

The image is a collage of three photographs. The top-left photo shows the Golden Gate Bridge in San Francisco, extending across a body of water under a clear blue sky. The top-right photo shows a large concrete dam with water cascading over its spillways, set against a backdrop of green hills and a blue sky with light clouds. The bottom-left photo shows two people, a man and a woman, in an office setting. The man is standing and pointing at a computer monitor, while the woman is seated at a desk with a large computer monitor and a keyboard, looking towards the man. The text 'Infrastructure Planning and Management' is overlaid in the center of the collage, and 'Class 2- The Infrastructure Scenario in India' is overlaid at the bottom.


# Infrastructure Planning and Management

Class 2- The Infrastructure Scenario in India



# Does India need Infrastructure?

- Urban population will grow from 26% to 36% of population by 2011
  - 50% by 2025
- Growth in GDP is predicted to be 8-9% per annum
- Road Traffic growth will be 15% per year
- Air traffic is growing by 25% per year
- 101,000 MW of new power needed by 2012
- Sanitation Coverage is only 35% currently

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- The figures in the earlier slide are a few statistics from publicly available documents such as the [India Infrastructure Report, 5-year plan documents](#) etc.
  - They indicate two issues
    - First, in many cases, the current infrastructure is inadequate even for today's needs. E.g. nearly two-thirds of the nation do not have access to sanitation facilities
    - Second, current infrastructure is not likely to meet tomorrow's needs. E.g. With the increase in road traffic at 15% per annum, we will need more, high-quality roads in order to maintain free-flowing traffic
  - Both these issues indicate that India needs its infrastructure to be developed.
    - In addition, this will enable economic growth as we saw in the previous class.



# What is India doing about this?

- Actions taken in the 11th 5 year plan - 2007-2012
  - The amount of money spent on infrastructure will be raised to 8% of GDP (earlier, infrastructure spending was only 4.6% of GDP)
  - One Half of all new investments in the 11<sup>th</sup> plan will be in infrastructure
  - The planning Commission has estimated that a total investment of \$450 Billion in infrastructure is required over the next 5 years to meet India's infrastructure needs over 5 years



# Other Actions

## ■ IIFC - India Infrastructure Finance Corporation

- The Govt has set up the IIFC to help fund infrastructure projects in India. IIFC will be owned by the government
- IIFC will lend money at low rates to public and private infrastructure projects. This will help encourage more projects as the cost of financing is very low.
- Since the loans that the IIFC takes are guaranteed by the government of India, IIFC is able to borrow and lend at lower rates.

## ■ New schemes to aid infrastructure development

- The Government has initiated the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) to improve Urban infrastructure
- The Bharat Nirman program has been instituted to improve infrastructure in rural areas
- These schemes will be dealt with in detail in later classes



# Reforms that are being undertaken

- The Central Government has also committed to enacting a certain set of policy reforms that it hopes will speed up the infrastructure development process and improve the overall quality of infrastructure. These reforms find a place in the documents of the Planning Commission and in various acts. Some of these reforms are:
  - Decentralization: One of the bottlenecks to creating infrastructure in the past has been the high amount of centralization in government agencies. As a result, most decisions by high-level officials, who are heavily overloaded and are unable to take decisions on time. By decentralizing and devolving responsibilities to lower levels, the government hopes to improve the response time on infrastructure projects.
  - Increasing Accountability, Transparency: The government has initiated procedures to improve the transparency and accountability of departments and processes that influence the development of infrastructure. The aim is once again to enable the development of infrastructure by removing delays and bottlenecks



# Other reforms

- Improving the efficiency of existing services
  - In addition to building new infrastructure, the government is also committed to improving existing infrastructure services and enabling the departments that deliver these services to become more efficient. To this end they have initiated practices such as benchmarking utilities across the country and so on.
- Inclusivity
  - Infrastructure development must be inclusive rather than exclusive as it affects the lives of many people. The government is therefore committed to practices wherein stakeholders are involved and consulted as part of the infrastructure delivery process
- Introducing and Encouraging Private Sector Participation in almost all sectors
  - This issue is discussed in detail in the following slides

# Private sector is being involved

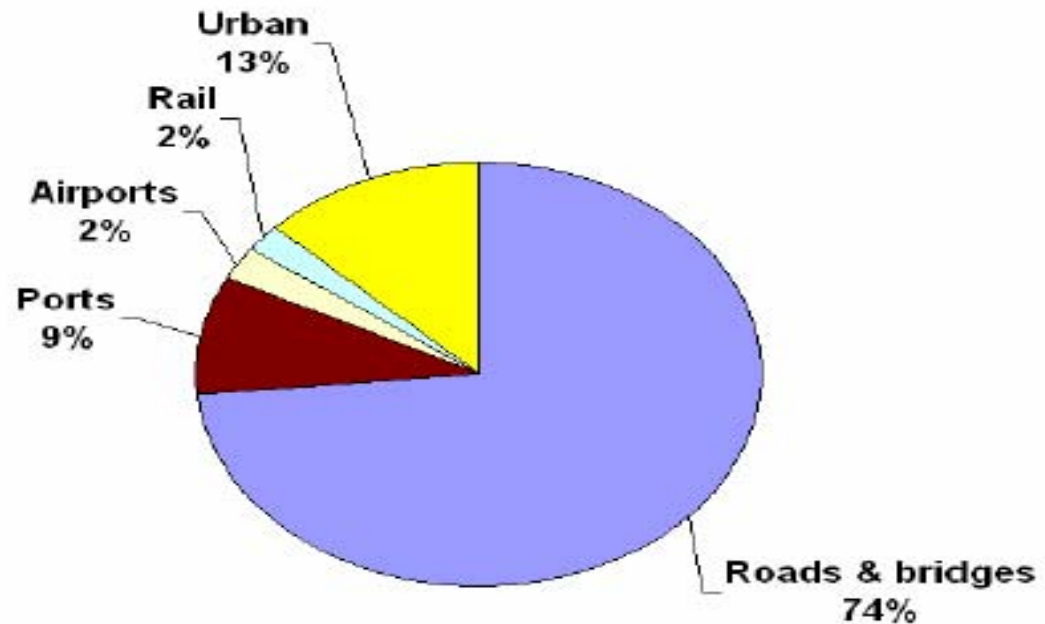


INFRASTRUCTURE  
Building for Growth

## PPPs in India – Uneven Progress.

### Number of awarded PPPs by sector

(total projects = 86) source: World Bank



Survey covering 12 states and 3 central agencies and 5 infrastructure sectors.  
Year: 2005

# Private sector in India

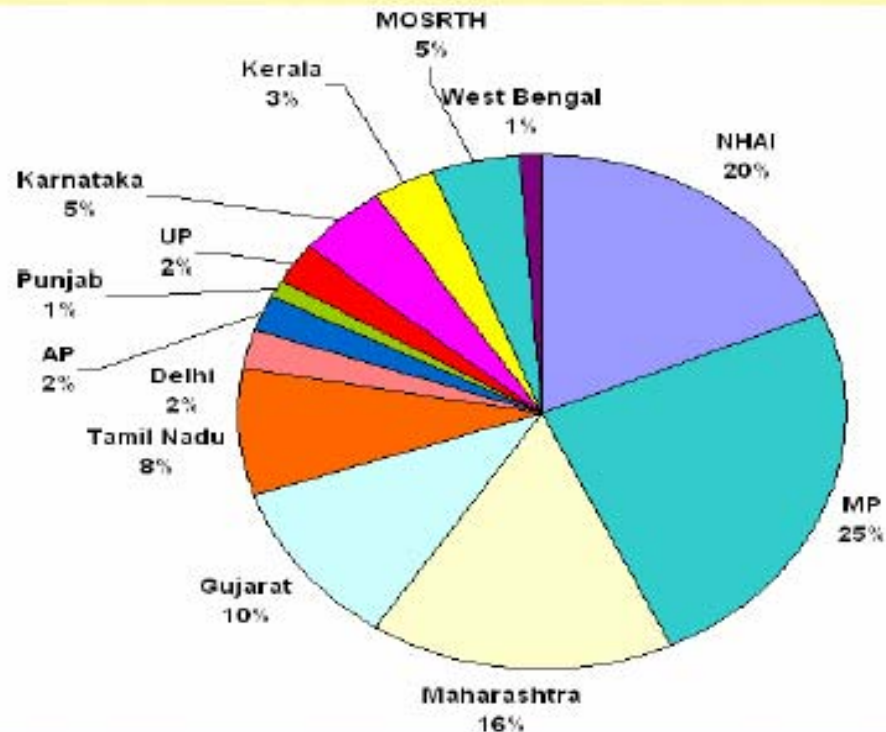


INFRASTRUCTURE  
Building for Growth

## PPPs in India – Uneven Progress contd.

Awarded PPP projects by states & central agencies

(total = 86) source: World Bank



Survey covering 12 states and 3 central agencies and 5 infrastructure sectors.  
Year: 2005



# Verdict on the Private Sector

- Private Public Partnerships (PPPs) bring with themselves several advantages such as
  - The ability to leverage private finance for infrastructure
  - Private sector efficiencies in construction and operations
  - These will be discussed in greater detail in a later class
- As the graphs in the two previous slides show, there has been some PPP activity in Indian infrastructure, but not a whole lot.
- In addition, PPPs in Indian infrastructure have occurred for the most part in the transportation sector, and are concentrated in relative few states in India
- This data indicates that widespread involvement of the private sector in Indian infrastructure has not happened yet.
- However, the government of India is in the process of introducing several schemes that will encourage more private involvement in infrastructure
  - Viability Gap funding for transportation projects is one such example
  - Urban Local Bodies are encouraged to undertake PPPs as part of JNNURM etc



Based on these government initiatives, are we on track to meet our infrastructure needs?

- **Power Sector:** This sector experienced a 24% shortfall in power in relation to the target set in the 10<sup>th</sup> 5 year plan (target was 41,000 MW by 2007)
  - In addition, there was a 25% fall in Hydropower and thermal targets over the 2002-07 period.
- As citizens, we have all experience power outages and water scarcity in recent times.
- **Water and Sanitation:** In 2001, 50% of urban households did not have piped water and 44% had no sanitation
- **Transportation Sector:** 60,000 crores were allocated to be spent in the 10<sup>th</sup> 5 year plan – only 20,000 has been spent so far



# The verdict in the mid-term appraisal

- **“Infrastructure inadequacies** in both rural and urban areas are a **major factor constraining India's growth**. This is especially so in the increasingly open economy environment in which we must operate, where the **quality of domestic infrastructure impacts on our ability to compete** with imports, to penetrate export markets and also to attract FDI”



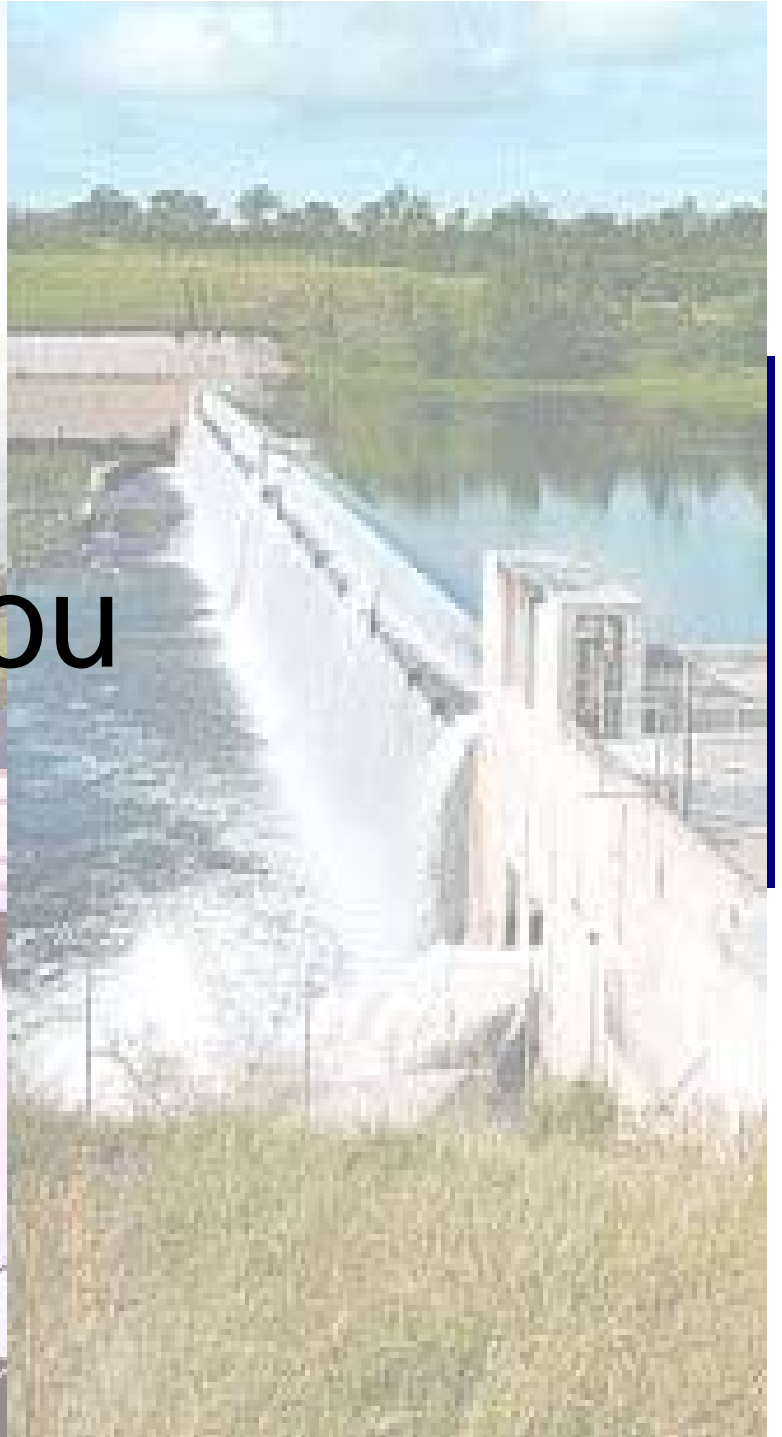
# Conclusion

- India needs a lot more infrastructure to meet its needs.
- The government is focusing on this and has created a set of programs and reforms aimed at addressing this issue.
- However, as the previous slide indicates, current infrastructure is still inadequate and many targets have been missed. There is therefore a lot of work that needs to be done. Business as usual, will not suffice.



# Targets set for the future

- According to the 11<sup>th</sup> 5 year plan, the following infrastructure targets have been set for the future (2007-2012)
  - Additional 10 million hectares of assured irrigation will be created by 2009
  - INR 15,000 Cr to be spent on road maintenance alone
  - 1000+ rural habitations to be connected with roads by 2009.
  - Port capacity will be increased from 520MT to 800MT
  - 575 Million Telecom Subscribers by 2012
  - 60000 MW of new power is to be added by 2012



Thank You

