

# Infrastructure in India: Insurmountable Challenge or Promising Business Opportunity?



Paul Hugentobler

Zürich, October 2, 2006

---

# Agenda

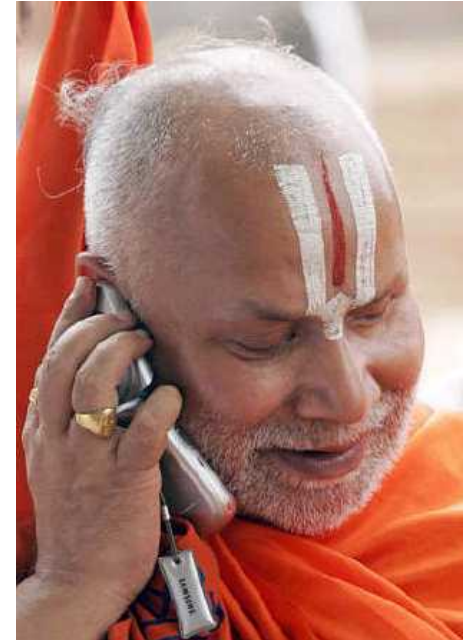
---

- India is moving in the fast lane
- Growth can further accelerate
- Physical Infrastructure: Bottleneck or Opportunity?
- Cement as the key to physical infrastructure
- Conclusions

India is proudly participating in the global charge...



.. moving away from the old by connecting the new...



...creating value through dynamic entrepreneurship...



...rapidly also investing outside India



### Tata Motors takes reins of Daewoo CV

*Business Standard — March 30, 2004*



### BBC NEWS

### Tetley bagged by India's Tata



## Conclusions

---

- As India progressively opens up to the world, the world starts recognizing India as an essential political and economic partner.
- Early reforms (e.g. telecommunication) have enabled India to carve out unique positions in the IT service industry, in business process outsourcing, and with further liberalization steps we can expect the manufacturing sector to become the next engine of growth.
- The Indian entrepreneurs are at the center of driving innovation and growth and we shall witness a growing presence on the global scene.

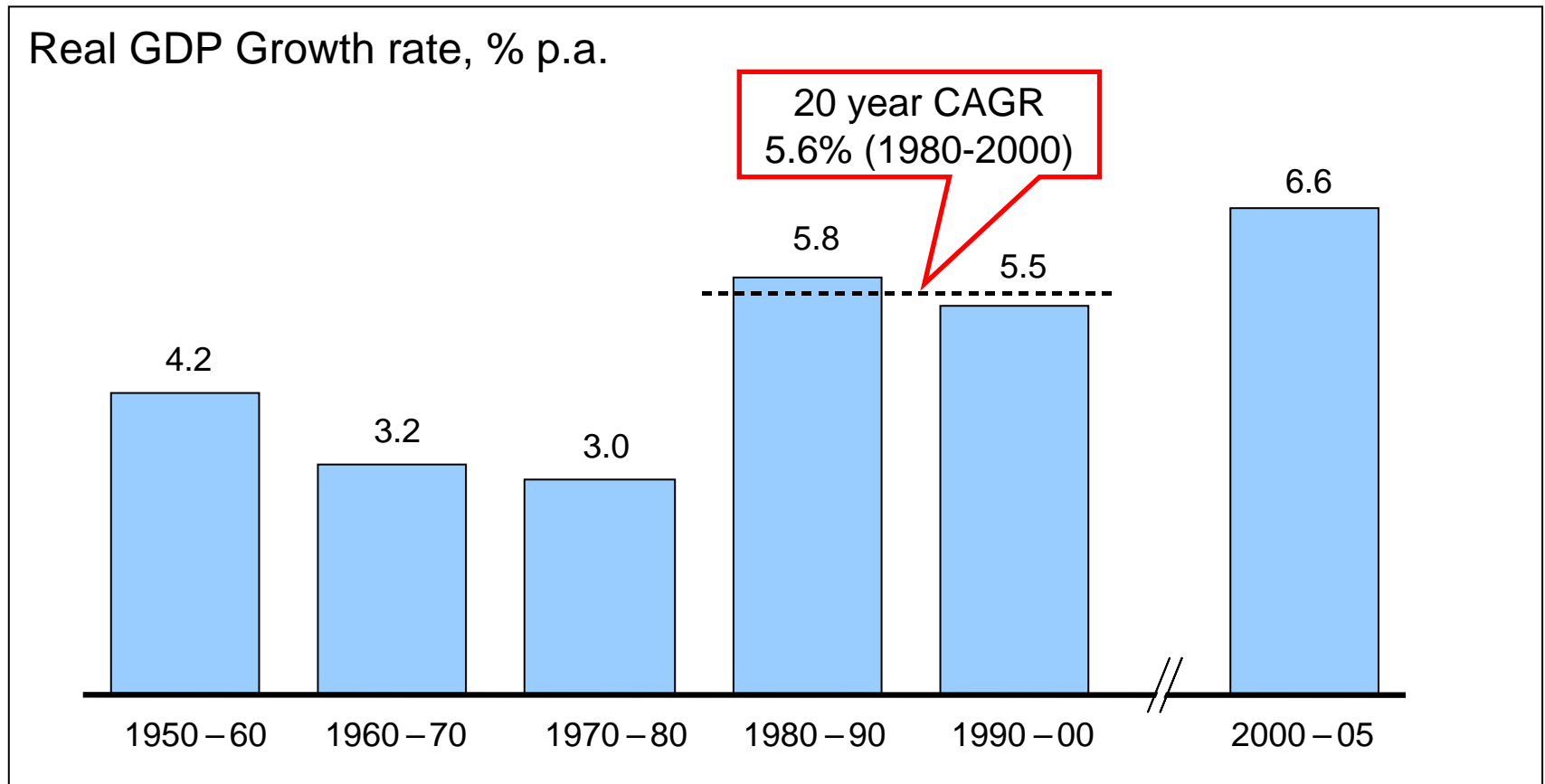
Inward-looking India belongs to the past... India is in transition and moving forward rapidly...

# Agenda

---

- India is moving in the fast lane
- Growth can further accelerate
- Physical Infrastructure: Bottleneck or Opportunity?
- Cement as the key to physical infrastructure
- Conclusions

## Growth can further accelerate GDP growth since India's Independence

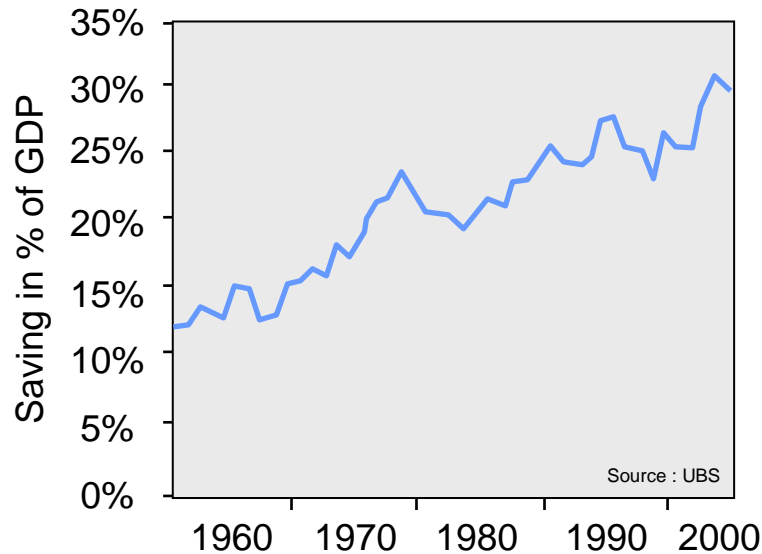


India's GDP growth rate received its first boost through the economic reforms of liberalization

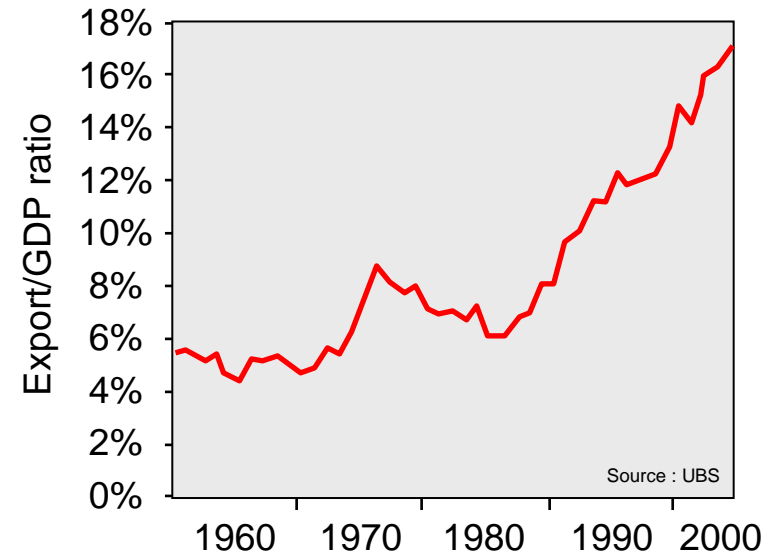
Growth can further accelerate

## Macro-indicators at encouraging levels and on the up

Indian Gross domestic saving rate



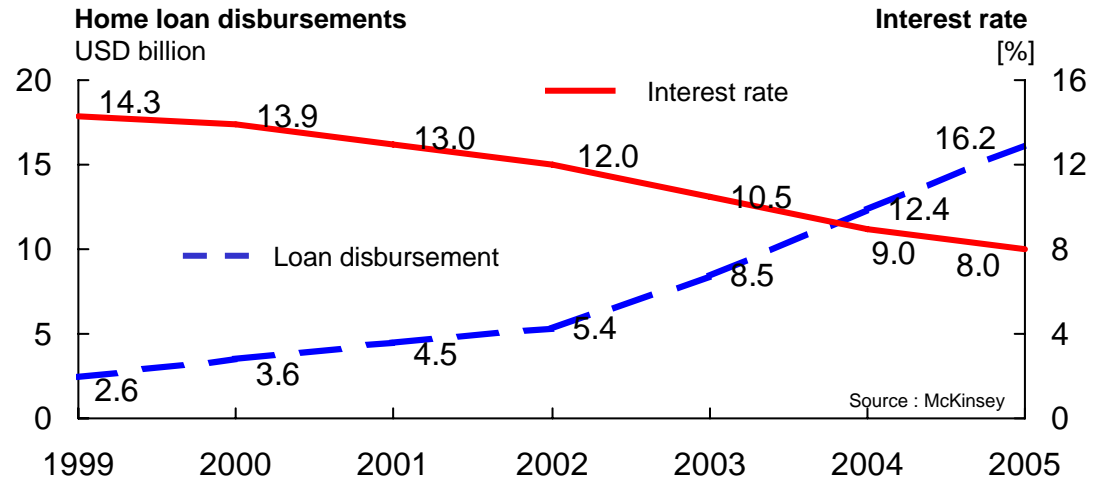
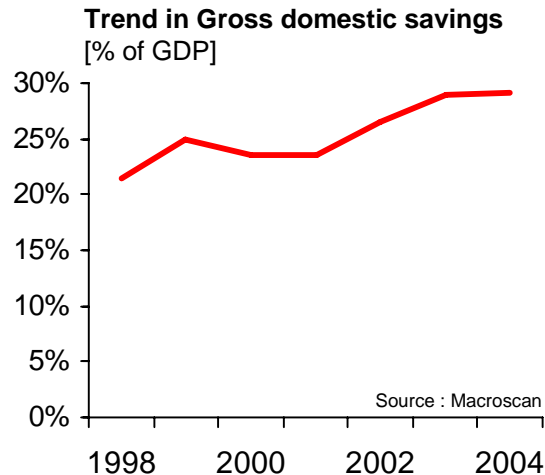
Indian Export / GDP ratio (RHS)



- Saving rate at ~30% of GDP will probably further improve, considering that 50% of the population is below 25 years of age.
- Domestic savings and ever increasing flow of FII funds / FDI are providing liquid capital markets (equity and debt).
- Indian manufacturing sector is growing exports rapidly as products are becoming competitive in quality and price.

Growth can further accelerate

## Increase in savings contributed to the growth in housing



**New homes financed\***  
Thousands

105	126	198	289	378
-----	-----	-----	-----	-----

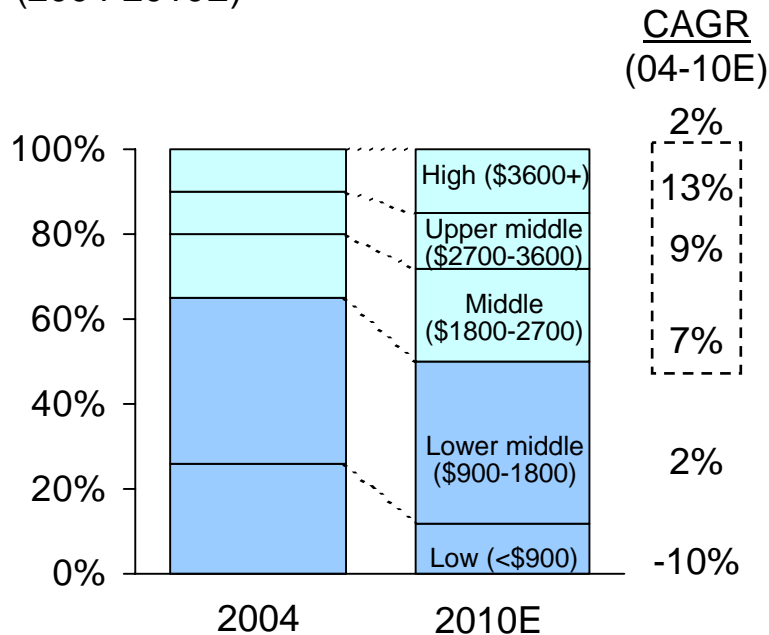
- Increased savings contributed to the reduction of interest rates, which allowed a spurt of investment in housing / residential projects by the private sector.
- Recent regulatory changes on FDI for the real estate sector will create new investment opportunities to sustain this growth. Real estate funds are mushrooming.

Growth can further accelerate

## Socio-economic patterns will change as people move up

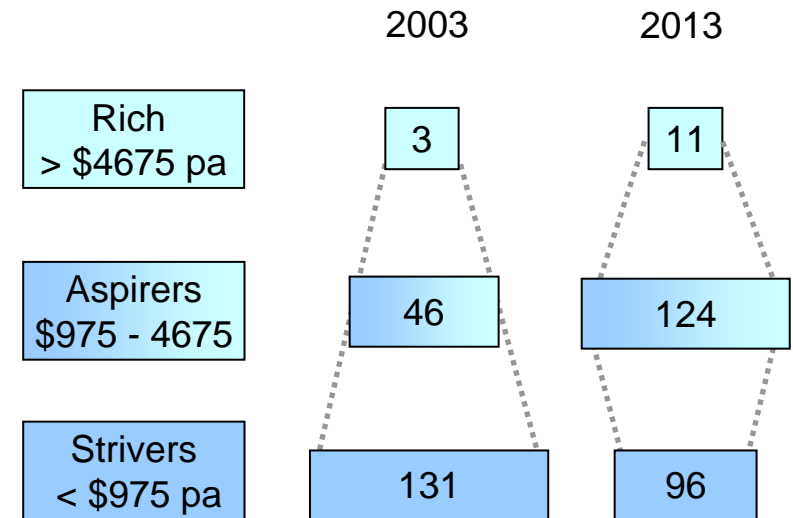
### Differentiated growth of the Indian income classes

Indian population by income level (2004-2010E)



### A fast growing, younger middle class is emerging

Number of Households per socio-economic class [Mio HH]

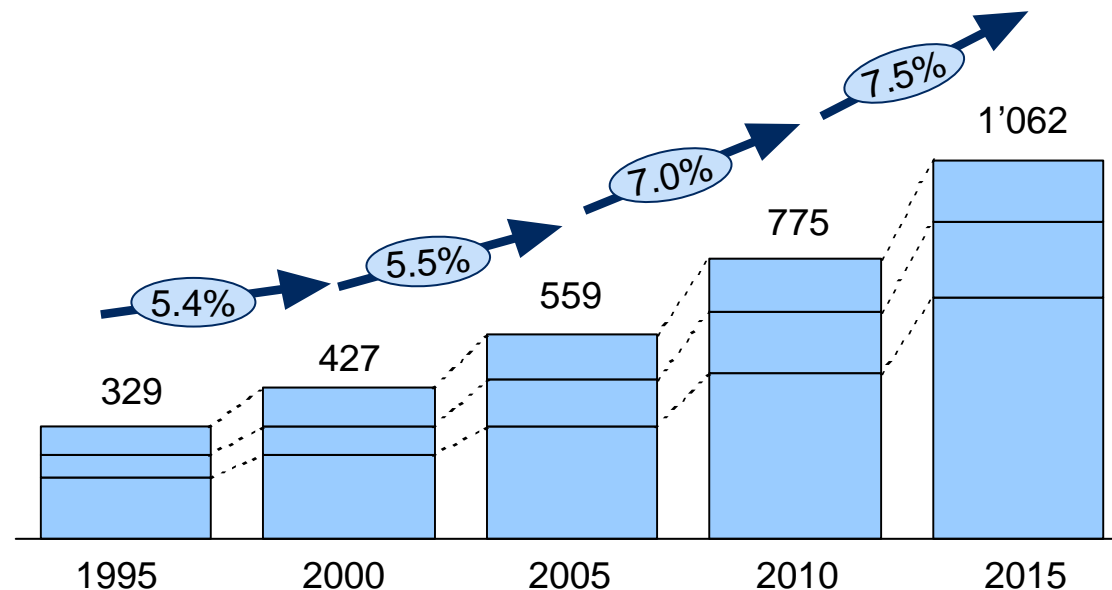


India's 'poorer' base will progressively participate in the economic prosperity

# Growth can further accelerate

## Composition of GDP: Outlook

US\$ billion, Per cent



CAGR	95 - 00	00 - 05	05 - 10	10 - 15
Agriculture	2.6%	3.6%	3.0%	3.0%
Industry	5.2%	5.6%	7.1%	7.1%
Services	6.8%	6.4%	8.0%	7.3%

Growth can further accelerate

## Conclusions

---

- Growth could accelerate through investments in infrastructure and manufacturing which could provide the foundations for a future export-driven growth cycle (yet to come).
- Physical infrastructure requirements in terms of quantity and quality are huge (power, roads, airports).
- Government has to shape up policy frameworks in all relevant sectors to allow bankable projects and a broader private sector participation. Government should liberalize relevant sectors faster.

If such conditions are created faster, India has the potential to boost its GDP growth rate significantly beyond the 8% mark.

# Agenda

---

- India is moving in the fast lane
- Growth can further accelerate
- Physical Infrastructure: Bottleneck or Opportunity?
- Cement as the key to physical infrastructure
- Conclusions

## Physical Infrastructure: Bottleneck or Opportunity? China vs. India

---



You arrive in China and see...

- ▶ New modern and efficient airports
  - ▶ Multi-lane highways and smooth traffic
  - ▶ Ultra-modern construction techniques and buildings
  - ▶ Efficient road-rail-port networks to support competitive manufacturing and export
- ✓ China spends 9% of GDP on infrastructure



- You arrive in India and encounter...
  - ▶ Old and overloaded airports
  - ▶ Roads full of potholes
  - ▶ Expensive and unreliable power supply
  - ▶ Roads, ports and rail facilities are still inefficient and costly

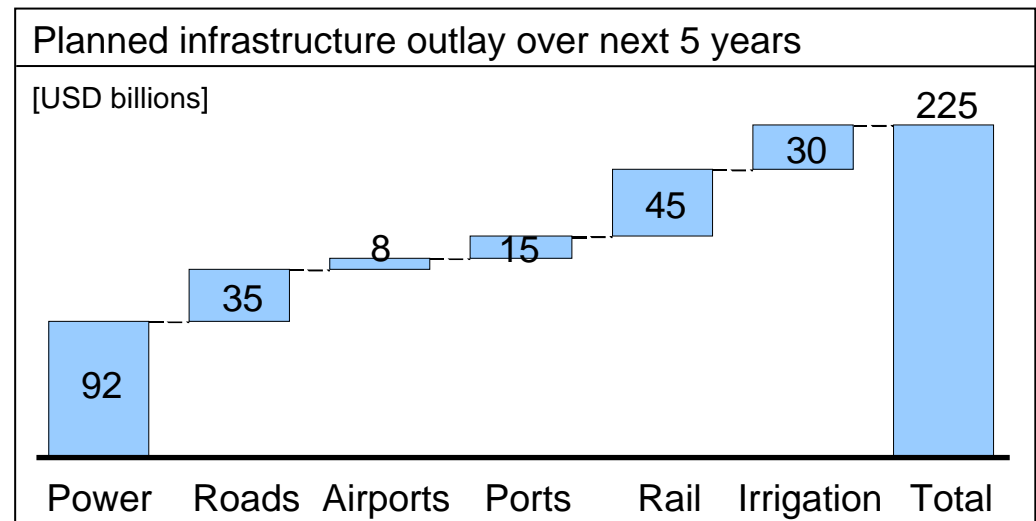
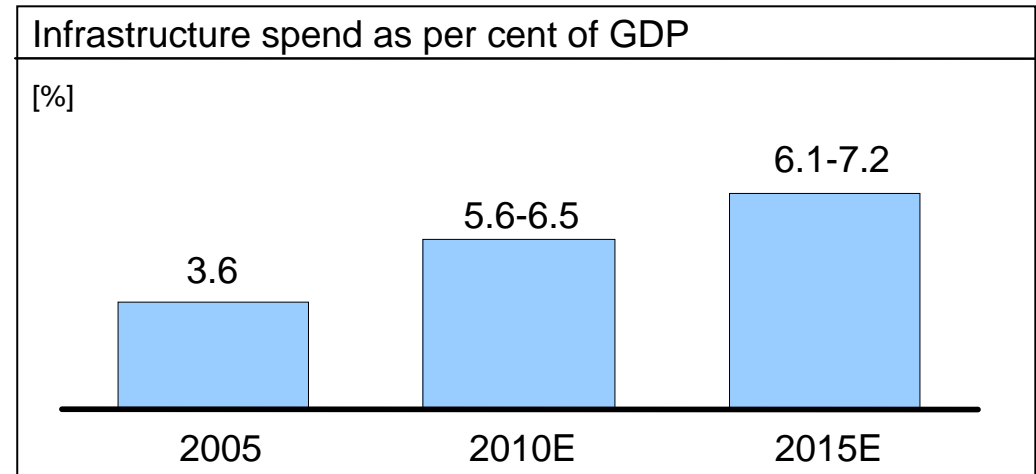
✓ India spends 3.6% of GDP on infrastructure

## Physical Infrastructure: Bottleneck or Opportunity?

### India plans to grow the share of infrastructure in its budget

#### Main drivers for infrastructure investment

- Government Awareness towards improving urban infrastructure
- Innovative funding schemes to pay for projects like cess on petrol, diesel
- PPP (Public Private Partnerships) being encouraged



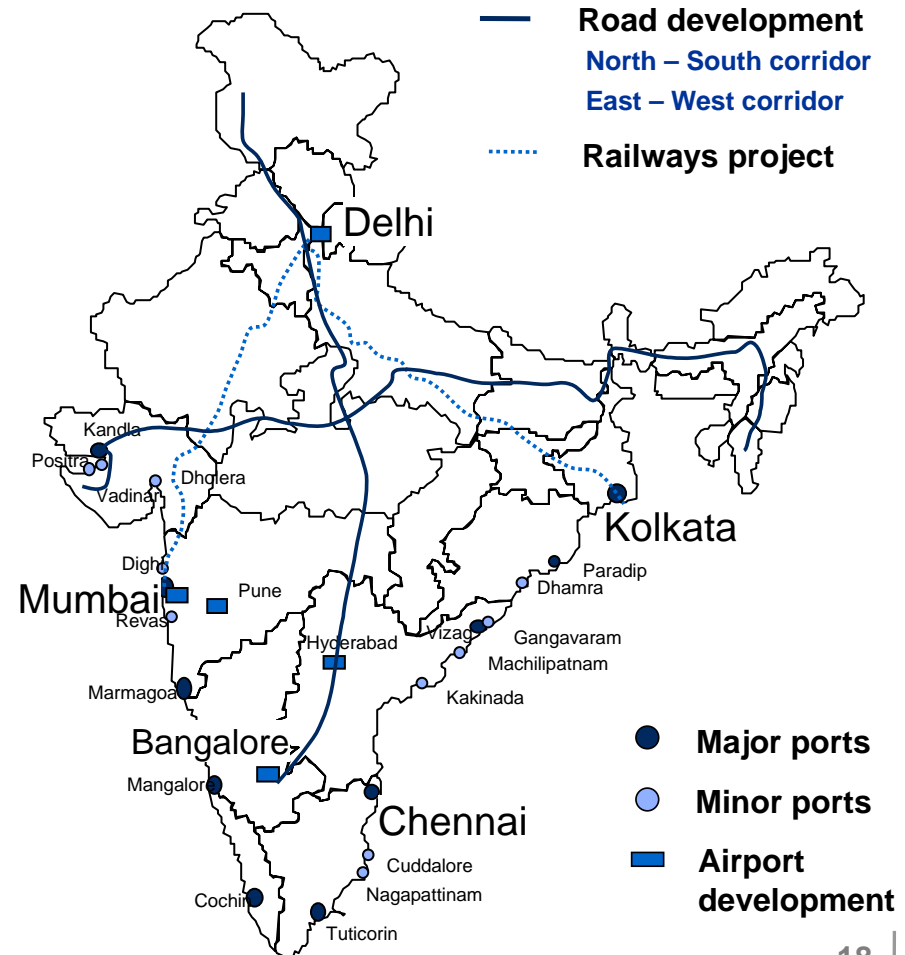
# Physical Infrastructure: Bottleneck or Opportunity?

## Physical connectivity : Key to sustain GDP Growth of over 8%

### Major Reforms are underway

- **Roads**
  - ▶ Length of national highways doubled from 1990-2004 (Golden quadrilateral and N-S / E-W corridors)
- **Railways**
  - ▶ 9,260 kilometer “Golden quadrilateral” freight corridor planned
- **Ports**
  - ▶ Sagarmala project to develop 50 minor ports, modernize existing shipyards/ ports
- **Airports**
  - ▶ New airports and modernization projects on the fast track
  - ▶ Delhi and Mumbai to have new international airports before 2010

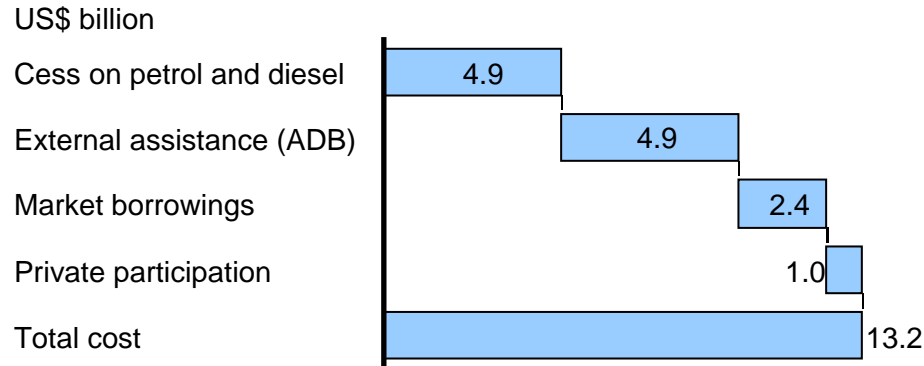
### New Projects will connect economic centers



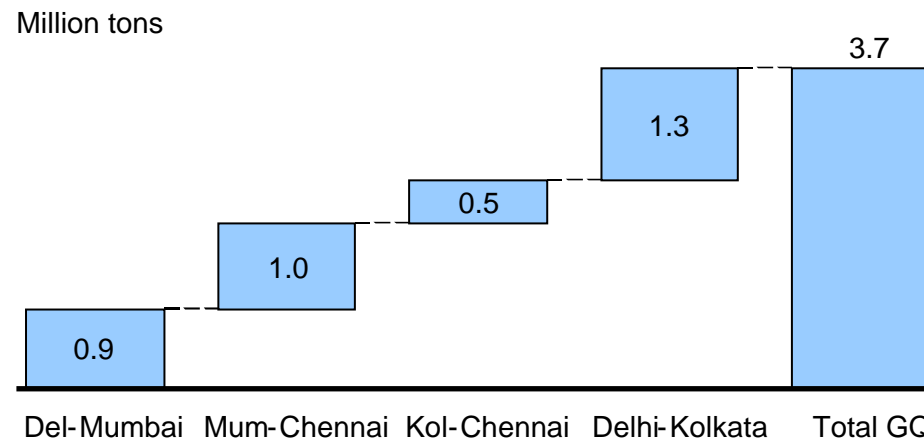
# Physical Infrastructure: Bottleneck or Opportunity?

## Example : NHA Golden Quadrilateral project

NHDP leveraged diverse sources for financing...

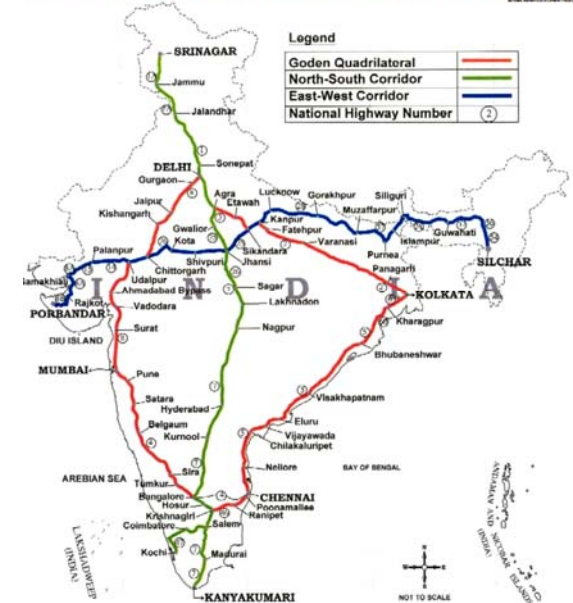


Cement demand (over 4 years)



NHDP is the largest road development project in India....

NATIONAL HIGHWAYS DEVELOPMENT PROJECT

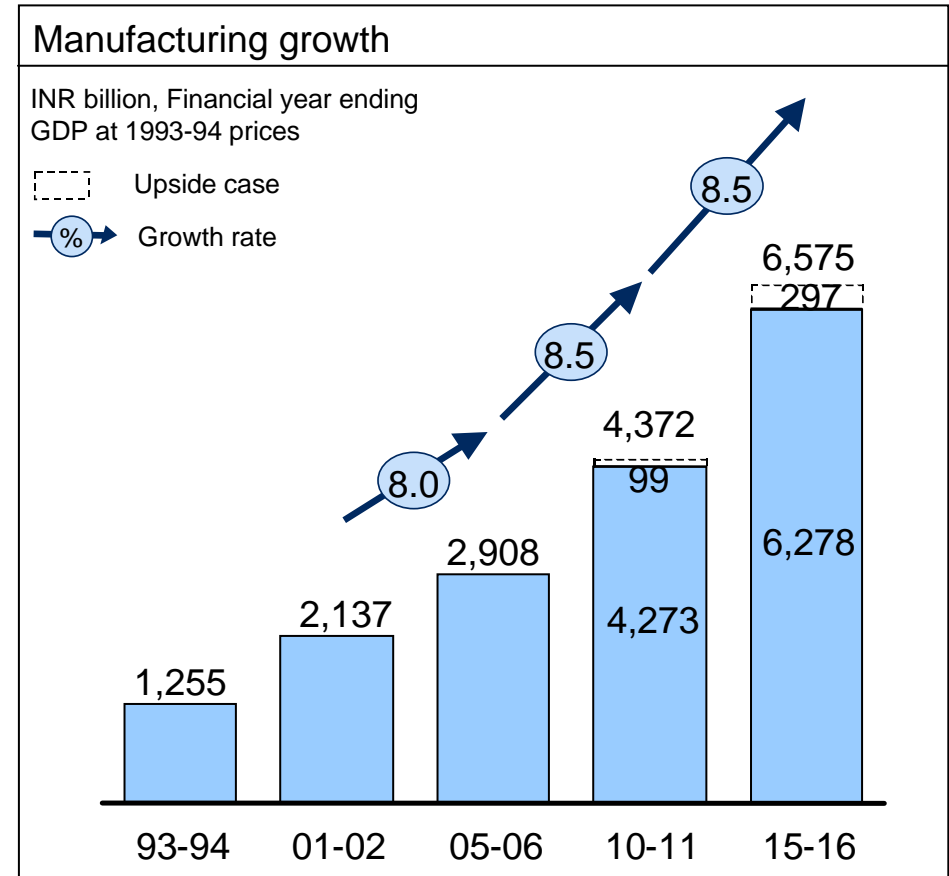


Del-Mum:	1,419 Km
Mum- Chennai:	1,290 Km
Kol- Chennai:	1,684 Km
Del-Kol:	1,453 Km
North - South:	4,000 Km
East- West:	3,300 Km

## Physical Infrastructure: Bottleneck or Opportunity?

### Infrastructure creates the momentum for manufacturing

- Infrastructure connectivity will transform the manufacturing sector as the pillar of future economic growth
- Manufacturing sector will be the catalyst for moving large numbers of people upwards on the social pyramid by creating employment, new skills and better wage opportunities



The impetus from infrastructure spending will enable manufacturing growth as logistics efficiencies improve

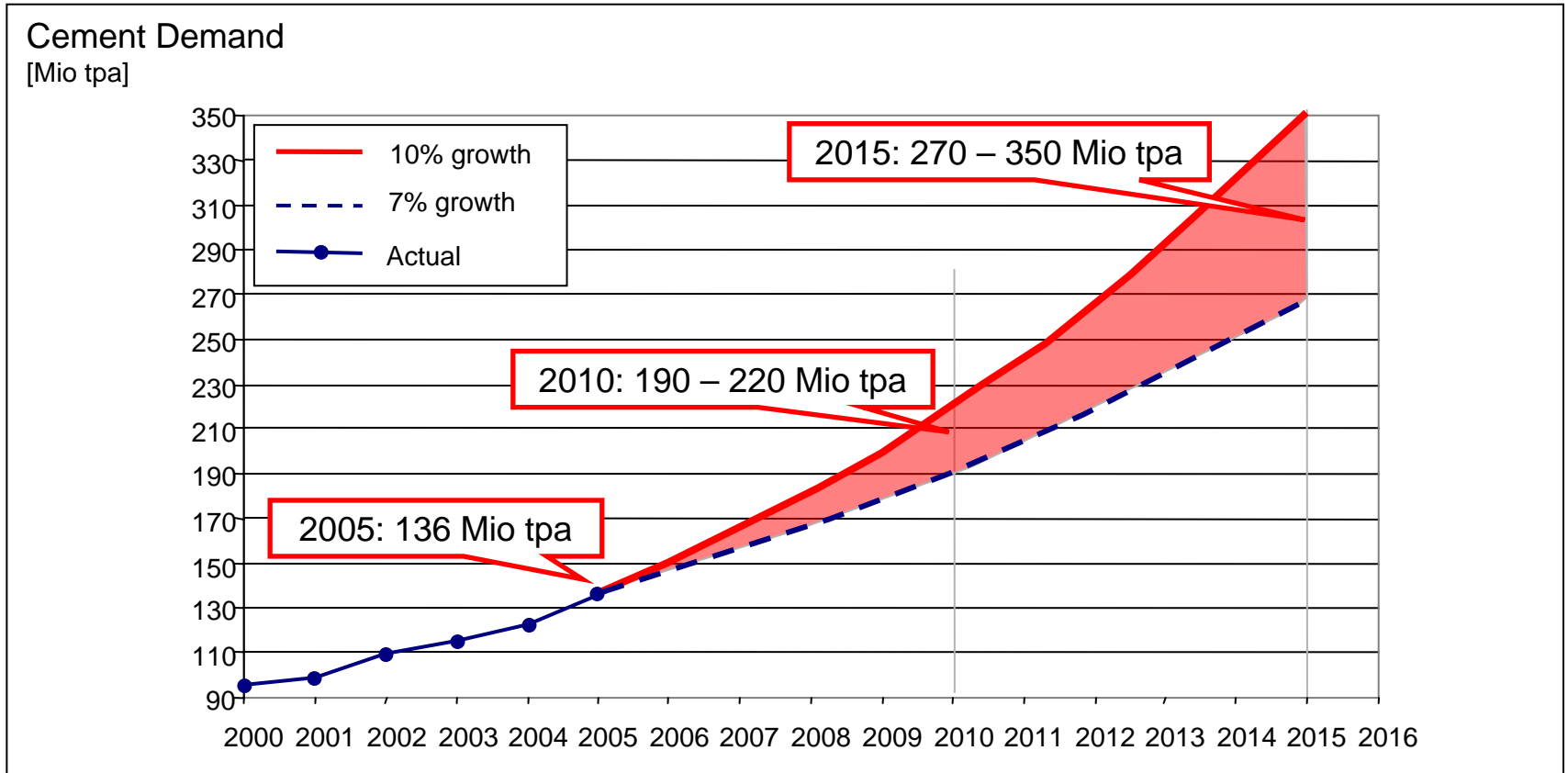
# Agenda

---

- India is moving in the fast lane
- Growth can further accelerate
- Physical Infrastructure: Bottleneck or Opportunity?
- Cement as the key to physical infrastructure
- Conclusions

# Cement as Key to Physical Infrastructure

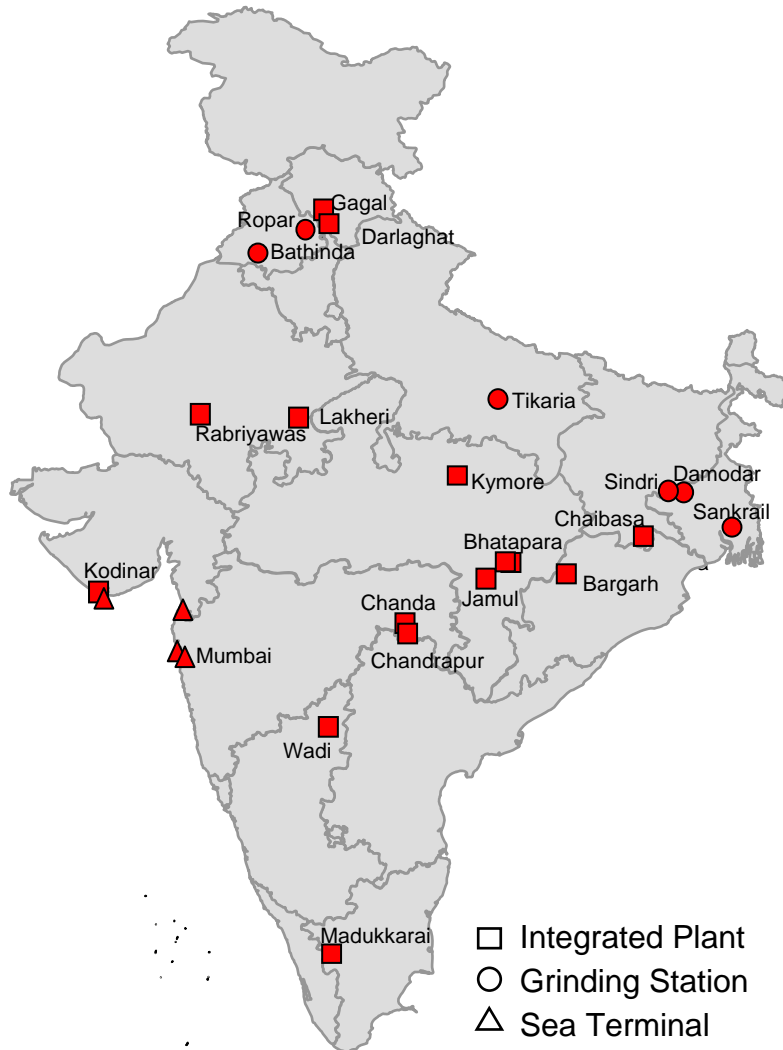
## Cement growth is strongly correlated to GDP growth



Indian economic growth perspectives to continue supporting a strong cement demand over the coming years

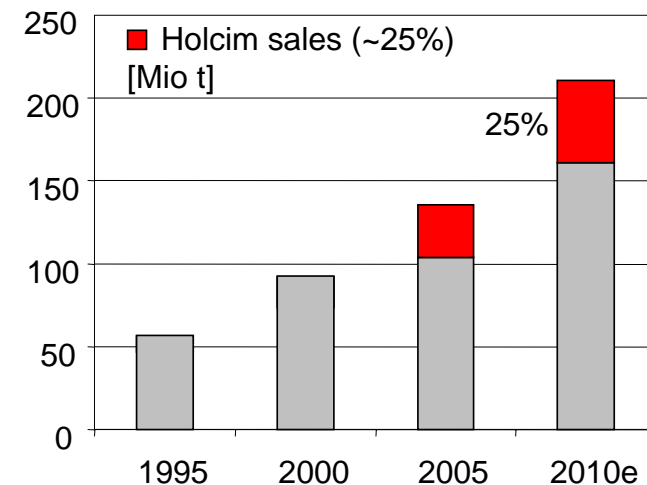
# Cement as Key to Physical Infrastructure

## Holcim in India



- With a market share of ~24% in 2005, Holcim is the 2<sup>nd</sup> largest producer in India.
- A network of 20 cement plants with a capacity of 36 Mio tpa and a pan-Indian presence.
- Holcim's efforts will be on increasing operational efficiencies, transfer of know how in Alternative Fuels and Raw Materials, cement and concrete technology, and construction techniques.

Cement sales Holcim vs. Market



# Agenda

---

- India is moving in the fast lane
- Growth can further accelerate
- Physical Infrastructure: Bottleneck or Opportunity?
- Cement as the key to physical infrastructure
- Conclusions

## Conclusions (1)

---

- India has the potential to witness a major infrastructure and manufacturing boom, which could propel the GDP growth rate from the current 7-8% to higher than 8% on a sustained basis.
- Holcim is committed to participate in this growth opportunity with focus on
  - ▶ Maintaining / growing a market share of ~25%,
  - ▶ Transferring of know-how to increase process and product efficiencies especially in term of alternative fuels / energies, product standards and environmental performance,
  - ▶ Training and development of human resources to ensure availability of skills at all levels,
  - ▶ Supporting local communities (education, water, employment, etc).
- However, infrastructure creation must happen faster and Government should provide frameworks for private sector to fully participate supporting Government efforts.

## Conclusions (2)

---

- Quote from International Herald Tribune – Saturday 30.09.06
  - ▶ “With policies changing and companies finding ways to get around the constraints, manufacturing output in the three months through June 2006 grew 11.3 percent from a year earlier, beating a 10.6 percent expansion in the roaring Indian services trade of call centers and software houses.”
  - ▶ “At its current pace, the economy would double in size every eight years.”

India is transforming itself from an elephant to a tiger

