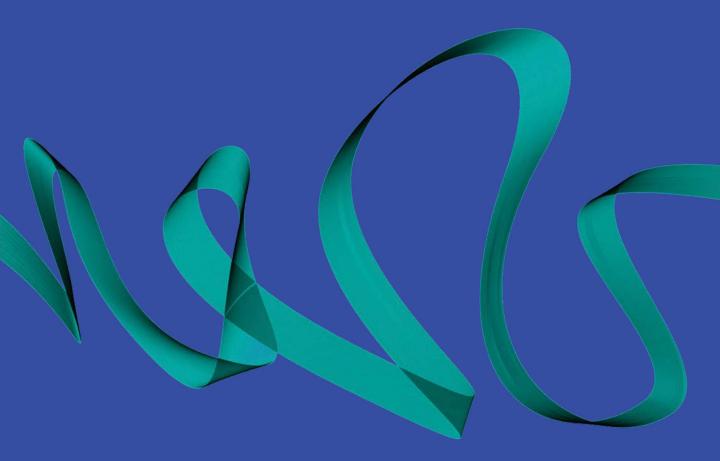


Understanding India's Construction Equipment Market



Ipsos Business Consulting Build · Compete · Grow

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CONTACT US

Suheil Murgai Associate Director, Delhi Email: suheil.murgai@ipsos.com

Prerna Kumra Consultant, Delhi Email: prerna.kumra@ipsos.com

Prithvijit Roy Associate Consultant Email: prithvijit.roy@ipsos.com

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October 2013

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Opportunities within India's construction equipment market

India's growth story has witnessed many cyclical changes across a wide range of industries from agriculture and retail to software, IT and real estate, all of which serve as key drivers of the country's economy.

Volatility in real estate and related industries, such as construction equipment, has resulted in demand-supply gaps that hamper analysis of the sector and its trends.

Demand for construction equipment is a reflection of broader macroeconomic trends such as interest rates, infrastructure investment and liquidity, which themselves indicate the health of the overall economy. This demand equipment is expected to grow in line with the expansion of real estate development from India's key urban centres into tier-2 and tier-3 cities.

This paper provides insight into opportunities for various construction equipment original equipment manufacturers (OEMs) in terms of business channels, as well as outlining the market structure by manufacturers and segments while indicating the road ahead in terms of infrastructure requirements.

Market overview

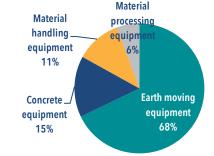
The global construction equipment market was estimated at INR5,551bn (US\$90.5bn) last year and is expected to reach INR7,310bn by 2016, representing CAGR of 7.7 per cent. Emerging markets such as China and India are becoming increasingly important on the global stage as key players shift their production bases to Asia to drive revenue by benefitting from the region's growing infrastructure investment, favourable government policies and mass-scale domestic markets.

India's construction equipment market, meanwhile, outpaced global growth trends with the market estimated at INR208.4bn at the end of last year. Revenue is expected to reach INR461.5bn by 2016, CAGR of 20.5 per cent. Figure 1: Overview of the construction equipment sector



Source: Datamonitor, BMI

Figure 2: Construction equipment market share by segment, 2012



Source: Datamonitor, BMI

The sector is made up of five main segments: earthmoving equipment, road construction equipment, concrete equipment, material handling equipment, and material processing equipment.

Earthmoving equipment and road construction equipment account for close to 70 per cent of India's construction equipment market. Backhoe loaders, which comprise tractors, front shovel/bucket backhoes and small backhoes, account for 65 per cent of the earthmoving equipment and road construction segment.

Concrete equipment is the second largest segment with a market share of approximately 14 per cent. It comprises asphalt finishers, transit mixers, concrete pumps and batching plants. Material handling equipment and material processing equipment account for 10 per cent and 6 per cent of the market respectively. Cranes are the largest category within the material handling equipment.

Construction & Material Handling Equipment Industry		
Products	56%	
Spare Parts	21%	
Unorganized Sector	15%	
Services	6%	
Exports	2%	

Market dynamics Segments Key players Asphalt finishers Major national and international players such as ECEL, JCB and Gujarat Appolo commands the Action Construction Equipment dominate India's construction largest share closely followed by equipment market. The recent influx of foreign direct Witgen in the large machine investment in the construction sector saw many new entries to segment. market, either in the form of joint ventures with Indian companies or by foreign firms setting up their own local **Transit mixers** manufacturing facilities. Key players operating across most Key players include Schwing Stetter, market segments are JCB, Escorts, ACE and BEML. Greaves India, Ajax Fiori and Telcon. Concrete Concrete pumps (boom & line) equipment **Market dynamics** Segments Putzmeister leads the market with a 60% share followed by Schwing Stetter and Sany. **Backhoe loaders** JCB is the market leader with a 25% market share followed by ACE, **Batching plants** Escorts and Terex Equipment. **Universal Construction Machinery &** Equipment leads the market with a 40% share followed by Macons **Excavators** Equipment and Cosmos Construction Telcon (a joint venture between Tata Machineries and Equipment. and Hitachi Construction Machinery) is the market leader followed by L&T Komatsu. Cranes Wheeled loaders Account for the largest market share. Major players include Caterpillar They include: India, Telcon, JCB and BEML. Crawler cranes: Telcon is the sole player in the Indian crawler Skid steer loaders crane segment though some Market remains untapped. JCB, other equipment is imported. Terex, Doosan and Gamzen are Tower cranes: Major players prominent players. include Manitowoc Group, ACE, Earthmoving & Material ECEL and Zoomilion. The 5-6 **Crawler loaders** road construction handling tonne segment accounts for 75-Major players include Volvo and equipment equipment 80% of the segment. Sany. Pick & carry cranes: ECEL is the market leader with a 45% share Crawler dozers followed by ACE and Voltas. Primarily used in the mining sector. Slew cranes: Tractors India Ltd Major players include BEML, L&T and ECEL are the key players. Komatsu, John Deere and Caterpillar. Diesel, electric and LPG forklifts Godrej and Voltas are dominant Motor graders players. Market leader is Caterpillar followed by L&T Komatsu and TIPL. **Rigid & articulated dump trucks Crushing equipment** Dominated by Hitachi, L&T Komatsu, Large capacity crushers (about 300 Terex, Volvo and Tata Motors. Material tonnes per hour) are more in processing demand than mid-size crushers Vibratory & static compaction equipment (about 150-200 tonnes per hour). equipment Major players include Terex and L&T Komatsu and Schwing Stetter are Puzzolona. market leaders.

Key drivers and challenges

Key drivers

- Robust economic development: India's 12th Five Year Plan is targeting 11 per cent growth for the construction sector up from 7.8 per cent in the previous plan.
- Infrastructure growth: Substantial infrastructure investment of INR45 trillion under the 12th plan will drive higher demand for construction equipment.
- Growing OEM presence: India offers significant potential as an OEM hub due to its lower costs and the availability of skilled labour. At least 10 new equipment manufacturers are expected to establish bases in India this year.
- Higher FDI in construction: Increased construction activities create favourable conditions for foreign direct investment in the equipment sector. Cumulative FDI inflows of INR7.8bn in the earthmoving machinery segment from April 2000 to December 2011.

Key challenges

- Limited land banks: Scarcity of land for infrastructure development hinders growth of Indian construction equipment market.
- Project bottlenecks: Regulatory issues, environmental concerns and delays in project approval hampers construction projects and limits sales of construction equipment in India.
- Rising crude prices: Rising oil prices increase other input costs, such as fuel, which erodes profits of end users and reduces demand for equipment.
- Higher steel prices: Rising cost of steel weakens profits and significantly hinders market growth.
- Lack of skilled labour: There are few government incentives to build a skilled workforce within the construction equipment market. Major construction equipment companies have to resort to establishing costly training centres to upgrade the skills of their workers.

Opportunities

End User Analysis

Infrastructure

total projects		
	11th plan	12th plan
21-23%	3,142	9,145
6-8%	2,618	6,433
5-7%	880	1,977
21-23%	310	877
21-23%	2,533	5,043
21-23%	1,437	
5-7%	6,665	18,202
4-5%	224	1489
21-23%	2,584	9,438
	6-8% 5-7% 21-23% 21-23% 21-23% 5-7% 4-5%	21-23% 3,142 6-8% 2,618 5-7% 880 21-23% 310 21-23% 2,533 21-23% 1,437 5-7% 6,665 4-5% 224

The construction equipment industry received a huge fillip in the 12th Five Year Plan compared to the previous plan due to surging construction activity, especially civil engineering projects. Infrastructure investment was supported by key events such as the 2010 Commonwealth Games, which fuelled the need for worldclass facilities.

Real estate

Real estate sector	Cost of construction equipment as share of total projects
Buildings	4-5%
Medium-size industry	7-9%
Mineral plants	20-22%

Despite cyclical fluctuations in the real estate sector, analysts predict the market will grow at 14.2 per cent CAGR from 2011-20, a dynamic which will provide numerous opportunities for construction equipment OEMs. Even though tracts of residential and commercial land currently remain unsold, the long-term outlook is positive due to the scarcity of available space in major metropolitan areas as well as tier-1 and tier-2 cities. This anticipated growth in the construction industry augurs well for the construction equipment sector.

Gujarat

- Gujarat increased construction spending by 33 per cent to INR505.99bn in its 2012-13 budget.
- Project investment over the past five years totals INR39601.48bn.
- Space and environmental constraints restrict expansion in Tamil Nadu and Delhi for major tier-1, -2 and -3 manufacturers.
- Abundance of non-agricultural land in Gujarat makes it an attractive site for manufacturing plants.
- Investment-friendly government and relative transparency eases the business set-up process.

Madhya Pradesh

- Madhya Pradesh is targeting economic growth of 12 per cent under the 12th Five Year Plan with the state government focusing on infrastructure development through public-private partnerships.
- The state government plans to invest about INR35bn to develop 77 industrial areas to facilitate investment.
- The planning commission approved investments of INR280bn from 2012-13.
- Some 150 new projects are expected to be developed in the state with power generation a major investment draw.
- Government announced the availability of 20,000 hectares of land in the state.
- Madhya Pradesh is also focusing on the development of 27 new industrial estates in the state.

West Bengal

- Thirty-five per cent of the INR233.71bn budget for 2012-13 has been set aside to develop infrastructure and power facilities in the state.
- State government announced plans to strengthen and widen 1,046km of roads in 11 under-developed districts and construct eight new bridges.
- Constructing affordable housing for low-income families was another key state initiative.
- Urban infrastructure development has been allotted a 40 per cent share of investments.

Orissa

- Infrastructure development accounts for INR61bn of the INR172bn 2012-13 budget.
- Orissa announced plans to invest INR50bn in developing public-private partnerships for roads and buildings, housing and urban development and the energy sector.
- The state has emerged as major hub for mineral and metal industries. Both sectors use construction equipment on a large scale.
- The Public Works Division is planning to construct 606km of roads and 16 bridges.
- The Housing and Urban Development Department has been allocated INR15.74bn from 2012-13.

The road ahead

As India's economic growth continues expanding into lessdeveloped states such as Orissa, West Bengal and Madhya Pradesh, it has become imperative that key players in the construction equipment market not only establish manufacturing facilities in India, but also ensure they have a strong distribution structure that enables them to penetrate more remote parts of the country. The construction equipment market provides both established players and new entrants with a range of opportunities. While established players can leverage their existing distribution structure to reach potential customers in these emerging regions, new players can make their foray into the market through joint ventures with companies. The fact that each state government has a separate budget for infrastructure development provides a platform which should enable all construction OEMs to get a substantial slice of the pie.

Your Ipsos Contacts

AUSTRALIA

PERTH

Level 1, 1292 Hay Street West Perth 6005 Perth, Australia australia.bc@ipsos.com Telephone 61 (8) 9321 5415

SYDNEY

Level 13, 168 Walker Street North Sydney 2060 NSW, Australia australia.bc@ipsos.com Telephone 61 (2) 9900 5100

GREATER CHINA

BEIJING

12th Floor, Union Plaza No. 20 Chao Wai Avenue Chaoyang District, 100020 Beijing, China china.bc@ipsos.com Telephone 86 (10) 5219 8899

SHANGHAI

31/F Westgate Mall 1038 West Nanjing Road 200041 Shanghai, China china.bc@ipsos.com Telephone 86 (21) 2231 9988

HONG KONG

22/F Leighton Centre No 77 Leighton Road Causeway Bay Hong Kong hongkong.bc@ipsos.com Telephone 852 3766 2288

INDIA

MUMBAI

5th, 6th and 7th Floor, Boston House Suren Road, Andheri (East) 400-093 Mumbai, India india.bc@ipsos.com Telephone 91 (22) 6620 8000

NEW DELHI

C-1 First Floor Green Park Extension 110 016 New Delhi, India india.bc@ipsos.com Telephone 91 (11) 4618 3000

INDONESIA

Graha Arda, 3rd Floor Jl. H.R. Rasuna Said Kav B-6, 12910 Kuningan Jakarta, Indonesia indonesia.bc@ipsos.com Telephone 62 (21) 527 7701

JAPAN

Kamiyacho Central Place 4-3-13, Toranomon Minato-ku, 105-0001 Tokyo, Japan japan.bc@ipsos.com Telephone 81 (3) 6867 8001

KENYA

Acorn House 97 James Gichuru Road, Lavington P.O. Box 68230 00200 City Square Nairobi, Kenya kenya.bc@ipsos.com Telephone 254 (20) 386 2721-33

MALAYSIA

18th Floor, Menara IGB No. 2 The Boulevard Mid Valley City Lingkaran Syed Putra, 59200 Kuala Lumpur, Malaysia malaysia.bc@ipsos.com Telephone 6 (03) 2282 2244

PHILIPPINES

1401-B, One Corporate Centre Julia Vargas cor. Meralco Ave Ortigas Center, Pasig City, 1605 Metro Manila, Philippines philippines.bc@ipsos.com Telephone 63 (2) 633 3997

SINGAPORE

11 Lorong 3 Toa Payoh Block B #03-26/27/28 Jackson Square, S319579 Singapore singapore.bc@ipsos.com Telephone 65 6333 1511

SOUTH KOREA

12th Floor, Korea Economic Daily Building, 463 Cheongpa-Ro Jung-Gu 100-791 Seoul, South Korea korea.bc@ipsos.com Telephone 82 (2) 6464 5100

THAILAND

21st and 22nd Floor, Asia Centre Building 173 Sathorn Road South Khwaeng Tungmahamek Khet Sathorn 10120 Bangkok, Thailand thailand.bc@ipsos.com Telephone 66 (2) 697 0100

TURKEY

Centrum Is Merkezi Aydinevler No:3 34854 Kuçukyali 3 Istanbul, Turkey turkey.bc@ipsos.com Telephone 90 (216) 587 1111

UAE

4th Floor, Office No 403 Al Thuraya Tower 1 P.O. Box 500611 Dubai Media City, UAE uae.bc@ipsos.com Telephone 971 (4) 4408 980

UK

Minerva House 5 Montague Close SE1 9AY London, United Kingdom uk.bc@ipsos.com Telephone 44 (20) 3059 5000

USA

31 Milk Street Suite 1100 Boston, MA 02109 United States of America us.bc@ipsos.com Telephone 1 (617) 526 0000

VIETNAM

Level 9A, Nam A Bank Tower 201-203 CMT8 Street, Ward 4 District 3 HCMC, Vietnam vietnam.bc@ipsos.com Telephone 84 (8) 3832 982