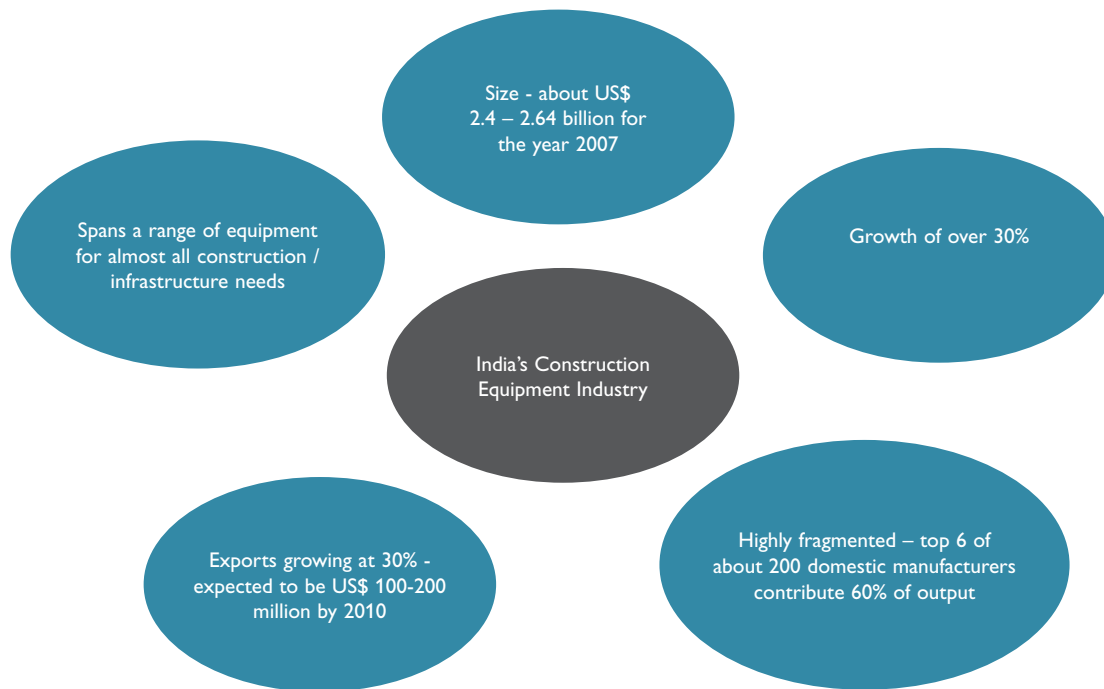




CONSTRUCTION EQUIPMENT

October 2007

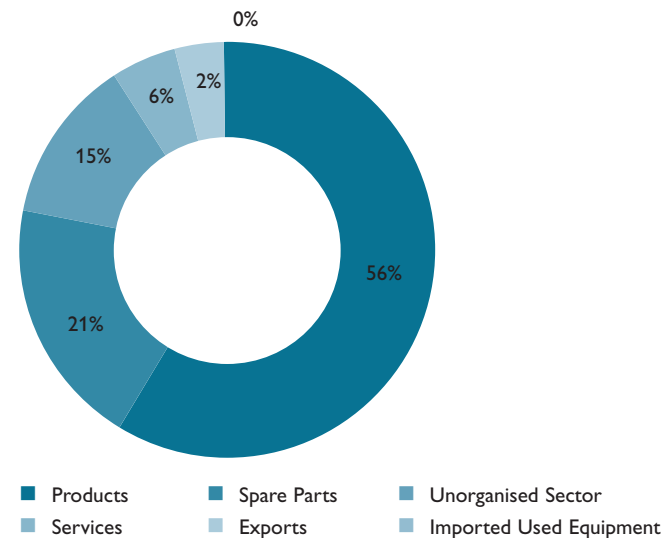
India's Construction Equipment Industry - Highlights



The Industry spans a range of products and services

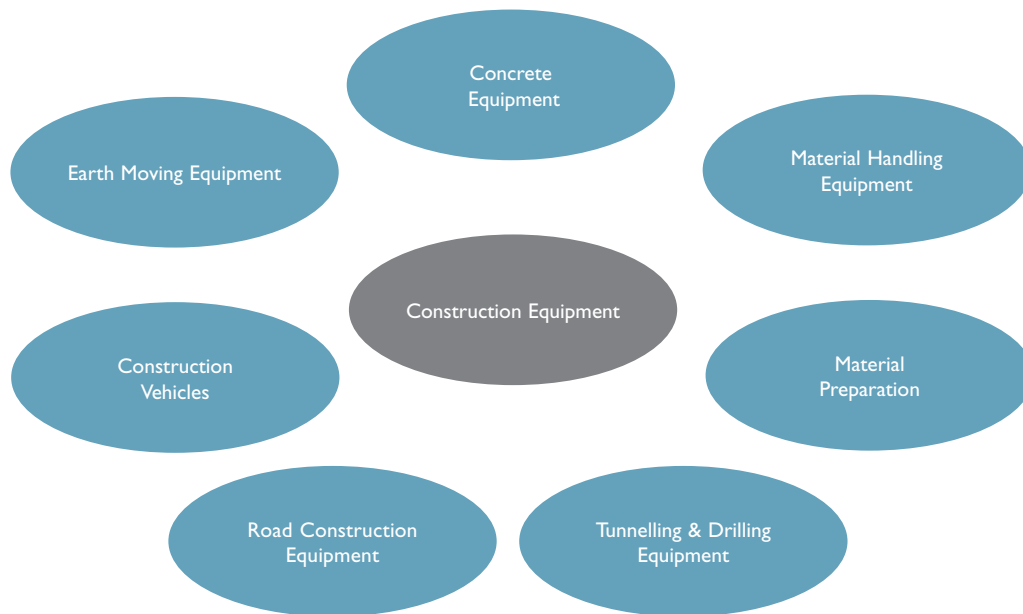
- Products and spare parts constitute the bulk of the industry
- Services segment is still nascent and presents good opportunities for growth
- The unorganised sector contributes about 15% by value, though the majority of players belong here

Construction & Material Handling Equipment (2004)



Source: CII-KPMG Report on Indian Infrastructure, KPMG

The key segments that constitute the Construction Equipment industry in India are



And there are a range of products in each segment

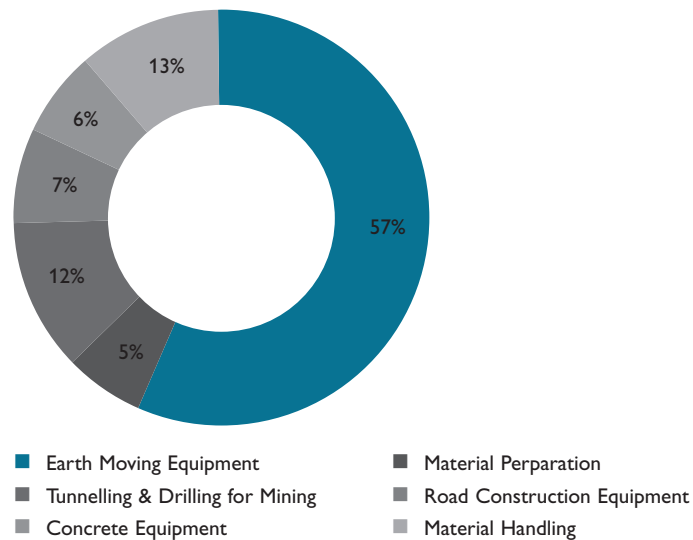
The industry has a wide product range

Earth Moving Equipment	Concrete Equipment	Material Handling Equipment	Material Preparation	Road Construction Equipment	Construction Vehicles	Tunnelling & Drilling
<ul style="list-style-type: none"> • Backhoe Loaders • Excavators • Loaders • Bulldozers • Skid-Steer Loaders • Wheeled Loading • Shovels • Wheel Loaders • Motor Graders • Motor Scrappers • Dump Trucks • Wheel Dozers • Draglines 	<ul style="list-style-type: none"> • Concrete Breaker • Paver Finisher • Concrete Batching Plants • Concrete Pumps • Concrete Mixers • Hot mix plants 	<ul style="list-style-type: none"> • Telescopic Handlers • Crawler Cranes • Mobile Cranes • Truck Cranes • Forklifts • Pick & Carry Cranes • Slew Cranes • Tower Cranes • Conveyors 	<ul style="list-style-type: none"> • Crushing Plants • Jaw Crushers 	<ul style="list-style-type: none"> • Compaction Equip • Vibratory Rollers • Pavers 	<ul style="list-style-type: none"> • Dumpers • Articulated Haulers 	<ul style="list-style-type: none"> • Rotary/ DTH Drilling • Hammer Track Drill • Boring Equipment • Demolition Equipment

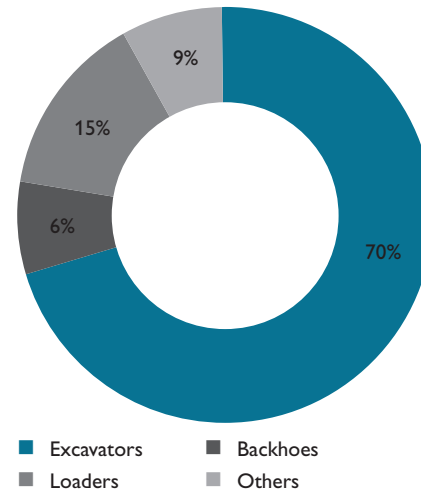
However, a few segments dominate the industry in size and volumes

Earthmoving Equipments constitute the biggest segment and Excavators, the largest product line within the segment

Construction Equipment Industry Structure



Earthmoving Equipment Segment

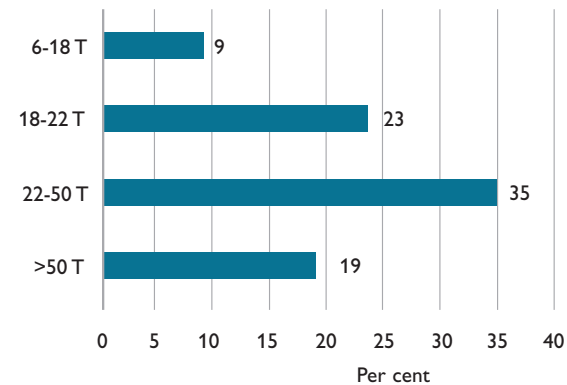


Source: KPMG Analysis, Primary Research; CII-KPMG Report on Indian Infrastructure

Earthmoving Equipments constitute the biggest segment and Excavators, the largest product line within the segment

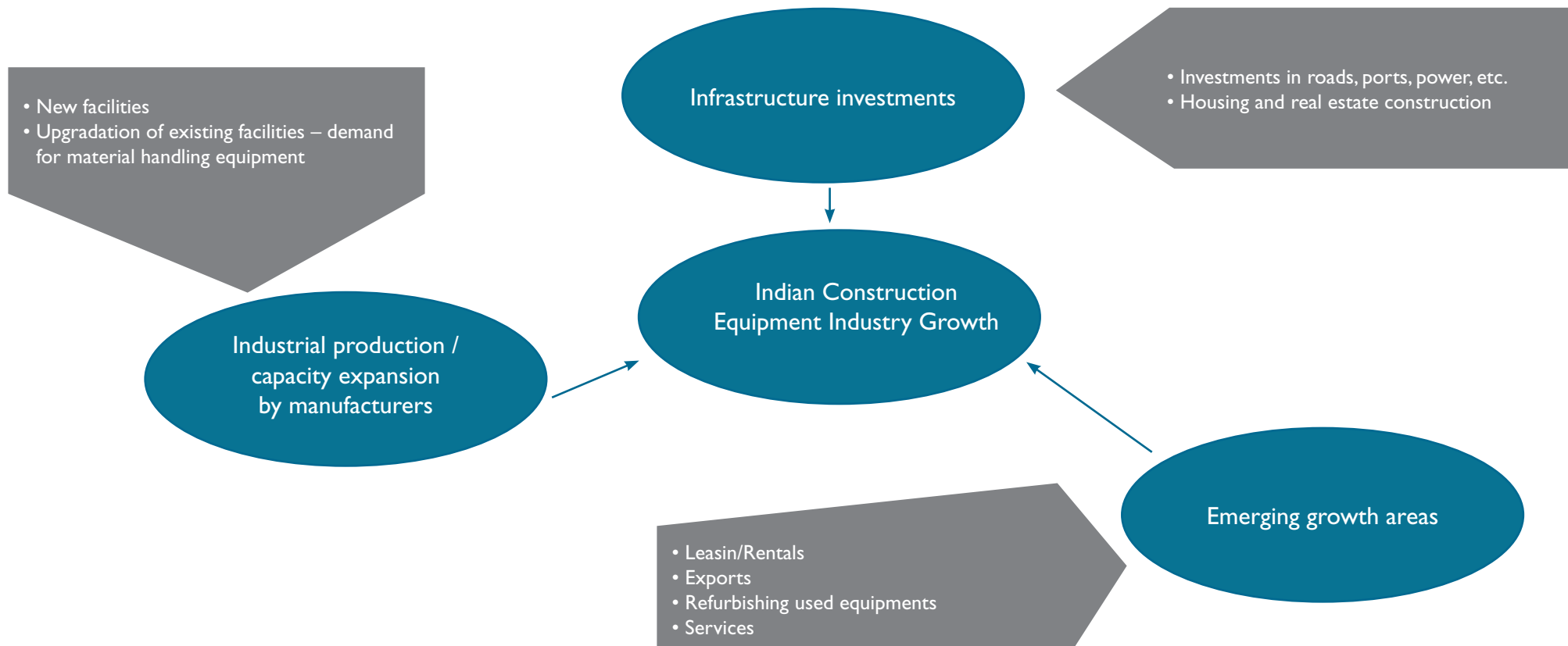
- The Excavator market is estimated at US\$ 1.4 billion
- Growing at 30% CAGR, driven by 22-60 tonne excavators

Excavator CAGR (FY 01-06)



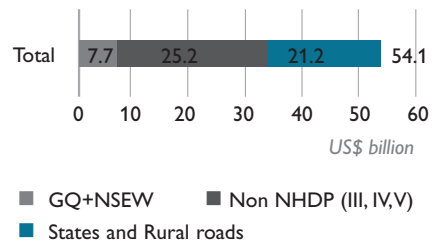
Source: KPMG Analysis, Primary Research;
CII-KPMG Report on Indian Infrastructure

Growth in the industry is expected to be driven by 3 key drivers



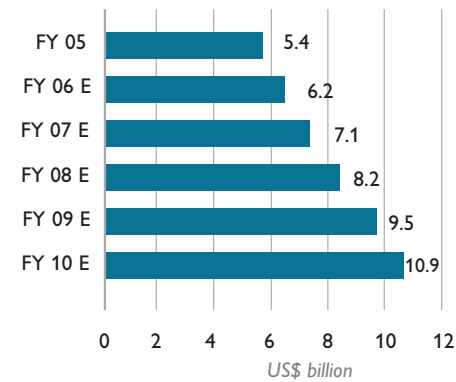
Significant investments are planned in developing India's infrastructure, which will benefit the Construction Equipment industry

Total Planned Road Investments (FY 06-10)



Source: NHAI, Budget & Plan Documents
CRIS INFAC, Construction Report

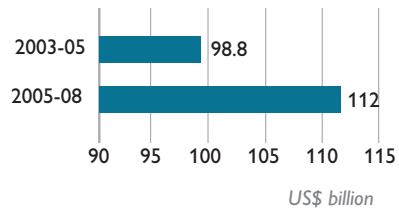
Total Planned Urban Infrastructure



Source: NHAI, Budget & Plan Documents
CRIS INFAC, Construction Report

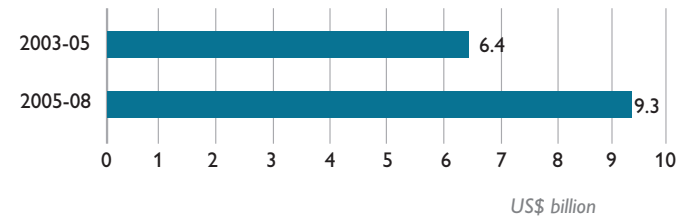
Significant investments are planned in developing India's infrastructure, which will benefit the Construction Equipment industry

Real Estate Development



Source: NHAI, Budget & Plan Documents
CRIS INFAC, Construction Report

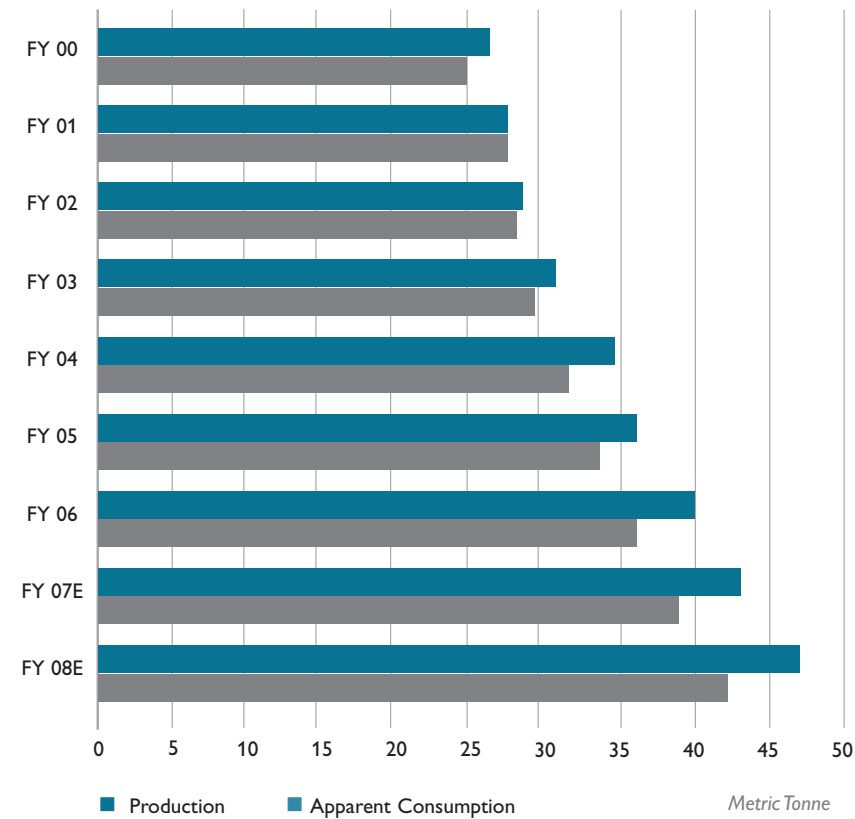
Total Planned Irrigation Investments



Source: NHAI, Budget & Plan Documents
CRIS INFAC, Construction Report

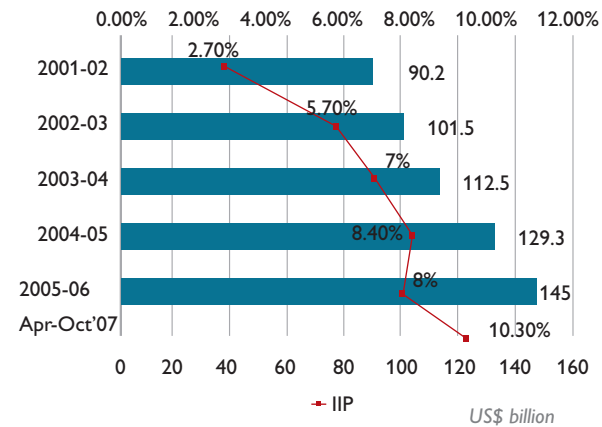
Industrial production has been growing and significant capacity additions are planned in core sectors

Steel Production & Apparent Consumption



Source: J.M Morgan Stanley Research, Report on Indian Steel

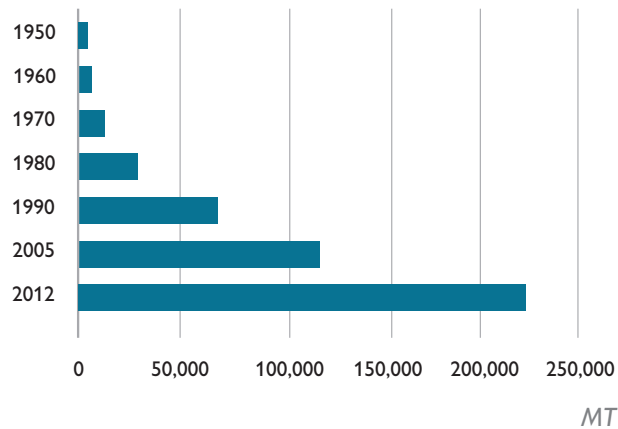
Index of Industrial Production & Industrial GDP



Source: Indiatat

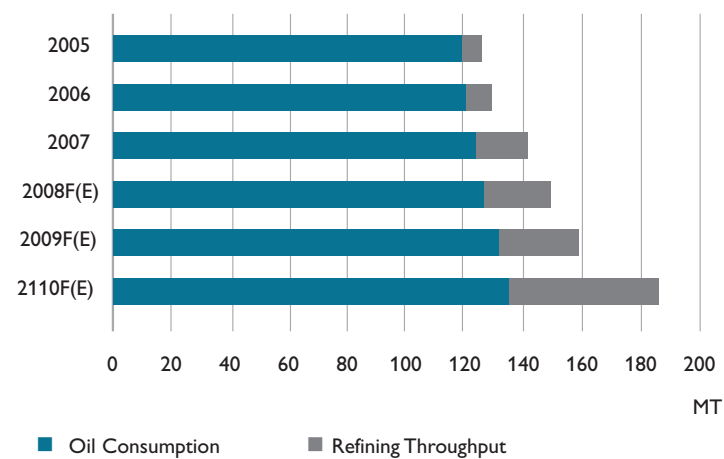
Industrial production has been growing and significant capacity additions are planned in core sectors

Installed Capacity at the end of the period



Source: JM Morgan Stanley Research, Report on Indian Steel

India Refining Capacity Demand-Supply



Source: Companies, ABN AMRO Research

New areas are emerging, that present good growth potential for the future

Rentals

- Currently, equipment rentals contribute to just about 2% of the market
- This is expected to grow to about 25% by 2010

Leasing

- Equipment leasing expected to grow from about 2% to around 8% by 2010

Financing and end-to-end services

- Some of the large players are looking at providing end-to-end services to the users throughout the equipment lifecycle – financing, user training, maintenance and buy-back of used equipment


Exports

- Exports of Construction Equipment (CE) from India grew by 30% CAGR over 2001-05 and are expected to sustain this growth in the future
-

The sector is competitive and likely to see increased investment from global players



Threat of New Entrants

- Fragmented market, dominated by a few large players 
- High potential growth
- New players will need the right technology and product

The sector is competitive and likely to see increased investment from global players

Supplier Power



- Import of some critical components
- Volatility of steel prices impacting production costs
- Inadequate supplier base to meet demand

Competitive Rivalry



- Price & Service are the differentiators
 - Lack in sharp differentiation leading to competition in price
-

The sector is competitive and likely to see increased investment from global players

Customer Power

- Strong increase in demand
- Price sensitive market
- Customers need to be trained in technology, equipment usage

Threat of Substitutes

- Complete substitution may not happen in near future
- Product replacement or enhancement is possible

Source: KPMG Analysis

Attractive investment options emerge in the following areas

- Earthmoving Equipment, Road Construction Equipment and Material Handling Equipment appear the most attractive product segments, in terms of size and future growth potential
 - However, the Indian CE market also presents other areas that are nascent, but which have high growth potential:
 - * Engineering Design Services
 - * Equipment Rentals
 - * Repair & Refurbishing of used equipment
-

Industry players would need to address the following key success factors

Post-Sales Support

- Service and Training Infrastructure
- Maintenance
- Spare Parts & Distribution Network

R&D and Innovation

- Appropriate technology and pricing
- Product customisation
- Product reliability and ease of use

End-To-End Services

- Equipment selection
 - Financing/leasing/rental
 - Maintenance and training
 - Repair and refurbishing
-

Profile of Key Players

JCB India

- JCB came to India in 1979
 - The company has a turnover of US\$ 335 million
 - The company is growing by 25-30% annually
 - JCB India is a subsidiary of JC Bamford Excavators Ltd. (JCB)
 - The products range from backhoe loaders, wheeled loaders to excavators and skid steer loaders
-

Profile of Key Players

- The Company has a 70% market share in the backhoe loader segment and around 13% market share in the overall Indian CE industry
 - It has facilities at Ballabgarh in Haryana and Pune in Maharashtra
 - It has 38 dealers and 206 outlets
 - It has a dedicated parts centre in Ballabgarh and parts distribution depots in Chennai, Pune and Kolkatta
-

Profile of Key Players

Bharat Earth Movers Ltd. (BEML)

- BEML is its largest player in earthmoving equipment sector
 - The Company turnover is around US\$ 484 million
 - The mining and construction equipment segment is around US\$ 306.6 million; defence segment is about US\$ 154.2 million; and railways around US\$ 23 million
 - The company is the largest public sector undertaking in this industry
-

Profile of Key Players

- Some of its customers are Delhi Metro Rail Corporation, Coal India and Jessop Co. Ltd. (Railways)
 - The Company has facilities established in Bangalore, Kolar Gold Fields and Mysore in Karnataka
 - It has a 70% market share in the domestic earthmover industry and 12% in the overall construction equipment industry
 - It has 33 marketing offices and has a strong foothold in the government sector
-

Profile of Key Players

L&T Case, L&T Komatsu

- The companies together have a turnover of US\$ 156 million, with majority coming from L&T Komatsu. Both these companies are subsidiaries of L&T Ltd.
 - They are joint ventures with CNH American LLC and Komatsu Asia Pacific Pvt. Ltd., Singapore, respectively
 - L&T Case manufactures loaders backhoes and vibratory compactors; while L&T Komatsu manufactures hydraulic excavators
-

Profile of Key Players

- L&T Case hold 21% market share in vibratory compactors
 - L&T Komatsu holds 20% market share in excavators
 - L&T Case has its facilities in Pithampur, Madhya Pradesh
 - L&T Komatsu has its operations in Bellary Road in Karnataka
-

Profile of Key Players

Ingersoll-Rand India Ltd.

- A public limited company (majority owned by Ingersoll Rand), is a market leader in compactors with a turnover of US\$ 104.5 million
 - The company operates in construction and compact vehicle technologies, air solutions and climate control technologies, with each of these contributing US\$ 50.8 million, US\$ 62 million and US\$ 0.9 million, respectively
 - It has a 39% market share in the compactor segment
-

Profile of Key Players

- Its major products are compaction equipment, pavers, loaders, light towers, air compressors, etc.
 - It has operations in Bangalore and Ahmedabad and has a good distribution network with 22 company offices and 80 distributors across India
-

Profile of Key Players

Tractors India Ltd. (TIL)

- The public limited company is a market leader in slew cranes segment in India
 - It has a turnover of US\$ 104.5 million of which US\$ 28.2 million is contributed from machine handling; US\$ 51.2 million from construction equipments and rest from power systems
 - Its product range includes slew cranes, earthmoving equipments, diesel generating sets, forklifts, etc.
 - Its has a 32% market share in the slew crane segment
 - It has facilities installed in Kamarhatty in West Bengal and Sahibabad, U.P.
 - It has 33 Indian locations and 4 overseas offices in its distribution network
-

Profile of Key Players

Telco Construction Equipment Company Ltd. (Telcon)

- The company is a market leader in excavators
 - It has collaborations with Hitachi Construction Machinery Company, Japan, for hydraulic excavators and cranes; John Deere, USA, for backhoe loader technology; CESAN, Turkey, for asphalt plants
 - It is a subsidiary of Tata Motors and has a turnover of US\$ 283 million
 - Its major products are excavators, loaders, mechanical shovels, high tonnage crawler cranes, etc.
-

Profile of Key Players

Telco Construction Equipment Company Ltd. (Telcon)

- It has a 50% market share in the excavator segment and an overall market share in the construction equipment segment of 11%
 - Tata group of companies, government enterprises, and contractors are its major customers. It has facilities installed at Jamshedpur in Jharkhand and Dharwad in Karnataka
 - Its marketing network spans across 30 Indian states and 3 international locations
-

Profile of Key Players

Voltas

- The public limited company – a part of the Tata group is the second largest player in the forklifts segment. The customers are engineering industries
 - Its products are: industrial air conditioning and refrigeration equipment, air conditioners, water coolers, freezers, commercial refrigerators, forklift trucks and large water supply pumps
 - The company has a turnover of US\$ 260 million, of which less than 7% is accounted for by the material handling division
-

Profile of Key Players

- It has a 31% share in the forklifts segment. It has facilities in Thane, Maharashtra; Union territory of Dadar; and Sanathnagar in Andhra Pradesh
 - Voltas has its head office in Mumbai and zonal headquarters in Mumbai, Kolkatta, New Delhi and Chennai
 - It has territorial offices in 8 more Indian cities and 3 international locations
-

Profile of Key Players

Godrej & Boyce Mfg. Co. Ltd.

- The private limited company has its products as forklifts (diesel, electric, battery)
 - It holds a 48% market share in forklifts segment
 - The company has a turnover of US\$ 402.6 million
 - Its major customers are airline operators, automobile industry, FMCG, pharmaceutical industry, oil and petroleum industry
 - It has facilities in Mumbai, Maharashtra. It has 14 branches and 20 dealers across India. The company is a market leader in forklift trucks (both in diesel and battery variants)
-

Profile of Key Players

Escorts Construction Equipment Ltd. (ECEL)

- It is a pioneer manufacturer of Pick & Carry cranes
 - The company is a subsidiary of Escorts Limited. It has a turnover of US\$ 61 million
 - It holds a 56% market share in the domestic pick and carry market
 - It has facilities installed in Faridabad, Haryana
 - Its products include pick and carry cranes, slew cranes, articulated boom cranes, tower cranes, forklift trucks, front end loaders, vibratory soil compactors, tandem vibratory rollers, etc.
 - It has 16 ECEL business centres and 54 dealer locations
-

Profile of Key Players

Action Construction Equipment Ltd. (ACE)

- The public limited company has a turnover of US\$ 36.3 million
 - Its product range includes hydraulic mobile pick-n-move cranes, forklift trucks, loaders, tower cranes, aerial work platforms, lifts, lorry loaders/truck mounted cranes, etc.
 - It has a 41% share in Pick & Carry cranes segment
 - It has facilities installed in Faridabad in Haryana
 - There are 8 ACE offices and 33 dealer locations
 - The turnover of the company has grown at a CAGR of approximately 96% in the last 4 years. The company has plans of diversifying its product portfolio to include truck mounted cranes, forklifts and backhoes
-

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