

Infrastructure at Crossroads



- Gajendra Haldea

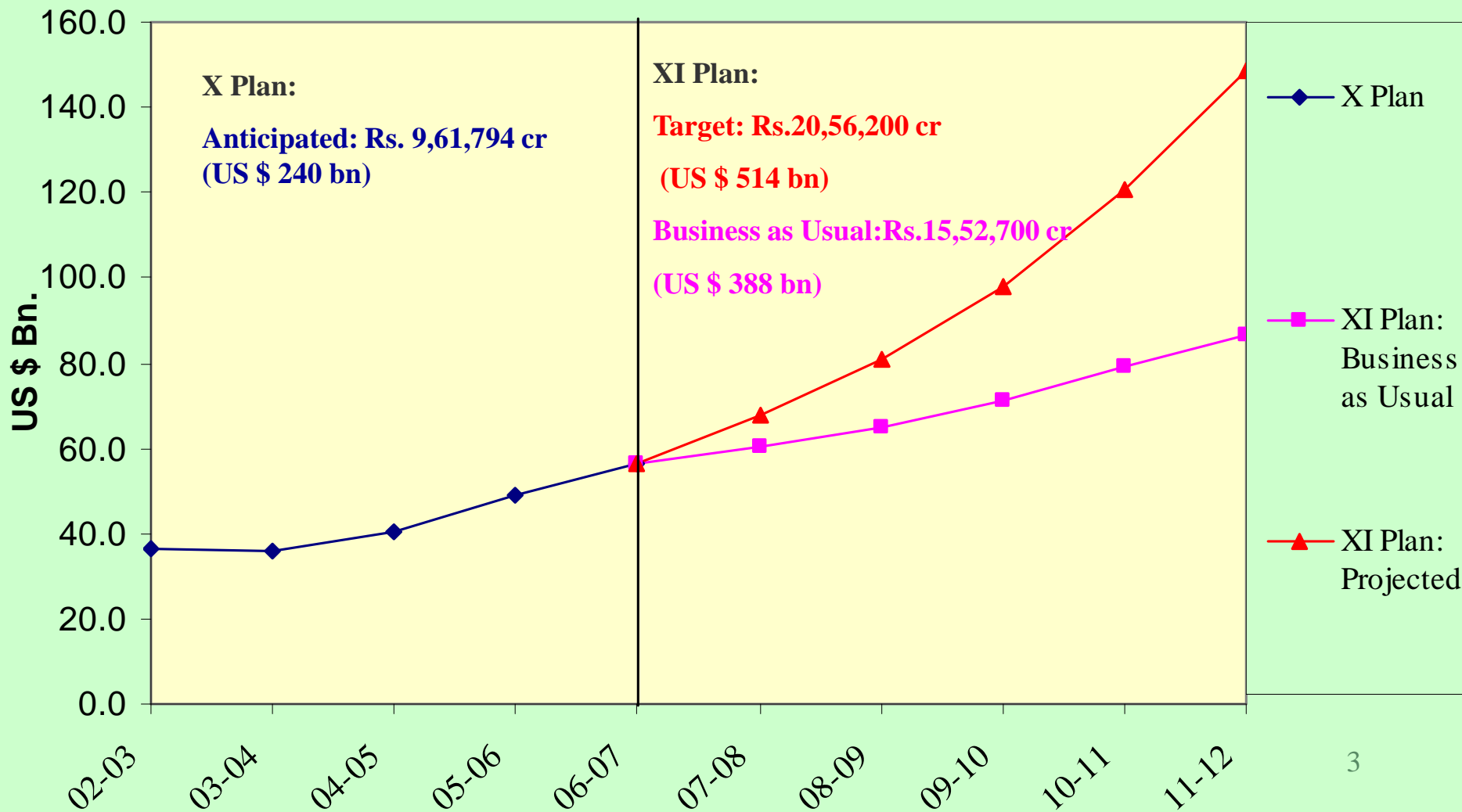
*February 10 , 2010
New Delhi*

The Reform Path

- Economic liberalisation of 1990s did not address infrastructure sectors; remained in command & control throughout the 1990s
- Telecom liberalised by NTP 1999; other sectors followed gradually
- About 5% of GDP invested in infrastructure during 2002-07 compared to over 9% in China & other East Asian economies
- XI Plan envisages an investment of Rs 20,56,200 cr. (2.4 times the X Plan); **targets 9% of GDP** by terminal year
- **Private investment** to rise from Rs 1,72,200 cr. in the X Plan to Rs 6,19,600 cr. in the XI Plan (**3.6 times**)
- Provision of infrastructure is critical for inclusive growth

Scale of the Challenge

Projected Investment in Infrastructure



Overview of Power sector

- **Peak shortage** increased from 12.3% in 2002-03 to 16.6% in 2007-08; **utility losses** increased from Rs 21,400 cr. in 2002-03 to Rs 28,800 cr. in 2006-07
- X Plan target of 41,110 MW capacity addition fell **short by 48%**
- High **T&D losses** (over 30%), **uneconomic tariffs** and **monopoly structure** continue to constrain growth
- Unbundling of SEBs did not usher in competition and associated gains
- Electricity Act 2003 enables **competition & open access**; but monopolist state utilities have **raised barriers**

Private investment in power sector

- **IPPs of the 1990s** were based on negotiated deals with high tariffs; mostly **remained still-born** for want of payment security
- Dabhol (Enron) PPA, the first to receive sovereign counter-guarantee, was rescinded due to unaffordable tariffs
- Renegotiation of some PPAs helped ward off impending 'Dabhols' by reducing tariffs
- Privatisation of distribution in Orissa remains a failure; Delhi attracted the wrath of CAG, PAC etc.
- Both **Orissa & Delhi created private monopolies** unlike in any developed economy

Private investment in power sector (Contd)

- Denial of open access forces producers & traders to **sell only to monopoly utilities**; credible investors hesitate in making investments for want of access to creditworthy consumers
- Deficit states are compelled to buy unregulated, costly power through 'trading' mechanisms that are exploitative
- During 2008-09, about 46 billion units were sold at an average price of Rs 6.4 per unit totalling about Rs 30,000 cr. – **a bubble**
- There is plentiful evidence of regulatory capture
- Power sector is the **most worrisome** aspect of the Indian economy

Overview of Highways

- Over 80% of national highway network (70,548 km) has two lanes or single lane; 71% of state highways are single lane
- Cess on fuels introduced in 1998 to leverage private investment
- NHAI continued with over-engineered **construction contracts** coupled with time & cost over-runs
- Against X Plan target of Rs.74,000 cr for NH, investment was Rs 52,800 cr (**72%**); private investment only Rs 7,000 cr (13%)
- **Resistance to PPP projects** has been the main barrier

Private investment in Highways

- NOIDA toll bridge (1997), the first negotiated PPP, compromised user interests and public exchequer
- Jaipur-Kishangarh NH (2002), **the first transparent PPP**, completed in a record 23 months; best NH project
- Model Concession Agreement (MCA) and bid documents for PPP projects in place since 2006; but continue to attract resistance
- Resistance from NHAI led to award of **less than 20%** of the annual targets during the past 4 years
- Deficiencies affecting PPP projects include **over-engineering and delays in award process**

Overview of Airports

- Air transport has undergone a significant **transformation** over the last five years
- Air traffic during X Plan was 321 m passengers – **24% higher** than the projected 259 m
- **Competition** brought new airlines, better services & lower fares
- Against a target of Rs 6,700 cr. for the X Plan, public investment was only Rs 3,800 cr. (**57%**)
- **Lack of commercial orientation and organisational structure of AAI** were barriers to growth of airport infrastructure

Private investment in Airports

- Private investment in airports quite impressive; **four of India's largest airports are PPPs**
- The privatisation process was beset with **shortcomings** that would unfold over time
- **Hyderabad & Bangalore Airports**
 - **Selection** of project sponsors without a clear framework
 - **Negotiated contracts** were not entirely fair or balanced
 - **Closure of existing airports** to provide monopoly to the new operators led to great deal of public criticism
 - **Higher user charges, lack of oversight on costs**, insignificant revenue share and other terms remain issues of concern

Private investment in Airports (contd)

■ Mumbai & Delhi Airports

- **Flawed selection** of bidders by international consultants had to be discarded; **modified process was more transparent**
- Concession agreements do not provide for **oversight on capital costs** (which have doubled)
- AAI's **share in revenues** has been undermined by *post bid* exclusion of certain inflows
- *Post bid* **increase in user charges** has raised concerns
- Absence of international bidders raises the issue whether the project terms were structured to suit domestic players

Overview of Ports

- During the X Plan, cargo increased by 214 MMT while capacity addition was only 161 MMT (75%); **added to congestion**
- Organisational structure of Port Trusts is **archaic** – ports in developed countries controlled by local governments
- Indian ports inefficient compared to Western and East Asian ports; **turnaround time is high**
- Private participation faces **incumbent resistance**; progress slow

Private investment in Ports

- Private investment was **limited** and also **flawed**
- Concessionaires at JNPT & Tuticorin stalled tariff reduction for several years and secured **ROE of over 100% p.a.**
- Four other terminals awarded, though 'cost plus' regulation based on 'rate of return' is **incompatible** with bidding for revenue share
- Government finally decided to **substitute 'cost plus' tariffs** by pre-determined tariff caps to be notified prior to bidding
- **MCA standardised** after long resistance
- Five projects bid out on new framework

Overview of Railways

- IR functions as **a government monopoly** – lacks incentive structure for efficiency and cost reduction
- **Organisational structure, management practices, and technology base are antiquated**
- Railways have steadily **lost market share to road sector**, despite comparative cost and environmental advantages
- Potential bankruptcy was averted through a re-orientation in commercial policies and robust growth of the economy
- **Turnaround not sustainable since most policies are reversible**

Private investment in Railways

- IR has shown **resistance to private participation** in upgrading infrastructure
- **Privatisation of container train operations** remains the only successful PPP initiative so far
- Option of private participation in **dedicated freight corridors** has been abandoned; DFFCIL functions like an **extended arm of MoR**
- Number of **PPP projects announced over the years** - development of railway stations, logistic parks etc. - **don't seem to fructify**

Overview of Metro Rail

- Urban transport suffers from **inadequate investment** and lack of planning
- Capital-intensive MRTS (metro rail) emerging as the preferred mode for large cities
- **Delhi Metro is unique in character – not amenable to replication**
- Bangalore, Chennai & Kolkata have followed Delhi model; **inadequate project management**, frequent changes of CEO, interference with state & local governments are issues
- **Mumbai & Hyderabad have followed the PPP model; 2 projects progressing in Mumbai; Hyderabad bidding is in progress**

Overview of Telecom

- Tele-density increased from 4.29% in 2002-03 to 18.31% in 2007-08 implying an annual **growth rate of about 34% - a success story**
- Introduction of **competition** and improvements in **technology** led to rapid expansion of networks and **reduction in tariffs**
- **Private sector entered a vacant space** (mobile telephony) – faced less resistance from incumbents
- Expansion in telecom driven by private sector; **public investment declined** from Rs 88,800 cr. in IX Plan to Rs 45,200 cr. in X Plan
- Telecom sector clearly **demonstrates that competition can enable large investments, lower costs and improved services**

Private investment in Telecom

- Private investment in mobile telephony began in 1994 with the auctioning of licences; gathered steam only in 1999 after migration to revenue sharing (**NTP 1999**)
- Private investment in telecom (Rs 55,300 cr.) **exceeded public investment** (Rs 45,200 cr.) by over 20 per cent during X Plan
- Award of new licences, spectrum allocation and preferential treatment to some entities have led to **serious controversies**
- **Growth continues to be robust; over 1 crore subscribers added every month; lowest tariffs in the world**

Conflict of interest

- Private participation revolves around contracts between public and private entities that may have adversarial interests
- **Lack of clarity on conflict of interest** has resulted in several flawed projects causing substantial losses to the exchequer
- Incumbent government players influence regulation of competitors; **players can't be umpires**
- In the case of **NOIDA Toll Bridge**, role of adviser, concessionaire, and lender was combined into one entity – a recipe for disaster
- A private entity formed **50:50 JVs** with several government agencies; led to negotiated awards to the preferred entity

Conflicts of interest (contd)

- In some cases, government's advisers switched over to selected bidders
- External development agencies prefer lending to the government – tend to crowd out private investment
- Though external development agencies support private participation, their loan portfolios are yet to reflect this philosophy
- Government has since streamlined and standardised the documents and processes relating to private participation

Conclusions

- **Rise in infrastructure deficit**
 - Following a robust GDP growth, **demand outpaced all projections** for infrastructure services
 - **Public sector could not meet even the initial investment targets; infrastructure deficit thus increased over the years**
 - **Investment foregone** in infrastructure could be of the order of about **4% of GDP p.a.**
 - No assessment has been made of the adverse effect of infrastructure deficit on the economy
 - **Several constraints arising from the political economy remain – deficit unlikely to decline over the XI Plan period**

Conclusions (contd.)

- Expenditure culture
 - Sub-optimal use of public funds is often driven by desire to award ever-larger construction contracts
 - NHAI gets Rs 6 cr. per km for development of 14,500 km; state governments are given Rs 4 lakh per km p.a. for 52,000 km of NH
 - DFCCIL eminently suited for private participation; but incumbents prefer construction contracts
 - AAI is building large and expensive terminal buildings that would add to its losses and also push up user charges
 - Expenditure culture leads to misallocation and misutilisation causing lower productivity of public investments

Conclusions (contd.)

- **Lack of Accountability**
 - **Non-performance is rarely penalised**; only departures from rule-based procedures get questioned
 - Focus is on **adherence to procedures rather than on outcomes**
 - Targets in the **power sector** have been missed Plan after Plan, and year after year – no one held accountable; **story repeats in other sectors as well**

Conclusions (contd.)

- **Failures of Regulation**
 - **Independent regulation is crucial** as infrastructure services often constitute natural monopolies; **regulatory capture seems common**
 - **Some port operators extracted ROE of over 100% p.a.**
 - **Ad-hoc user charges** have been imposed **at several airports**
 - Users of **toll roads** are better off as much of the regulation is through the concession agreement; but **enforcement is an issue**
 - **Competition has ensured consumer protection in telecom**
 - **Electricity regulatory commissions have failed to introduce competition;** user interests have been compromised
- **Absence of accountability and lack of an overarching philosophy of regulation are the main problems**

Conclusions (contd.)

■ Contract Raj

- Loss of **power and patronage** following the de-licensing of industry in the 1990s has shifted the focus to control over infrastructure
- **Construction contracts are the most preferred mode** of service delivery in all sectors; PPP projects progressing rather slowly
- 'Contract Raj' not only enables the award of lucrative contracts but also creates **fiefdoms in operation and control of infrastructure services**
- Structure of public sector contracts typically leans towards a discretionary framework **amenable to patronage and corruption**
- **Lessons of the 1990s can well be applied** to the infrastructure sectors, if only the **political will** can be sufficiently demonstrated

Conclusions (contd.)

■ Rent seeking

- Absence of competitive and transparent processes in the initial years
- Project agreements were drafted by beneficiaries and then cursorily negotiated with the government, especially in power & road sectors
- Malady of rent seeking and crony capitalism runs across sectors – concessions for port terminals, privatisation of electricity distribution in Delhi, award of telecom licenses etc.
- Deals justified in the name of development; users suffering from low-quality public sector services initially lend support
- Prolonged user exploitation has the potential for discarding replication of private investment. e.g. Delhi power privatisation

Conclusions from the study (contd.)

■ The Brighter Side

- Significant progress during the past few years
- Investment has crossed 7.5% of GDP in 2008-09 as compared to 5% in X Plan
- Four world-class airports demonstrating a complete makeover – air travel grew by about 20% p.a
- Remarkable growth in telecom; private participation in roads & ports accelerated; railways witnessed a turn-around
- Policies & contractual framework that have evolved during recent years have the potential of achieving a very robust growth
- Pressure to improve infrastructure services is enormous; rapid expansion in investment seems certain

Conclusions from the study (contd.)

- **Governance is the Key**
 - In spite of the higher allocations in XI plan, **ability of the public sector to deliver remains doubtful; reliance on PPPs is inevitable**
 - **Vested interests** pose persistent opposition to implementation of progressive policies evolved over the last five years
 - **Critical to weed out crony capitalism & rent-seeking** - the worst enemies of equitable growth
 - Need for **separation of policy & oversight role** from that of ownership & operation of public sector entities
- **State is unable to manage its public sector efficiently; also unable to accelerate private participation on competitive terms – reform of governance holds the key**

Thank You