used extensively in urban housing, industrial sector and infrastructure development. It has become synonymous with construction activity and the per capita consumption of cement is accepted as an important indicator of the country's economic growth.

In terms of quality, technology, productivity and efficiency, India compares well with the best in the world. The demand for cement is closely linked to the overall economic growth, particularly the housing and infrastructure sector. The recent government thrust on housing and infrastructure development augurs well for the industry. However, the per capita consumption of cement in India still remains substantially low at about 195 kg when compared with the developed world or world average which stands at about 500 kg. The Indian Cement Industry plays a key role in the national economy, not only by generating substantial revenue for State and Central Governments but also as a key industry that generates maximum employment directly or indirectly. India has a lot of potential for development in the Infrastructure and Construction Sector and the Cement Sector is poised for a positive growth in the days ahead. Some of the recent major government initiatives, such as, development of smart cities are expected to provide a major boost to the sector.

India exported about 2.84 million tonnes cement valued at ₹ 954 crore (including 0.8 million tonnes clinker, 1.9 million tonnes of portland grey cement and 0.02 million tonnes portland white

cement) in 2019-20 to Sri Lanka, Nepal, Bangladesh, Maldives etc.

IBM captures data from mineral consuming industries as per provisions made under Rule 45, MCDR-2017 in Form 'M' (Erstwhile Form 'O'). The plant-wise reported production as furnished in Form 'O' for the year 2019-20 are tabulated in later pages.

The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce, Govt. of India publishes data on production and capacity of cement in its Annual Report. As per Annual Report 2020-21, the total installed capacity of cement plants has been placed at 537 million tonnes among which there are more than 350 mini cement plants with an estimated capacity of 11.10 million tonnes per annum. During 2019-20, the production of cement was 334.37 million tonnes which showed a slight decrease of 1% as compared to the year 2018-19 which reported a production of 337.32 million tonnes.

Three cement plants, having a total capacity of 1.338 mtpa white cement. Most of these capacities are modern and based on the energy-efficient dry processing technology.

There are as many as 175 plants with over a million tonnes or more capacity. In the Public Sector, however, there is only one Central Public Sector Undertaking i.e., CCI which had 10 units, spread over eight States/Union Territories. Out of these, only three plants, namely, Bokajan, Rajban and Tandur units are operational, the remaining cement plants have shut operations for more than a decade now. There are five large cement plants owned by various State Government Undertakings like Tamil Nadu Cement, Malabar Cements, J&K Ltd and Mawmluh-Cherra Cement Ltd, Shillong, Meghalaya. The company-wise annual installed capacity and production of cement plants during the year 2019-20 in the country is furnished in Table-1.

- Data on capacity, production and growth in Cement Industry are reflected in Table-2.

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**Table 1: Company-wise Installed Capacities and Production of Cement Plants, 2019-20**

(In million tonnes)

Company/ Plant Name	Capacity	Production
<b>ACC Ltd</b>		
Bargarh, Bargarh, Odisha	2.50	-
Chaibasa, Singhbhum, Jharkhand	0.90	0.90
Chanda, Chandrapur, Maharashtra	3.80	2.63
Damodar (G), Purulia, West Bengal	0.70	0.62
Gagal-I & II, Bilaspur, Himachal Pradesh	4.40	3.40
Jamul, Durg, Chhattisgarh	3.00	2.30
Kudithini (G), Ballari, Karnataka	3.00	1.10
Kymore, Katni, Madhya Pradesh	2.72	-
Lakheri, Bundi, Rajasthan	1.50	-
Madukkarai, Coimbatore, Tamil Nadu	1.00	-
Sindri (G), Dhanbad, Jharkhand	3.00	0.53
Thondebhavi (G), Chikballapur, Karnataka	1.66	-
Tikaria (G), Sultanpur, Uttar Pradesh	2.64	2.67
Vizag (G), Vizag, Andhra Pradesh	0.30	-
Wadi & Wadi New, Wadi, Karnataka	5.45	3.20
<b>ACL, Jaypee Group</b>		
Durga Cement Works, Guntur, Andhra Pradesh	2.31	0.40
Vishaka Cement Works, Vizag, Andhra Pradesh	0.54	-
<b>Ambuja Cement Ltd</b>		
Ambujanagar I & II, Kodinar, Junagadh, Gujarat	5.70	4.70
Bathinda (G), Bhatinda, Punjab	1.20	-
Bhatapara, Raipur, Chhattisgarh	3.50	2.60
Dadri- (G), G B Nagar, Uttar Pradesh	1.50	1.50
Darlaghat, Solan, Solan, Himachal Pradesh	6.8	4.90
Farakka (G), Murshidabad, West Bengal	1.25	1.10
Magdalla (G), Surat, Gujarat	1.56	-
Maratha Cement, Chandrapur, Maharashtra	4.75	3.60
Nalagargh, Solan (G), Solan, Himachal Pradesh	1.50	0.80
Rabriyawas, Pali, Rajasthan	3.60	2.20
Roorkee (G), Haridwar, Uttarakhand	1.00	-
Ropar (G), Ropar, Punjab	2.50	-
Sankrail (G), Howrah, West Bengal	2.40	-
<b>Amrit Cement</b>		
Jaintia Hills, Jaintia Hills, Meghalaya	3.00	-
<b>Andhra Cement Ltd.</b>		
Durga Cement Works, Guntur, Andhra Pradesh	2.31	0.37
<b>Anjani Portland Cements</b>		
Anjani Portland Cements, Nalgonda, Telangana	1.92	0.82
<b>Asian CCPL</b>		
Asian Cement, Solan, Himachal Pradesh	1.30	-
<b>Asian FCPL</b>		
Asian Cement, Patiala, Punjab	1.50	-

(contd)

CEMENT

(Table-1 contd)

Company/ Plant Name	Capacity	Production
(In million tonnes)		
<b>Bagalkot Cement &amp; Ind Ltd</b>		
Bagalkot Cement, Bijapur, Karnataka	0.60	-
<b>Barak Valley Cement</b>		
Karimganj, Karimganj, Assam	0.33	-
<b>Bharathi Cement</b>		
Kadapa, Kadapa, Andhra Pradesh	5.00	2.70
<b>Bhavya Cement</b>		
Bhavya Cement, Guntur, Andhra Pradesh	1.40	0.80
<b>Bheema Cement (Earlier Coromandel Cements)</b>		
Bheema Cement, Nalgonda, Telangana	0.90	-
<b>Binani Cement</b>		
Sikar (G), Sikar, Rajasthan	1.40	2.70
<b>Birla Corp. Ltd</b>		
Chandera, Chittorgarh, Rajasthan	4.00	3.57
Durgapur and Durga Hitech Cement (G), Bardhaman, West Bengal	2.30	-
Raebareli (G), Raebareli, Uttar Pradesh	1.30	-
Satna, Satna, Madhya Pradesh	2.20	-
<b>Birla Corp. Ltd (erstwhile Reliance Cement)</b>		
Butibori (G), Nagpur, Maharashtra	0.50	-
Kundanganj (G), Raebareli, Uttar Pradesh	2.00	-
Maihar, Satna, Madhya Pradesh	3.00	2.74
<b>BMM Cement, Anantpur, Andhra Pradesh</b>	0.95	0.87
<b>BJCL, Jaypee Group</b>		
Bhilai Jaypee (G), Durg, Chhattisgarh	2.20	-
Bhilai Jaypee, Satna, Madhya Pradesh	1.30	0.80
<b>Burnpur Cement</b>		
Asansol, Burdwan, West Bengal	0.30	-
Patratu, Ramgargh, Jharkhand	0.30	-
<b>C.C.I. Ltd</b>		
Bokajan, Karbi, Assam	0.20	-
Rajban, Sirmaur, Himachal Pradesh	0.25	-
Tandur, Rangareddy, Telangana	1.00	-
<b>Century Textiles and Industries Ltd</b>		
Century Cement, Raipur, Chhattisgarh	2.40	1.80
Maihar Cement I & II, Satna, Madhya Pradesh	4.20	-
Manikgarh Cement I & II, Chandrapur, Maharashtra	6.00	3.00
Sonar Bangla (G), Murshidabad, West Bengal	1.50	-
<b>Chettinad Cement</b>		
Ariyalur, Ariyalur, Tamil Nadu	5.50	2.00
Dachepalli works, Guntur, Andhra Pradesh	3.50	-
Kallur, Gulbarga, Karnataka	2.50	1.50
Karikkali, Dindigul, Tamil Nadu	4.50	2.30
Puliyur, Karur, Tamil Nadu	1.70	1.12

(contd)

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(Table-1 contd)

Company/ Plant Name	Capacity	Production
(In million tonnes)		
<b>Dalmia Cement (Bharat) Ltd</b>		
Adhunik Cement Ltd, Jaintia Hills, Meghalaya	1.50	0.90
Ariyalur, Ariyalur, Tamil Nadu	3.40	2.10
Belagavi, Belagavi, Karnataka	4.00	1.60
Kadapa, Kadapa, Andhra Pradesh	4.00	1.84
Dalmiapuram, Trichy, Tamil Nadu	3.40	2.10
Calcom Cement India Ltd, Noagoan, Assam	1.72	-
<b>Dalmia Cement (Bharat) Ltd (erstwhile Jaypee Group)</b>		
Bokaro (G), Bokaro, Jharkhand	2.10	-
<b>DCM Shriram Cement</b>		
Shriram Cement Works, Kota, Rajasthan	0.40	-
<b>Deccan Cement</b>		
Nalgonda, Nalgonda, Telangana	1.80	1.50
<b>Dhandapani Cement Ltd.</b>		
Manachanallur, Tamil Nadu	0.02	0.01
<b>ECO Cement</b>		
Durgawati, Bhabhua, Bihar	1.00	-
<b>Emami Ltd</b>		
Panagarh, Burdwan, West Bengal	2.00	-
Risda, Baloda Bazaar, Chhattisgarh	3.00	2.55
<b>Green Valley Industries</b>		
Green Valley Industries, Jowai, Meghalaya	1.00	-
<b>Grey gold Cement</b>		
Grey gold Cement, Nalgonda, Telangana	0.05	0.04
<b>Gujarat Siddhi Cement Ltd Junagad, Gujarat</b>		
	2.01	1.15
<b>Heidelberg Cement</b>		
Ammasandra, Tumkur, Karnataka	0.51	-
Imlai (G), Damoh, Madhya Pradesh	3.00	2.80
Jhansi (G), Jhansi, Uttar Pradesh	2.70	-
<b>Hi-Bond Cement</b>		
Hi-Bond cement, Gondal, Gujarat	1.20	-
<b>Hills Cement Company</b>		
Hills Cement, Jaintia Hills, Meghalaya	1.00	-
<b>Hemadri Cement Ltd Andhra Pradesh</b>		
Hemadri Cement, Vedadri, Krishna, Andhra Pradesh	0.25	0.19
<b>India Cements Ltd</b>		
Chilamkur Works, Kadapa, Andhra Pradesh	1.46	-
Dalavoi, Ariyalur, Tamil Nadu	2.16	1.30
Malkapur, Rangareddy, Telangana	2.90	1.90
Parli (G), Beed, Maharashtra	1.10	-
Sankaridurg, Salem, Tamil Nadu	1.39	0.72
Sankarnagar, Tirunelveli, Tamil Nadu	2.05	1.20

(contd)

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(Table-1 contd)

Company/ Plant Name	Capacity	Production
Banswara Works, Banswara, Rajasthan	1.80	1.50
Vallur (G), Chennai, Tamil Nadu	1.10	-
Vishnupuram, Nalgonda, Telangana	3.50	1.60
Yerraguntla, Kadapa, Andhra Pradesh	1.00	0.40
Andaman Nicobar Islands	1.65	1.20
<b>J&amp;K Cement Ltd</b>		
Khrew, Pulwama, J & K	0.40	-
Samba, Jammu, J & K	0.10	-
<b>J.K. Cement Ltd</b>		
Gotan White, Nagaur, Rajasthan	0.61	1.00
Jharli(G), Jhajjar, Haryana	1.50	-
Mangrol, Chittorgarh, Rajasthan	2.50	2.45
Muddapur, Bagalkot, Karnataka	3.00	1.90
Nimbahera, Chittorgarh, Rajasthan	3.30	2.33
<b>JAL, Jaypee Group</b>		
Chunar (G), Mirzapur, Uttar Pradesh	2.50	-
Churk, Mirzapur, Uttar Pradesh	1.50	-
Rewa, Rewa, Madhya Pradesh	2.50	-
Sadva Khurd (Blending), Allahabad, Uttar Pradesh	0.60	-
<b>JCCL, Jaypee Group</b>		
Shahabad Cement, Shahabad, Karnataka	1.20	-
<b>JK Lakshmi Cement Ltd</b>		
Durg, Durg, Chhattisgarh	2.40	2.10
Jhajjar (G), Jhajjar, Haryana	1.30	-
Kalol (G), Gandhinagar, Gujarat	1.00	-
Sirohi, Sirohi, Rajasthan	8.70	3.40
Surat, Surat, Gujarat	1.35	-
<b>JPVL, Jaypee Group</b>		
Jayprakash Power Ventures (G), Singrauli, Madhya Pradesh	2.00	-
<b>JSPL</b>		
Raigarh, Raigarh, Chhattisgarh	0.85	-
<b>JSW (erstwhile Heidelberg Cement (I) Ltd)</b>		
Dolvi (G) , Raigad, Maharashtra	1.00	-
<b>JSW Cement</b>		
Nandyal, Kurnool, Andhra Pradesh	4.80	1.50
Salboni, P Medinipur, West Bengal	2.40	-
Vijayanagar, Bellary, Karnataka	3.20	-
<b>JUD Cements</b>		
Jaintia Hills, Jaintia Hills, Meghalaya	0.50	-
<b>Kalburgi Cement</b>		
Gulbarga, Gulbarga, Karnataka (formerly Virat Sagar Cement Pvt Ltd)	3.50	2.70

(contd)

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(Table-1 contd)

Company/ Plant Name	Capacity	Production
(In million tonnes)		
<b>Kakatiya Cement &amp; Sugar Ind.Ltd. Telangana</b>		
Kakatiya Cement & Sugar Ind. Ltd Telangana	0.30	0.26
<b>Kalyanpur Cement</b>		
Kalyanpur Cement, Rohtas, Bihar	1.00	-
<b>Kanodia Cement</b>		
Kanodia Cement, Bulandsahar, Uttar Pradesh	0.33	-
Kanodia Infra, Bhabhua, Bihar	1.20	-
<b>KCP Ltd</b>		
Unit II, Jaggayyapeta, Krishna Andhra Pradesh	3.52	1.72
Guntur, Andhra Pradesh	0.82	0.34
<b>Keerthi Industries (Formerly Suvarna Cement)</b>		
Keerthi Industries, Nalgonda, Telangana	0.59	-
<b>Kesoram Industries</b>		
Kesoram Cement, Karimnagar, Telangana	1.50	0.90
Vasvadatta Cement, Kalaburagi, Karnataka	8.65	4.80
<b>Khyber Industries (P) Ltd</b>		
Khyber Cement, Srinagar, J & K	0.33	-
<b>KJS Cement</b>		
KJS Cement, Satna, Madhya Pradesh	2.20	1.75
<b>Nuvoco Vistas Corp Ltd., Lafarge Cement</b>		
Arasmeta, Janjgir, Chhattisgarh	1.80	-
Chittorgarh, Chittorgarh, Rajasthan	2.60	2.30
Jojobera (G), Singhbhum, Jharkhand	4.60	-
Mejia (G), Bankura, West Bengal	1.65	1.54
Sonadih, Raipur, Chhattisgarh	1.00	0.60
<b>Mawmluh Cherra Cements Ltd</b>		
Mawmluh Cherra Cements Ltd, Garo (east), Meghalaya	0.18	0.05
<b>Maa Chandi Cement</b>		
Bamunara, Burdwan, West Bengal	0.33	-
<b>Malabar Cements</b>		
Cherthala (G), Alappuzha, Kerala	0.20	-
Walayar, Palakkad, Kerala	0.66	0.40
<b>Mancherial Cement</b>		
Mancherial Cement, Adilabad, Telangana	0.33	-
Jalgaon (G),Jalgaon,Maharashtra	2.00	-
<b>Mangalam Cement Ltd</b>		
Aligarh(G), Aligarh, Uttar Pradesh	0.75	-
Mangalam Cement I & II, Kota, Rajasthan	3.25	2.50
<b>Megha Technical &amp; Engineers Pvt. Ltd</b>		
MTEPL-Lumshong, Jaintia Hills, Meghalaya	0.70	-
<b>Meghalaya Cements Ltd</b>		
Jaintia Hills, Jaintia Hills, Meghalaya	0.86	1.50

(contd)

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(Table-1 contd)

(In million tonnes)		
Company/ Plant Name	Capacity	Production
<b>Mehta Group</b>		
Gujarat Sidhee Cement, Junagadh, Gujarat	1.20	1.10
Saurashtra Cement, Porbandar, Gujarat	3.06	1.30
<b>Murli Industries</b>		
Murli Cement, Chandrapur, Maharashtra	3.00	-
<b>My Home Industries Ltd</b>		
Mellacheruvu, Nalgonda, Telangana	3.20	2.20
Mulakalapalli (G), Vizag, Andhra Pradesh	2.00	-
Ottapidaram, Thoothukudi, Tamil Nadu	1.50	-
<b>NCL Industries</b>		
Kondapalli (G), Krishna, Andhra Pradesh	0.99	-
Simhapuri, Nalgonda, Telangana	2.00	1.40
<b>Nirma Ltd.</b>		
Nirma Cement, Pali, Rajasthan	2.28	1.62
<b>OCL India Ltd</b>		
Bengal Works, Midnapore, West Bengal	1.35	-
Kapilas (G), Cuttack, Odisha	1.35	-
Rajgangpur, Sundargarh, Odisha	4.00	-
<b>Orient Cement</b>		
Chittapur, Kalaburagi, Karnataka	3.00	2.30
Devapur, Adilabad, Telangana	5.00	2.40
Jalgaon (G), Jalgaon, Maharashtra	2.00	-
<b>Panyam Cement</b>		
Panyam Cement, Kurnool, Andhra Pradesh	1.00	-
<b>Parasakti Cement</b>		
Parasakti Cement, Guntur, Andhra Pradesh	1.26	0.80
<b>Penna Cement Industries Ltd</b>		
Boyareddypalli, Anantapur, Andhra Pradesh	2.00	-
Ganeshpahad, Nalgonda, Telangana	1.20	1.60
Talaricheruvu, Anantapur, Andhra Pradesh	2.20	0.94
Tandur, Rangareddy, Telangana	2.00	-
<b>Prism Cement Ltd</b>		
Prism Cement-I & II, Satna, Madhya Pradesh	6.60	-
<b>Prism Johnson Ltd.</b>		
Karnool, Andhra Pradesh	4.80	-
<b>Purbanchal Cement</b>		
Sonapur, Kamrup, Assam	0.36	-
<b>Rain Cements Ltd</b>		
Kurnool Cem. Plant, Kurnool, Andhra Pradesh	2.77	1.56
Ramapuram Cem. Plant, Nalgonda, Telangana	1.50	0.90
<b>Ramco Cements Ltd</b>		
Alathiyur Works I & II, Perambalur, Tamil Nadu	3.05	-
Ariyalur, Perambalur, Tamil Nadu	3.50	2.60

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(Table-1 contd)

Company/ Plant Name	Capacity	Production
(In million tonnes)		
Changelpet (G), Kancheepuram, Tamil Nadu	0.50	-
Jyantipuram, Krishna, Andhra Pradesh	3.85	1.70
Kolaghat (G), P Medinipur, West Bengal	0.95	-
Mathodu, Chitradurga, Karnataka	0.29	-
Ramasamyraja Nagar, Virudhnagar, Tamil Nadu	2.00	1.90
Salem (G), Salem, Tamil Nadu	1.60	-
Vizag (G), Vizag, Andhra Pradesh	0.95	-
<b>RNB Cement</b>		
East Khasi Hills, East Khasi, Meghalaya	0.40	-
<b>Sagar Cement Ltd</b>		
BMM Cement, Anantapur, Andhra Pradesh	1.00	0.90
<b>Sagar Cements</b>		
Bayyavaram, Vizag, Andhra Pradesh	0.20	-
Mattampally, Nalgonda, Telangana	3.30	1.40
Pedaveedu, Nalgonda, Telangana	0.35	-
<b>Sanghi Industries Ltd</b>		
Sanghi Cement, Kachchh, Gujarat	4.10	2.00
<b>Saurashtra Cement</b>		
Porbandar, Gujarat	3.00	1.28
<b>Shree Cements</b>		
Baloda Bazar, Raipur, Chhattisgarh	3.00	2.20
Bangur Cement (G), Aurangabad, Bihar	3.60	2.00
Bangur Cement , Suratgarh, Rajasthan	3.60	2.14
Beawar I & II, Ajmer, Rajasthan Unit-III Andheri Deori	3.60	1.10
Bulandsahar (G), Sikandrabad, Uttar Pradesh	2.00	1.65
Jaipur (G), Jaipur, Rajasthan	1.50	0.60
Khushkhera (G), Alwar, Rajasthan	3.50	2.50
Karnataka Cement Project, Sedam	3.00	1.50
Karnataka Cement Project, Gulbarga, Karnataka	3.00	1.53
<b>Shree Cements</b>		
New Bihar Cement Plant, Aurangabad, Bihar	2.00	1.70
Ras, Pali, Rajasthan	3.00	2.80
Roorkee (G), Haridwar, Uttrakhand	1.80	-
Ras New Cement Unit, Ras Rajasthan	4.00	2.79
Shree Jharkhand, Saraikela, Jharkhand	2.27	0.57
Suratgarh (G), Sriganaganagar, Rajasthan	1.80	0.20
<b>Shree Cements (erstwhile Jaypee Group)</b>		
Panipat (G), Panipat, Haryana	1.50	1.14
<b>Shree Digvijay Cement Co.</b>		
Shree Digvijay-Sikka, Sikka, Gujarat	1.20	1.00
<b>Shristi Cement</b>		
Mangalpur, Burdwan, West Bengal	0.36	-

(contd)

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(Table-1 contd)

(In million tonnes)		
Company/ Plant Name	Capacity	Production
<b>Sparta Cements &amp; Infra Ltd</b>		
Sparta Cements, Bhuj, Gujarat	1.00	-
<b>Sri Chakra Cements</b>		
Annamarajupet Grinding Unit (G), Vizianagaram, Andhra Pradesh	0.26	-
Narasimhapuri Cement Unit, Guntur, Andhra Pradesh	0.31	-
<b>Sri JayaJothi Cements Pvt. Ltd</b>		
Sri JayaJothi Cement Plant, Kurnool, Andhra Pradesh	3.20	2.00
<b>Sri Lalita</b>		
Matampally, Nalgonda, Telangana	1.00	-
<b>Star Cement Ltd</b>		
CMCL-Lumshong, Jaintia Hills, Meghalaya	1.00	0.83
CMCL-Sonapur (G), Guwahati, Assam	2.00	-
<b>Swasata Cements Ltd</b>		
Swasata Cements, Purulia, West Bengal	1.50	-
<b>Tamil Nadu Cement</b>		
Alangulam, Virudhunagar, Tamil Nadu	0.29	-
Ariyalur, Ariyalur, Tamil Nadu	0.50	-
<b>Tata Chemicals Limited</b>		
Tata Chemicals Cement Division, Mithapur, Gujarat	0.50	-
<b>Tamil Nadu Newsprint &amp; Papers Limited</b>		
Tamil Nadu Newsprint & Papers Limited	0.33	0.25
<b>The K.C.P. Ltd</b>		
Macherla, Guntur, Andhra Pradesh	0.82	0.30
Muktyala, Krishna, Andhra Pradesh	3.52	1.70
<b>Topcem</b>		
Gauripur, Kamrup, Assam	0.66	-
<b>Udaipur Cement</b>		
Udaipur Cement, Udaipur, Rajasthan	1.60	0.85
<b>UltraTech Cement Ltd</b>		
Aditya, Chittorgarh, Rajasthan	8.00	4.17
Aligarh(G), Aligarh, Uttar Pradesh	1.30	-
Anantapur, Andhra Pradesh Cement Works	9.00	4.10
Arakkonam (G), Vellore, Tamil Nadu	1.10	-
Awarpur, Chandrapur, Maharashtra	6.00	2.73
Bhatinda (G), Bhatinda, Punjab	1.75	-
Dadri (G), G B Nagar, Uttar Pradesh	1.30	-
Dankuni, Hooghly, West Bengal	1.60	-
Dhar, Madhya Pradesh (Nagda)	3.50	2.15
Giniger (G), Koppal, Karnataka	1.30	-
Gujarat Cement Works, Amreli, Gujarat	6.40	4.80
Hirmi, Raipur, Chhattisgarh	2.75	2.20
Hotgi, Solapur, Maharashtra	4.00	2.40

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(Table-1 conclud)

	(In million tonnes)	
Company/ Plant Name	Capacity	Production
Jafrabad, Amreli, Gujarat	1.45	1.25
Jhajjar (G), Jhajjar, Haryana	1.60	-
Jharsuguda (G), Jharsuguda, Odisha	2.60	-
Kotputli, Jaipur, Rajasthan	4.00	2.37
Magdalla (G), Surat, Gujarat	0.75	-
Nagpur, Nagpur, Maharashtra	2.00	-
Panipat(G), Panipat, Haryana	1.30	-
Nathdwara Cement Ltd.,(earlier Binani Cement Sirohi)	4.85	2.69
Patliputra, Patna, Bihar	1.90	-
Rajashree, Kalaburagi, Karnataka	6.10	4.10
Ratnagiri (G), Ratnagiri, Maharashtra	0.48	-
Rawan, Raipur, Chhattisgarh	2.50	2.10
Reddipalayam, Ariyalur, Tamil Nadu	1.40	1.30
Sirohi, Sirohi, Rajasthan	4.85	-
Sewagram, Kachchh, Gujarat	2.40	2.30
Vikram, Neemuch, Madhya Pradesh	4.50	1.20
Wanakbori (G), Kheda, Gujarat	2.40	-
WBCW (G), Burdwan, West Bengal	1.40	-
Bara Allahabad, Uttar Pradesh	4.00	-
Birla White, Katni, Madhya Pradesh	0.40	0.37
Birla White, Jodhpur, Rajasthan	1.08	0.95
<b>UltraTech Cement Ltd (erstwhile Jaypee Group)</b>		
Ayodhya (G), Ambedkar Nagar, Uttar Pradesh	1.00	-
Baga, Solan, Himachal Pradesh	2.54	0.93
Bagheri (G & B), Solan, Himachal Pradesh	2.00	-
Balaji Cement, Krishna, Andhra Pradesh	5.00	2.90
Bela, Rewa, Madhya Pradesh	2.60	-
Dalla, Sonebhadra, Uttar Pradesh	0.50	0.44
Roorkee (G), Haridwar, Uttarakhand	1.10	-
Sidhi, Sidhi, Madhya Pradesh	3.50	1.54
Sikandrabad, Bulandsahar, Uttar Pradesh	1.00	-
<b>Vadraj Cement</b>		
Mora, Surat, Gujarat	6.00	-
<b>Vijay Cements</b>		
Vijay Cements, Trichy, Tamil Nadu	0.08	0.03
<b>Vinay Cement</b>		
Vinay Cement, Dima Hasao, Umrangshu, Assam	1.80	1.00
<b>Wonder Cement</b>		
Wonder Cement, Chittorgarh, Rajasthan	12.00	6.26
<b>Zuari Cement Ltd</b>		
Chennai (G), Chennai, Tamil Nadu	0.90	-
Sitapuram, Nalgonda, Telangana	1.40	0.94
Solapur, Solapur, Maharashtra	1.20	-
Yeraguntla, Kadapa, Andhra Pradesh	3.80	2.30

\* Survey of Cement Industry and Directory and Annual Return in Form 'M' (Erstwhile Form 'O').

**Table –2: Capacity, Production and Growth in Cement Industry, 2018-19 to 2019-20**

Year	Annual Capacity (In million tonnes)	Production (In million tonnes)	Growth (In million tonnes)	Growth%
2018-19	537	337.32	-	-
2019-20	537	334.37	(-) 2.95	(-) 0.87%

Source: DIPP, Annual Reports

A large number of mega plants with capacity of one million tonnes and above, possessing the latest technological features like roller process, vertical roller mills, process control equipment and efficient pollution control devices have emerged in different parts of the country. The induction of advanced technology has helped the Industry immensely to conserve energy & fuel and thereby save the raw materials substantially.

India is producing different varieties of cements like Ordinary Portland Cement (OPC), Portland Pozzolana Cement (PPC), Portland Blast Furnace Slag Cement (PBFSC), Oil-well Cement, Rapid Hardening Portland Cement, Sulphate Resistant Portland Cement (SRPC) and White Cement. BIS covers two types of PPC, viz. IS 1489 (Part 1): 1991 (Reaffirmed 2009) Flyash-based and IS 1489 (Part 2): 1991 (Reaffirmed 2009) Calcined clay-based. PPC is suitable for all general construction, particularly, for marine & hydraulic construction and other mass concrete structures. Portland Slag Cement (PSC)-IS 455:1989 (Reaffirmed 2009) is particularly useful for marine works. BIS specifies three grades of OPC – (i) IS 269:1989 (Reaffirmed 2008), i.e., 33 grade suitable for all general constructions, particularly for masonry and plastering works (ii) IS 8112:1989 (Reaffirmed 2009), i.e., 43 grade is particularly suitable for high strength concrete work, and (iii) IS 12269:1987 (Reaffirmed 2008), i.e., 53 grade suitable for specialised work, such as, precast concrete, prestressed concrete, long span structures/bridges, tall structures, etc.

All these varieties of cement are produced strictly conforming to the BIS specifications for maintaining high quality. The Cement Quality Control Order dated February 2003 issued under the BIS Act ensures quality of cement produced and sold in the market.

Power, coal and freight constitute about 15–20% each of the total production cost of cement while capital cost (interest and depreciation) forms 20–30 per cent. Although the Industry is largely under Private Sector, Government controls more than 40% of the cost. Power, coal and freight costs are all regulated by Government bodies, such as, State Electricity Boards, Coal India Ltd and the Railways.

### Operating Cost

The cement capacity in the country is mostly concentrated near the main raw material source, i.e., limestone. According to some estimates, around 1.5 tonnes of limestone and 180–250 kg of coal is required to produce a tonne of cement. Cement manufacturing also consume minerals, such as, gypsum, quartz, bauxite, coal, kaolin, and iron ore too in varying amounts. Other important raw material is coal (0.25 tonnes required per tonne of cement). Many cement plants are situated near the coal belts in eastern Madhya Pradesh, primarily due to two reasons, namely, (i) less freight cost incurred to transport coal, and (ii) inability of domestic coal producers to fulfil supply-requirements of cement plants due to fall in production and prioritised supply to power plants. However, limestone reserves have been the primary consideration in choosing the location of plants. Presence of clusters of capacity and high transportation cost make the cement market regional in nature with the producers supplying cement to areas around the location of the plant.

Power is a major parameter that influences the operating cost. Grid power purchased from SEBs is costlier than captive power from coal-based plants by more than 25–30 per cent. Where conditions are favourable, setting up captive wind power farms has become a realistic option for cement plants.

### Coal Distribution

Coal, being a low value, bulk product, regional concentration of deposits entails freight costs that constitute a substantial part in the production cost of cement. Though, rail is the predominant form of transport, road transport is commonly used by plants located close to pitheads. The Government in its notification to the Cement Industry has permitted cement plants to operate their own captive coal mines. Many cement plants have expressed interest in taking up coal blocks on lease and operating the mines for coal. As proposed by the Government, cement is one of the core sectors for which captive mining blocks would be allocated.

## Power Availability

The Industry's average energy consumption is estimated to be about 725 kcal/kg clinker thermal energy and 80 kWh/t cement electrical energy. The best thermal and electrical energy consumption presently achieved by the Indian Cement Industry is about 667 kcal/kg clinker and 67 kWh/t cement which are comparable to the best reported figures of 660 kcal/kg clinker and 65 kWh/t cement in a developed country like Japan. Since the controls were lifted, aggregate power requirements have grown rapidly with rising cement capacity without commensurate growth in power generating capacity in the country. To offset the power crisis situation, many cement plants have set-up installations for captive power generation. Further, as part of reform process in Coal Sector, the Government has also permitted 100% FDI in captive coal blocks in Cement Sector along with Power and Steel Sectors to facilitate and augment power availability.

## Freight Costs

Logistics in the Cement Sector affect freight costs to a large extent. The basic raw materials for manufacturing cement, such as, limestone and coal are low value high bulk material and, as a result, entail huge freight cost which form the single largest cost component, usually accounting for 33% of the variable costs. During 1990s, the most significant developments were the emergence of big plants and formations of clusters of cement plants. These clusters, typically located far away from the major consumption centres meant that cement has to be transported over very long distances. The Indian Railways transported 110.10 million tonnes cement in 2019-20, a decrease from 117.34 million tonnes of cement transported in 2018-19, as a part of revenue earning freight traffic. Alternatively, the cost-conscious manufacturers have attempted to use sea route for transportation as sea route is cost-effective and could benefit coast-based manufacturers. Some cement plants have set-up dedicated jetties for promoting bulk transportation and export.

## Cost Control

Cement producers of the country have continuously attempted to lower the cost by various methods like:

- improved efficiency by increasing usage of captive power;
- locating units closer to the market place;

- increasing production of blended cement;
- availing of various State incentives like sales tax exemption; power tariff; exemption/concession (Himachal Pradesh and Tamil Nadu);
- conversion from wet to dry process, wherever possible, depending on quality of limestone; and
- enhanced capacities to achieve economy of scale. (Expansion is the preferred route as setting up new plant costs thrice the cost of expansion).

## Environment

Ministry of Environment and Forests has notified the emission standards for cement plants in 1987, which were subsequently revised in February, 2006. In India, the permissible stack dust emissions from various sources for existing cement plants is 1.50 mg/Nm and 100 mg/Nm for plants located in critically polluted areas. However, the limit for new plants in our country is 50 mg/Nm which is at par with some of the developed countries. All large plants do have in place necessary air pollution control equipment to control dust emissions. Thermal power stations use bituminous or sub-bituminous coal and produce large volumes of fly ash. Fly ash is a fine powder recovered from gases created by coal-fired electric power generation. These micron sized earth elements consist primarily of silica, alumina and iron. When mixed with lime and water, the fly ash forms a cementitious compound with properties very similar to portland cement. The research outcomes so far have established that low-grade /dolomitic limestone up to 15–20% can be used in the manufacture of cement conforming to 43 grade OPC. Fly ash up to 45% can be used in high volume fly ash cement, thereby, enhancing the fly ash utilisation. The research outcome pursued under Swatchhta Action Plan established that poor quality fly ash can be used up to 40% by activating it through mechanical and chemical routes resulting in additional fly ash utilisation of about 15 million tonnes annually over and above the current quantum of fly ash utilisation limit of 35%. These efforts have certainly impacted the country in a big way by saving it from severe environmental consequences. Industrial wastes, such as, petcoke, tar waste and by-products, such as, red mud from aluminium industries, ferrous and non-ferrous slag from steel & other industries, phospho-chalk & phospho-

gypsum from fertilizer industries, lime sludge from paper & sugar industries, carbide sludge from carbide industries, phosphorus furnace slag, etc. are now finding use in the manufacture of cement.

### Ready-Mix Concrete

Ready-mix Concrete (RMC) is a relatively nascent market in India. RMC is ready-to-use concrete blend of cement, sand & aggregate and water mixed in convenient proportion. It was first launched in Mumbai a few years ago and is gaining ground in other metros in India. RMC is a corollary to bulk handling and transportation of cement. It has several advantages. It is produced under controlled conditions and hence has consistency in quality and it can be directly powered in the required form which would not only save time but also would improve the quality of construction. Leading companies operating in the RMC market of India include UltraTech Cement Ltd, ACC Ltd, Nuvoco Vistas Corp. Ltd, The India Cement Ltd, Godrej Construction. The Ramco Cement Ltd, etc. Indian RMC market is expected to grow at 9% during 2021–2026.

### POLICY

The Export & Import Policy 2015-20, incorporated in the FTP for cement is free. The import of cement viz. portland cement, white cement, aluminous cement, slag cement, super sulphate cement and similar hydraulic cements, whether or not coloured or in the form of clinkers, under ITC (HS) Code 2523 is free.

### Development Council for Cement Industry

Development Council for Cement Industry has been set-up under Section 6 of the Industrial (Development & Regulation) Act, 1951. The activity of the Council is funded through the cess collected from Cement Manufacturers in terms of the Cement Cess Rules, 1993. The Cement Council promotes development of the Cement Industry by funding development projects in areas of base level activities of National Council for Cement & Building Materials and R&D, improving productivity by reducing cost, optimum utilisation of raw materials, modernisation of cement plants, improvement of environment, standardisation and quality control progress, bulk supply and distribution of cement, training and upgradation of skill in Cement Industry.

## WORLD REVIEW

The cement production in 2020 was estimated at 4,100 million tonnes which is constant as compared to preceding year. China (2,200 million tonnes) was the largest producer of cement in the world, contributing about 54% to the world output, followed by India (340 million tonnes) 8%, Vietnam (96 million tonnes) and USA (90 million tonnes) 2%, each (Table-3).

**Table – 3: World Production of Cement (By Principal Countries)**

(In '000 tonnes)			
Country	2018	2019	2020
<b>World : Total (rounded)</b>	<b>4050000</b>	<b>4100000</b>	<b>4100000</b>
Brazil	53000	54000	57000
China	2200000	2300000	2200000
Egypt	81200	47000	50000
India*	300000	340000	340000
Indonesia	75200	70000	73000
Iran	58000	60000	60000
Japan	55300	53000	53000
Korea, Rep. of	57500	50000	50000
Russia	53700	56000	56000
Turkey	72500	57000	66000
USA	87000	89000	90000
Vietnam	90200	97000	96000
Other countries	870000	880000	890000

*Source: USGS, Mineral Commodity Summaries, 2020 & 2021.*

*\* : India's production of cement in 2017-18, 2018-19 and 2019-20 was 297.71 million tonnes, 337.32 million tonnes and 334.37 million tonnes, respectively.*

## FOREIGN TRADE

### Exports

Export of cement (total) decreased drastically by 51% to 2.84 million tonnes in 2019-20 from 5.82 million tonnes in 2018-19. In 2019-20, exports of portland grey cement at 1.89 million tonnes and cement clinker at 0.80 million tonnes showed a decline in the total cement exports. Exports of portland white cement and other cements were 18,166 tonnes and 1,29,763 tonnes, respectively. Exports of cement in 2019-20 were mainly to Sri Lanka (65%), Nepal (19%), Bangladesh (5%), Maldives (4%) and Bhutan (3%) (Tables - 4 to 8).

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**Table – 4: Exports of Cement : Total  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>5824303</b>	<b>20293766</b>	<b>2840284</b>	<b>9539872</b>
Sri Lanka	2754708	8498152	1841184	5722779
Nepal	2545775	9912345	551552	2139850
Bhutan	48497	243530	87819	446595
Maldives	126445	567814	100845	438767
Bangladesh	236200	662129	146974	388192
Mozambique	58350	131686	68275	150714
Reunion	16100	70295	15484	67521
Mauritius	277	1489	6481	30393
Nigeria	2497	28484	2535	29417
Seychelles	10062	35902	7902	29244
Other countries	25392	141940	11232	96401

Figures rounded off

**Table – 6: Exports of Cement (Portland White)  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>29181</b>	<b>215183</b>	<b>18166</b>	<b>176656</b>
Nepal	12096	111232	12561	122997
Nigeria	2203	25339	2535	29417
Qatar	2007	12924	1673	10030
Bhutan	169	2082	391	3767
Madagascar	126	1544	241	3062
Malawi	190	2494	187	2487
China	-	-	280	1116
Ethiopia	535	8071	82	956
Mozambique	49	622	42	499
UAE	-	-	56	468
Other countries	11807	50875	116	1857

Figures rounded off

**Table – 5: Exports of Cement (Portland Grey)  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>2014673</b>	<b>6837613</b>	<b>1892278</b>	<b>6173135</b>
Sri Lanka	1759475	5735422	1720408	5377981
Maldives	116928	517259	85612	363168
Nepal	96321	430181	42037	228015
Bhutan	2524	14959	12628	77716
Reunion	9240	41953	11004	49078
Seychelles	10024	35588	7868	28571
Mauritius	254	1210	5680	26580
Madagascar	19180	58422	7000	21258
China	-	-	22	219
Saudi Arabia	-	-	12	196
Other countries	727	2620	7	353

Figures rounded off

**Table – 7: Exports of Cement Clinker  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>3570550</b>	<b>12477756</b>	<b>800077</b>	<b>2709413</b>
Nepal	2403284	9214121	491979	1759074
Bangladesh	235731	658389	146680	384241
Bhutan	45106	221042	74662	364274
Mozambique	58300	131020	68233	150212
Sri Lanka	828109	2253078	18445	50309
Malawi	-	-	28	425
Seychelles	-	-	18	367
New Zealand	-	-	3	253
Tanzania,	-	-	25	240
Germany	3	36	3	13
Other countries	17	71	++	5

Figures rounded off

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**Table – 8: Exports of Cement (Others)  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>209898</b>	<b>763214</b>	<b>129763</b>	<b>480668</b>
Sri Lanka	156824	479922	102321	294220
Maldives	9494	50266	15216	75304
Nepal	34074	156810	4975	29763
Saudi Arabia	195	9112	399	22044
Reunion	6860	28342	4480	18443
UAE	275	6394	426	9670
Algeria	20	1095	111	6005
Malaysia	198	8355	199	5026
Bangladesh	469	3740	294	3770
Mauritius	-	-	779	3538
Other countries	1489	19178	562	12886

*Figures rounded off*

### Imports

Like exports, cement imports also decreased but marginally in 2019-20 by 2% to 2.21 million tonnes from 2.26 million tonnes in 2018-19. In imports of portland grey cement were 0.37 million tonnes.

Similarly, imports of cement clinker were 1.46 million tonnes, other cements 0.23 million tonnes and portland white cement about 0.15 million tonnes. The main suppliers in 2019-20 were UAE (31%), Iran (24%), Bhutan (14%), Oman (12%), Bangladesh (10%) and Japan (6%) (Tables- 9 to 13).

**Table – 9: Imports of Cement: Total  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>2261590</b>	<b>9834409</b>	<b>2214479</b>	<b>9003783</b>
UAE	347572	1512815	691409	2996047
Iran	98793	291535	526771	1384942
Bhutan	92396	387290	301542	1295244
Bangladesh	239699	1234754	217011	1133103
Oman	++	6	261459	741898
Japan	124201	487993	143005	489920
China	6826	362396	6654	377689
Singapore	1840	83752	2476	124638
Netherlands	1847	81557	2458	122915
Turkmenistan	51700	113745	52484	109935
Other countries	1296717	5278567	9209	227450

*Figures rounded off*



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**Table – 10: Imports of Cement (Portland Grey)  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>1195645</b>	<b>4882590</b>	<b>372431</b>	<b>1757397</b>
Bhutan	52556	238944	165721	762276
UAE	41498	179053	121599	556016
Bangladesh	51458	277101	81672	425992
Pakistan	1049732	4182420	3439	13113
Netherlands	-	-	++	++
Germany	297	4158	-	-
Qatar	20	402	-	-
Seychelles	56	362	-	-
Iran	28	151	-	-

*Figures rounded off*

**Table – 11: Imports of Cement (Portland White)  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>62643</b>	<b>500255</b>	<b>148099</b>	<b>1115330</b>
UAE	52131	409614	142275	1077299
Iran	2342	16118	4764	28479
Egypt	588	5047	840	6836
Oman	-	-	216	1350
Spain	-	-	3	1332
Brazil	-	-	++	34
Pakistan	7340	67258	-	-
USA	186	1896	-	-
Marshall Islands	54	303	-	-
Italy	1	12	-	-
Other countries	1	7	-	-

*Figures rounded off*

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**Table – 12: Imports of Cement Clinker  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>776413</b>	<b>2638595</b>	<b>1462999</b>	<b>4208355</b>
Iran	96423	275262	522007	1356463
UAE	253833	922181	416654	1292653
Oman	-	-	261243	740538
Japan	124200	487756	143000	489775
Bhutan	15310	52534	66650	210560
Turkmenistan	51700	113745	52484	109935
Singapore	80	3213	86	3508
Malaysia	4004	28238	312	2187
Pakistan	749	2254	440	1324
Egypt	3663	28134	112	940
Other countries	226451	725278	11	471

*Figures founded off*

**Table – 13: Imports of Cement (Others)  
(By Countries)**

Country	2018-19 (R)		2019-20 (P)	
	Qty (t)	Value (₹'000)	Qty (t)	Value (₹'000)
<b>All Countries</b>	<b>226890</b>	<b>1812970</b>	<b>230949</b>	<b>1922701</b>
Bangladesh	188241	957653	135340	707111
China	6815	362085	6643	377384
Bhutan	24530	95811	69171	322407
Netherlands	1847	81557	2458	122915
Singapore	1760	80539	2390	121130
Taiwan	221	80900	225	78644
UAE	110	1966	10880	70079
Croatia	1411	51012	1407	51961
Korea, Rep. of	91	5912	380	26381
France	942	49502	383	17098
Other countries	922	46032	1672	27590

*Figures founded off*

## FUTURE OUTLOOK

The primacy of Cement Industry would continue as cement remains paramount for the development of infrastructure all over the world and no other material would possibly substitute it in the near future. Infrastructure and industrial activity, real estate business and investment in core sectors mainly drive the demand for cement. Some emerging areas for cement demand are concrete roads, concrete canal lining and rural construction (housing). Over 65% demand for cement arises from housing and real estate, 25% from public infrastructure.

The Government of India has been laying a massive emphasis on infrastructure development, with 100 smart cities, modernisation of 500 cities, affordable housing for all by 2022, cement concreting of national highways, provision of sanitation facilities, etc. These development projects that are in the pipeline would be the main drivers of growth of Indian Cement Industry.

The country is self-sufficient in terms of cement production. Most of the cement plants in India are operated by state-of-the-art technology and

with advanced production facilities. The liberalisation policies for Cement Industry enabled achievement of strong growth in the Cement Sector. The Cement Industry has presently ushered in modifications and upgradation in technology, particularly in the energy conservation front.

As per IBEF India, cement production is expected to rise between 5 and 7% backed by demands from roads, urban infrastructure and commercial real estate segments Cement consumption is expected to grow at 6.83%. The demand for cement is expected to touch 550–600 million tonnes per annum by 2025.

Reviewing the technology status of the Indian Cement Industry, the Working Group has observed that although the modern cement plants have incorporated the latest technology, yet there is scope for further improvement in the areas of in-pit crushing and conveying, pipe conveyors, co-processing of waste derived/hazardous combustible wastes as fuel, neurofuzzy expert system, cogeneration of power, multi chamber/dome silos, bulk transport of cement, pelletising and shrink wrapping for packing & despatch.