

Building Infrastructure: Challenges and Opportunities



*- Gajendra Haldea
Planning Commission*

*March 23 , 2010
Vigyan Bhawan, New Delhi*

Infrastructure Deficit

Highways

- 70,548 Km of NH (2% of network, 40% of traffic): only 17% Four-lane; 53% Two-lane; and 30% Single-lane

Ports

- Inadequate berths, rail / road connectivity and draft are constraints

Airports

- Inadequate capacity: Runways, aircraft handling capacity, parking space & terminal buildings

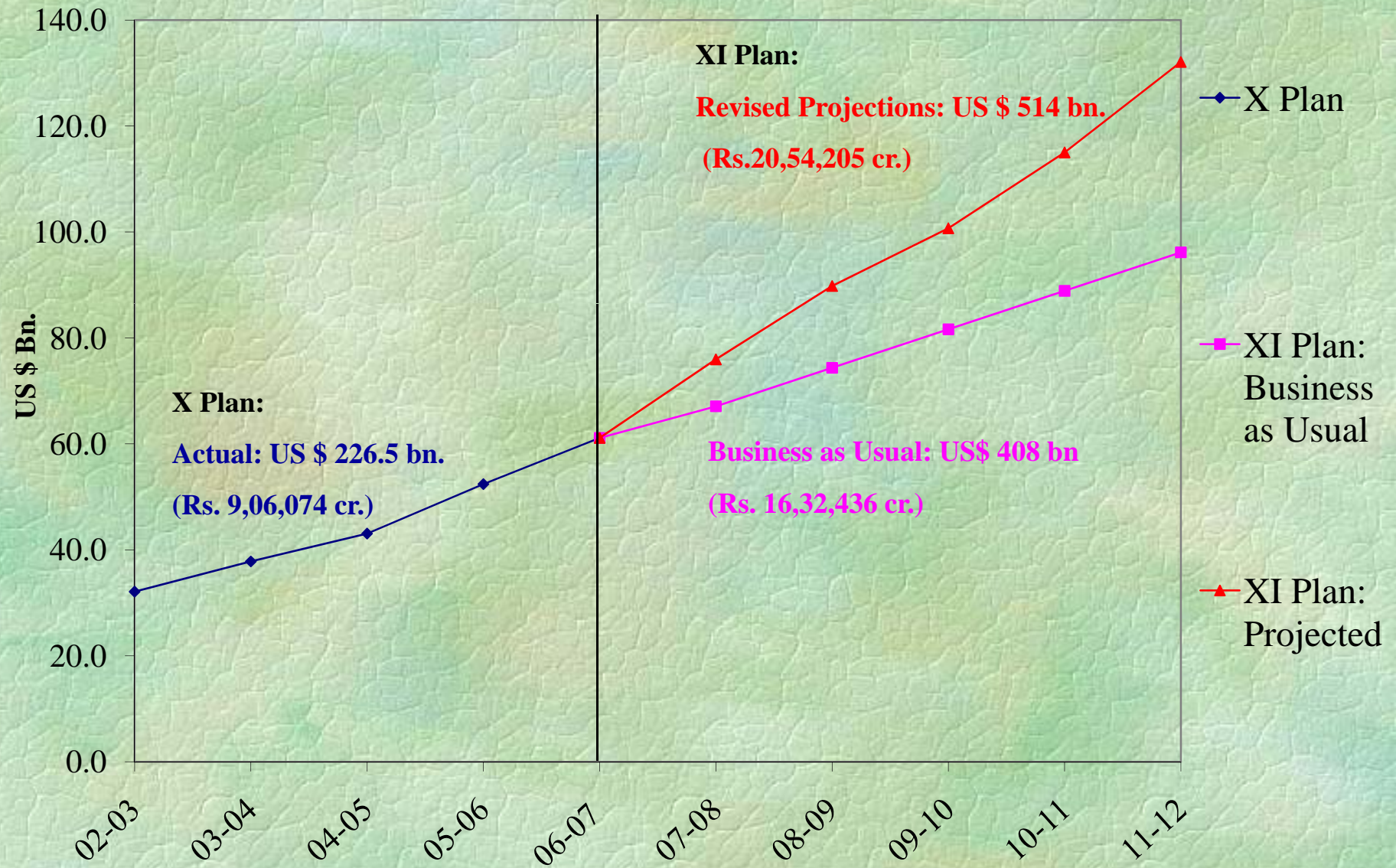
Railways

- Old technology; saturated routes: slow average speeds (freight: 22 kmph; passengers: 50 kmph); low payload to Tare ratio (2.5)

Power

- 14% peaking deficit and 11% energy shortage; 27% T&D losses; absence of competition; and inadequate private investment

Projected Investment in Infrastructure



Projected Investment in Infrastructure (Revised)

(at 2006-07 prices)

Sectors	X Plan		XI Plan	
	Rs. crore	Share (%)	Rs. crore	Share (%)
Electricity (incl. NCE)	340,237	37.55	658,630	32.06
Roads and Bridges	127,107	14.03	278,658	13.57
Telecommunication	101,889	11.25	345,134	16.80
Railways (incl. MRTS)	102,091	11.27	200,802	9.78
Irrigation (incl. Watershed)	106,743	11.78	246,234	11.99
Water Supply & Sanitation	60,108	6.63	111,689	5.44
Ports	22,997	2.54	40,647	1.98
Airports	6,893	0.76	36,138	1.76
Storage	5,643	0.62	8,966	0.44
Oil & Gas Pipelines	32,367	3.57	127,306	6.20
Total	906,074	100	2,054,205	100

Revised Mid-Term Projections

Compared to original Eleventh Plan projections, the revised projections are:

Telecom: (+) 34%

Irrigation: (+) 3%

Power: (-) 1%

Roads: (-) 11%

Water Supply: (-) 23%

Railways: (-) 23%

Ports: (-) 53%

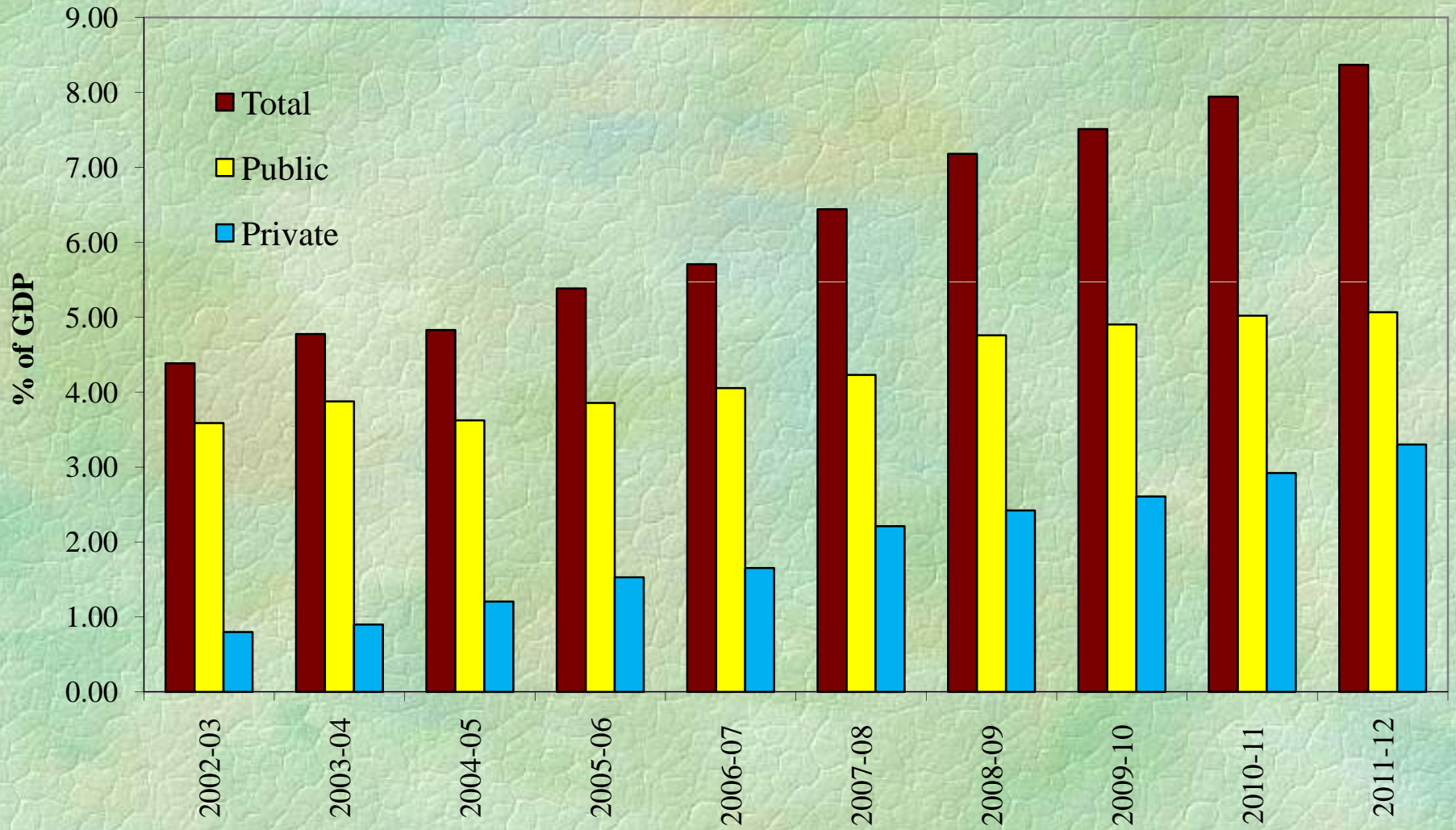
Investment by Centre, States & Private Sector

(Rs. crore at 2006-07 prices)

(per cent share in brackets)

	Tenth Plan	Eleventh Plan
Centre	370,381 (41)	690,926 (34)
States	310,473 (34)	620,367 (30)
Private	225,220 (25)	742,912 (36)
Total	906,074	2,054,205

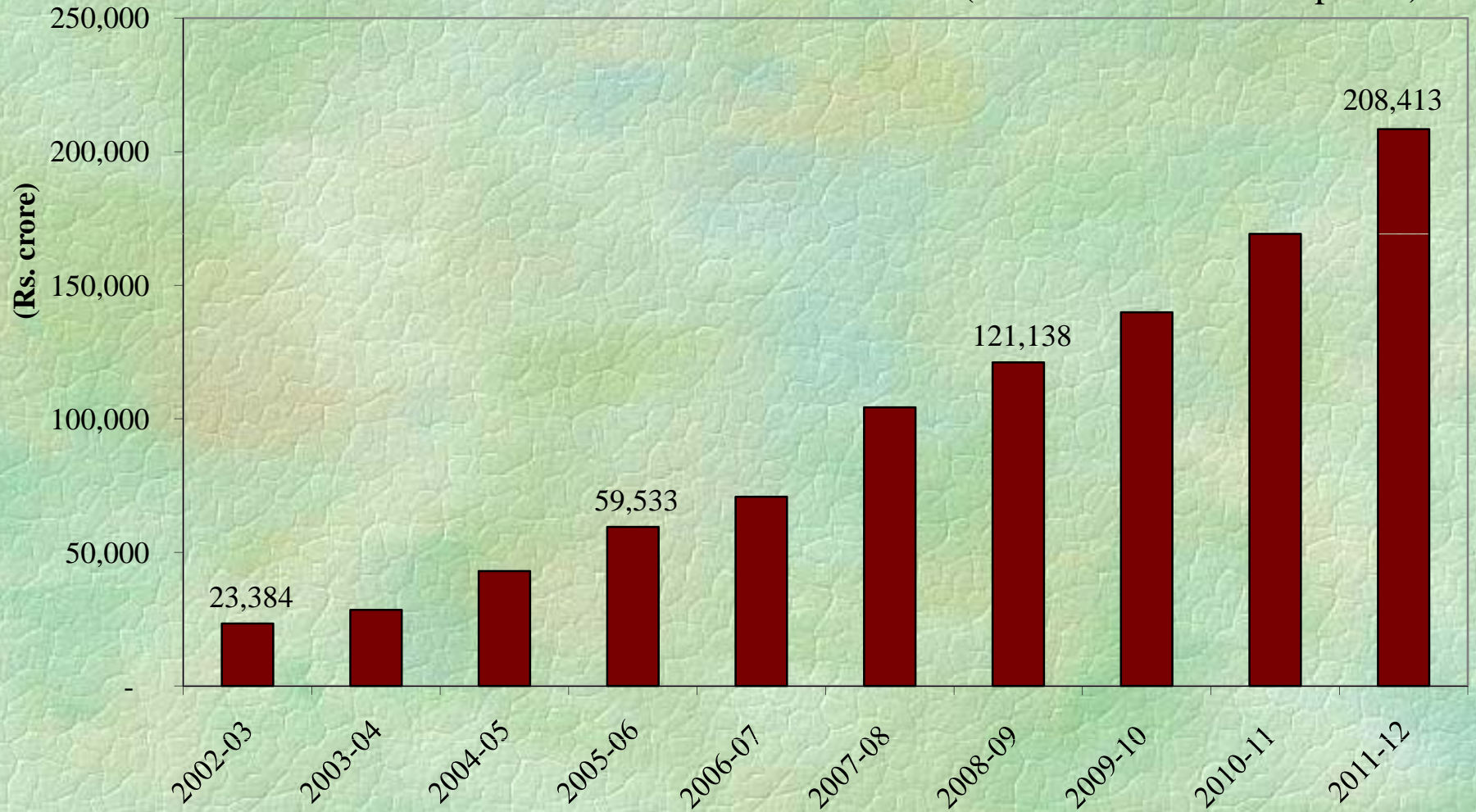
Investment in Infrastructure as % of GDP



Projected figures for 2009-12

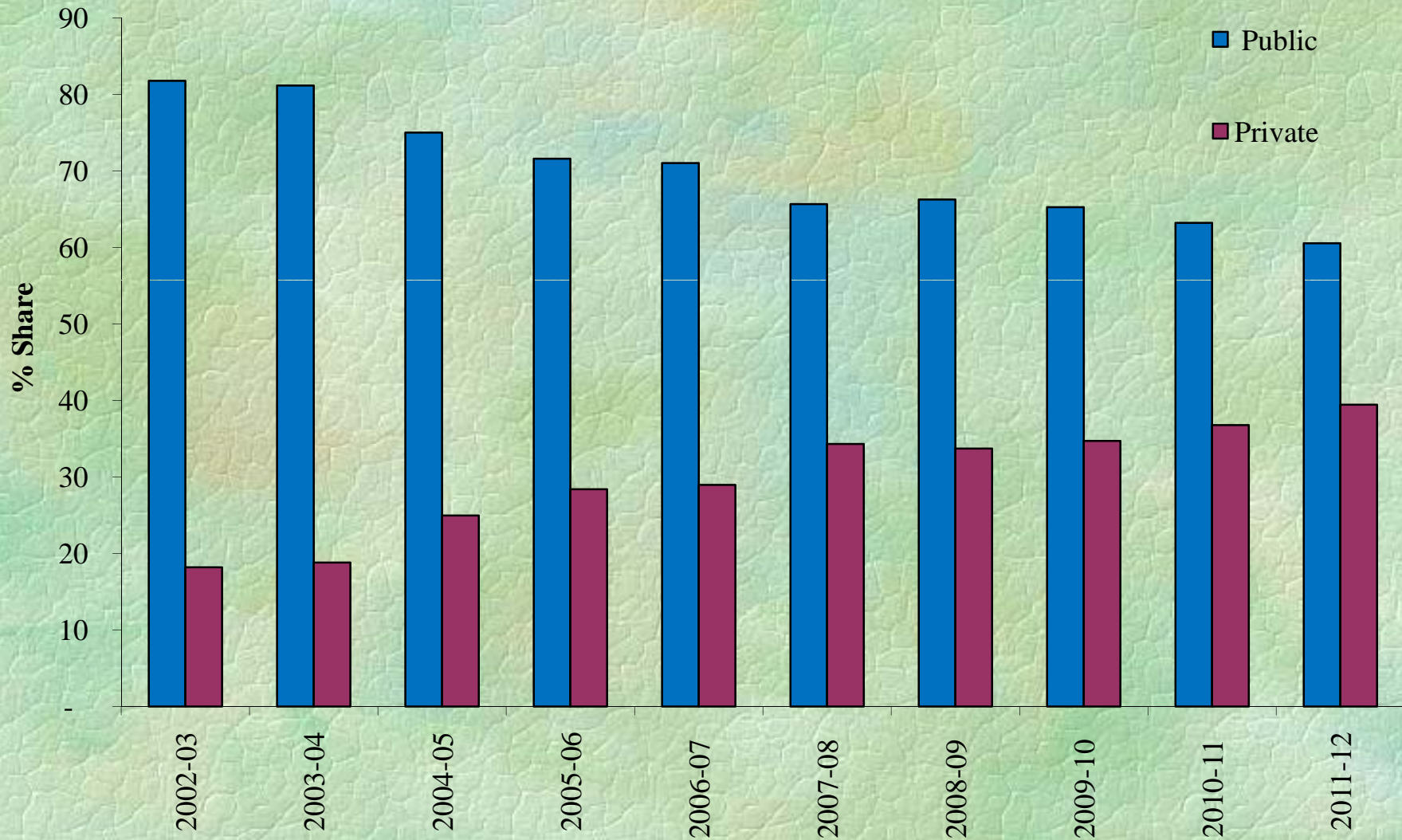
Growth of Private Investment

(Rs. crore at 2006-07 prices)



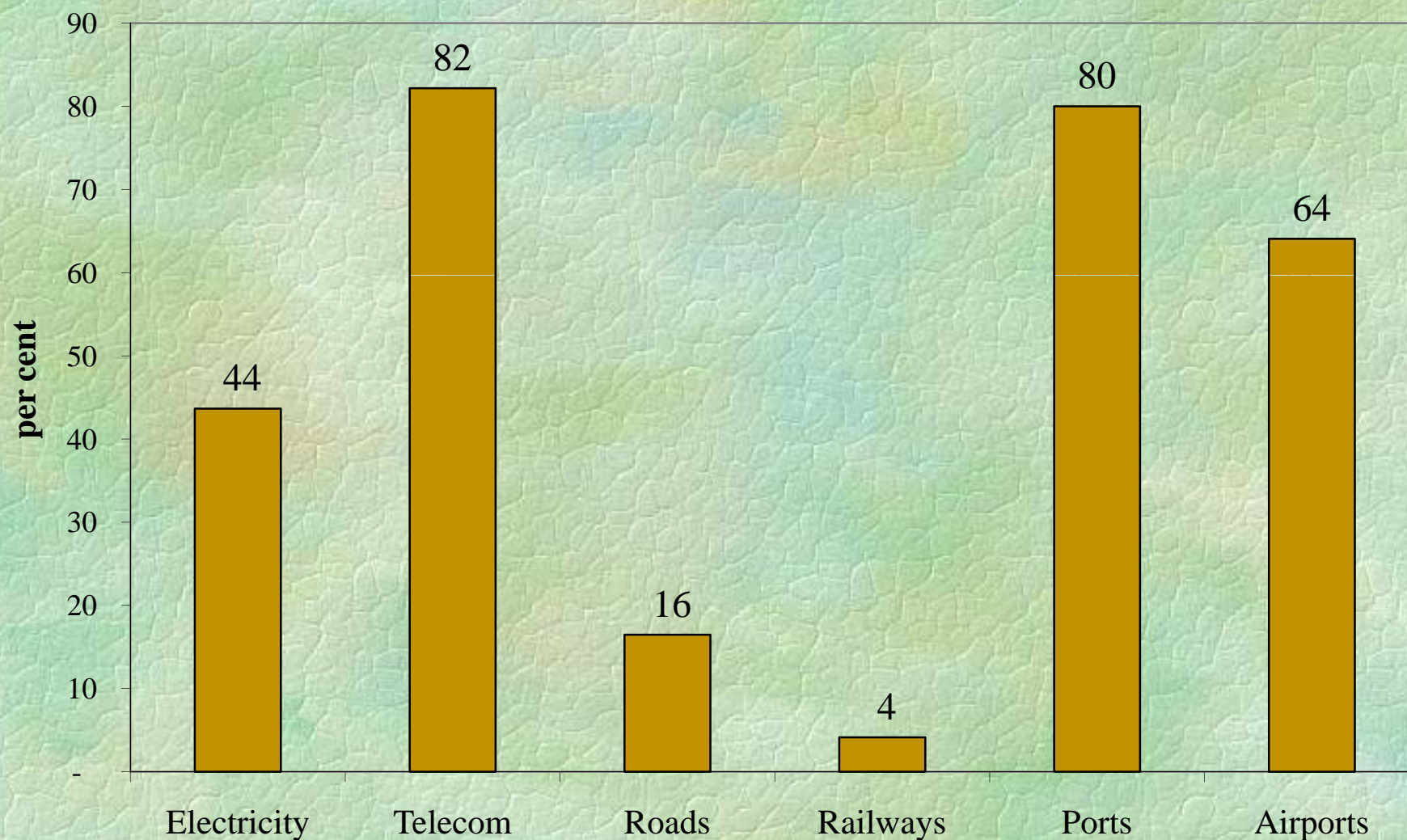
Projected figures for 2009-12

Relative Share of Private Investment (%)



Projected figures for 2009-12

Sector-wise share (%) of private investment during the Eleventh Plan



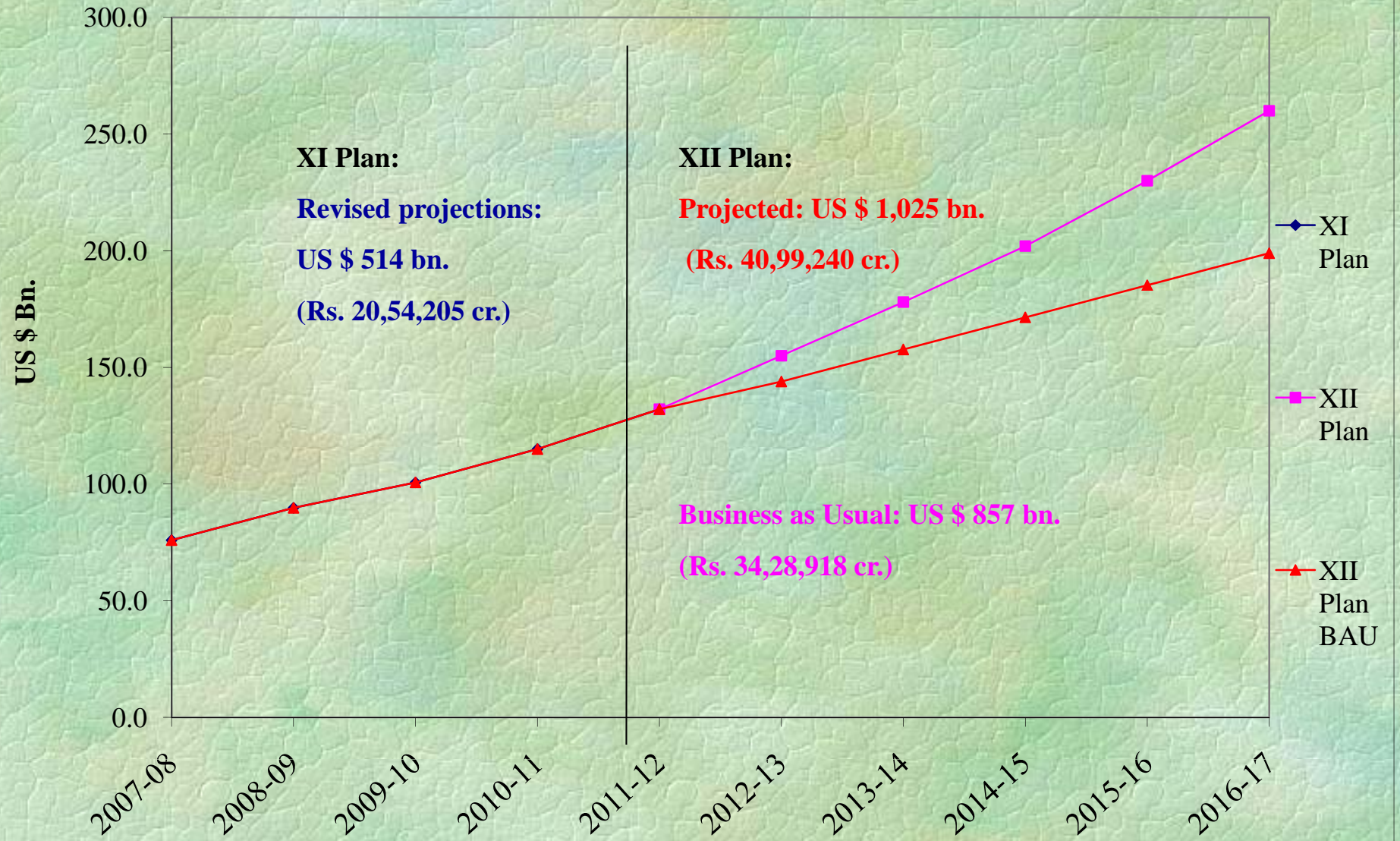
Telecom: A spectacular success story

- Private investment increased from **Rs. 5,936 cr.** in 2002-03 to **Rs. 51,019 cr.** in 2009-10 (8.6 times)
- Share of private investment increased from **28 %** in 2002-03 to **80%** in 2009-10
- Target of 15% tele-density by 2010 was achieved **3 years ahead** of schedule
- Over **1 crore** mobile connections added every month; total of 54.5 crore by February 2010
- **Lowest tariffs in the world**
- **Competition and access to consumers seems the driving force**

Power: Constrained growth

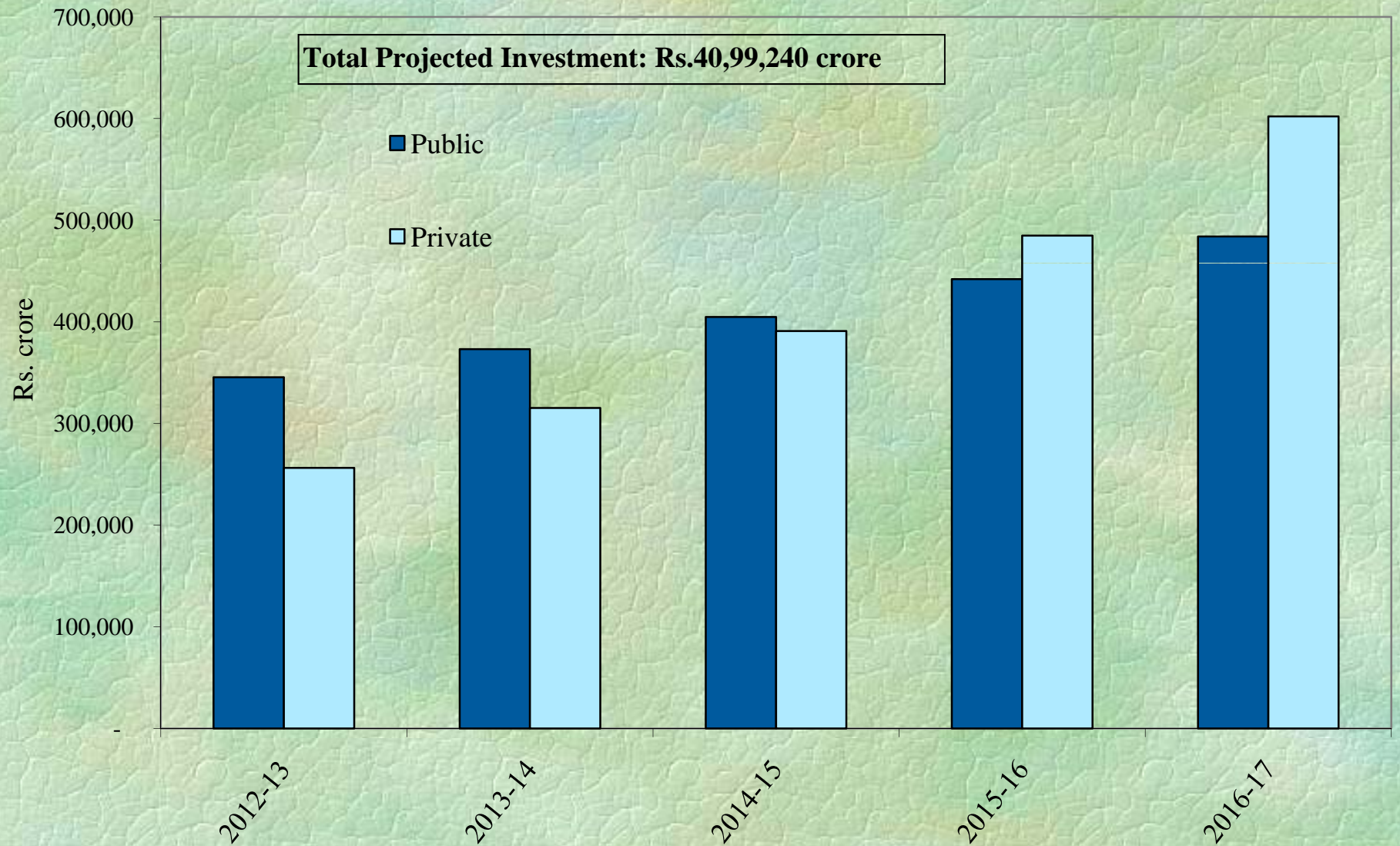
- T&D losses exceed **27%**; provisional losses of **Rs. 40,000 cr.** in 2008-09; **14%** peak shortage & **11%** energy shortage
- About **5,900 cr. units** sold by traders to utilities at average price of **Rs. 5.9 per unit** for **Rs. 33,000 cr.- highest tariff in the world**
- Traded power is purchased by state-owned utilities only; **public sector is the sole buyer** of this high-cost power
- Unregulated trading will increase consumer tariffs and utility losses
- Complete lack of open / last mile access to consumers despite the mandatory provisions of the Electricity Act
- **Absence of competition and access to consumers seems the principal cause for inadequate investment and shortages**

Projected Investment in Twelfth Plan



Share of Private Investment in Twelfth Plan

(Rs. crore at 2006-07 prices)



Policy Challenges

- **Large capacity addition**
 - Time-bound delivery under **budgetary constraints**
 - World class yet **cost effective**
 - Commercially sustainable yet affordable
- **Attracting private investment**
 - **Policy and regulatory framework for PPPs**
 - Institutional restructuring and reorientation
 - Financial support to PPPs

Division of Labour

- **Public Sector to continue, and even expand**
 - Especially in segments that can't be commercialised, such as rural roads
- **Increased reliance on PPPs** for additionality & improved efficiency
 - In segments that can be commercialised, eg. roads, ports, airports & rail concessions
- **Independent private investment** whenever feasible
 - Enable competition in power generation, airlines, container trains etc.

Stages of PPPs

- I. Public sector provision of Infrastructure: **Command & Control**
 - PPP **by exception**

 - II. Introduction of PPPs: **The Transition** - still on in some sectors/states
 - Largely negotiated, often opaque
 - Often **driven by private beneficiaries** (eg. Dhabol, NOIDA bridge)

 - III. PPPs gain acceptability: **Enhancing welfare & efficiency**
 - Transparent, competitive and fair
 - Driven by the government; **good governance becomes the key**
 - Objective is to attract **private capital in public projects**
- **Indian PPP projects are mostly in Stage III**

Governance: Typical Issues

- Unwillingness of incumbents to **cede control** over construction & operation of projects
- Denial of **level playing field**
- Inadequate and inefficient **roll out of projects**
 - The demand for PPP projects is far greater than their supply
- **Incumbent mindset** constitutes a major challenge

The Paradigm Shift: Wider Ownership

- Line Ministries/Departments:
 - often encumbered by incumbent pressures & conflicts of interest against PPPs
 - have inadequate inter-sectoral/ inter-disciplinary exposure
- Successful reform initiatives have universally relied on:
 - political leadership
 - creation of independent & inter-ministerial processes
- PPP has gained **wide ownership** and support across the government. A **paradigm shift** has occurred.

Governance Structure for PPPs

- **Constitution of a Cabinet Committee on Infrastructure (CCI)**
 - Prime Minister is the Chairperson
 - Ministers of Infrastructure Ministries, Finance Minister and Deputy Chairman, Planning Commission are members
- **PPP Appraisal Committee**
 - Appraises & recommends all PPP projects of the Central Government
 - Chaired by Finance; appraisal by Planning Commission
 - Cleared 144 projects with an investment of Rs. 1,30,915 cr. (US\$ 33 bn)
- **Empowered Committee**
 - Approves proposals for Viability Gap Funding (upto 20% of capital costs)
 - Chaired by Finance; appraisal by Planning Commission
 - Cleared 55 projects with an investment of Rs. 39,736 cr. (US\$ 10 bn)

Governance Structure for PPPs (contd.)

- **PPPs have been integrated in the planning process**
- Ministries retain their role but work closely with CCI to develop & implement the vision for world-class infrastructure
- Greater reliance on inter-ministerial and inter-disciplinary dialogue to enrich outcomes and eliminate conflicts of interest.
- Consultations with stakeholders, including users and investors
- **Simplification & standardisation of documents and processes**

Framework Documents

Model Concession Agreements published for PPP in:

- National Highways
- State Highways
- Ports
- Operation & Maintenance of Highways
- Urban Rail Systems (Metro rail)
- Container Train Operation
- Redevelopment of Railway Stations
- Non-metro Airports
- Greenfield Airports
- Procurement-cum-Maintenance of Locomotives
- Transmission of electricity

Framework Documents (contd.)

Model Bidding Documents for PPP projects

- Request for Qualification Document (RFQ) for pre-qualification of bidders
- Request for Proposal (RFP) for selection of bidder
- RFP for Selection of Technical Consultants
- RFP for Selection of Legal Advisors
- RFP for Selection of Financial Consultants

Guidelines for Appraisal, Approval and Assistance for PPP projects

- Guidelines for Financial Support to PPPs in Infrastructure (VGF Scheme)
- Guidelines for Appraisal and Approval of PPP Projects (PPPAC)
- Scheme for Financing through India Infrastructure Finance Co. (IIFCL)
- Guidelines for establishing Joint Ventures (JVs) in Infrastructure

Financial support to PPPs

- Viability Gap Funding (**VGF**) upto 20% of capital costs based on bidding
- **159** central and state projects with an investment of **Rs. 177,365 cr.** (US\$ 44 bn) cleared with a **VGF** commitment of **Rs. 51,629 cr.** (US\$ 13 bn)
- India Infrastructure Finance Company (**IIFCL**) provides upto 20% of capital costs as long-term debt for viable projects
- **IIFCL** has sanctioned **Rs. 21,000 cr.** (US\$ 5 bn) for 125 projects

Some illustrative PPP projects

- Delhi, Mumbai, Hyderabad & Bangalore airports
- Jaipur-Kishengarh and Delhi-Gurgaon Highways
- Two metro-rail projects in Mumbai
- Four Ultra mega Power Projects: Sasan(MP), Mundra (Gujarat), Krishnapatnam (AP) and Tilaiya (Jharkhand)
- Container terminals at JNPT, Chennai & Tuticorin
- 15 concessions for operation of container trains

Initiatives at State level

- States have initiated several PPP projects
- State PPP projects are availing upto 20% of capital costs as **VGF** grant from Central Government
- They are also availing upto 20% of capital costs as long-term loans from **IIFCL**
- **Technical assistance** being provided by Planning Commission
- **Assistance for capacity building** being provided by the Finance Ministry

Way forward

- Reinforce the **enabling environment** for private investment
- Improve the delivery of public sector projects
- Adopt **standardised documents and processes** for accelerating competitive investment flows
- **Leverage budgetary resources** & multi-lateral loans for PPPs
- **Accelerate the roll-out** of PPP projects
- Objective is to create world class infrastructure

Thank You

*For further details please visit
<http://infrastructure.gov.in>*