

Uphill Struggle for Public Benefits

Lessons from Electricity Reform in South Asia

Navroz K. Dubash

World Resources Institute

(Based on work in collaboration with Sudhir Chella Rajan)

Presented at UNEP-IEA Meeting, Paris, May 21-22, 2002



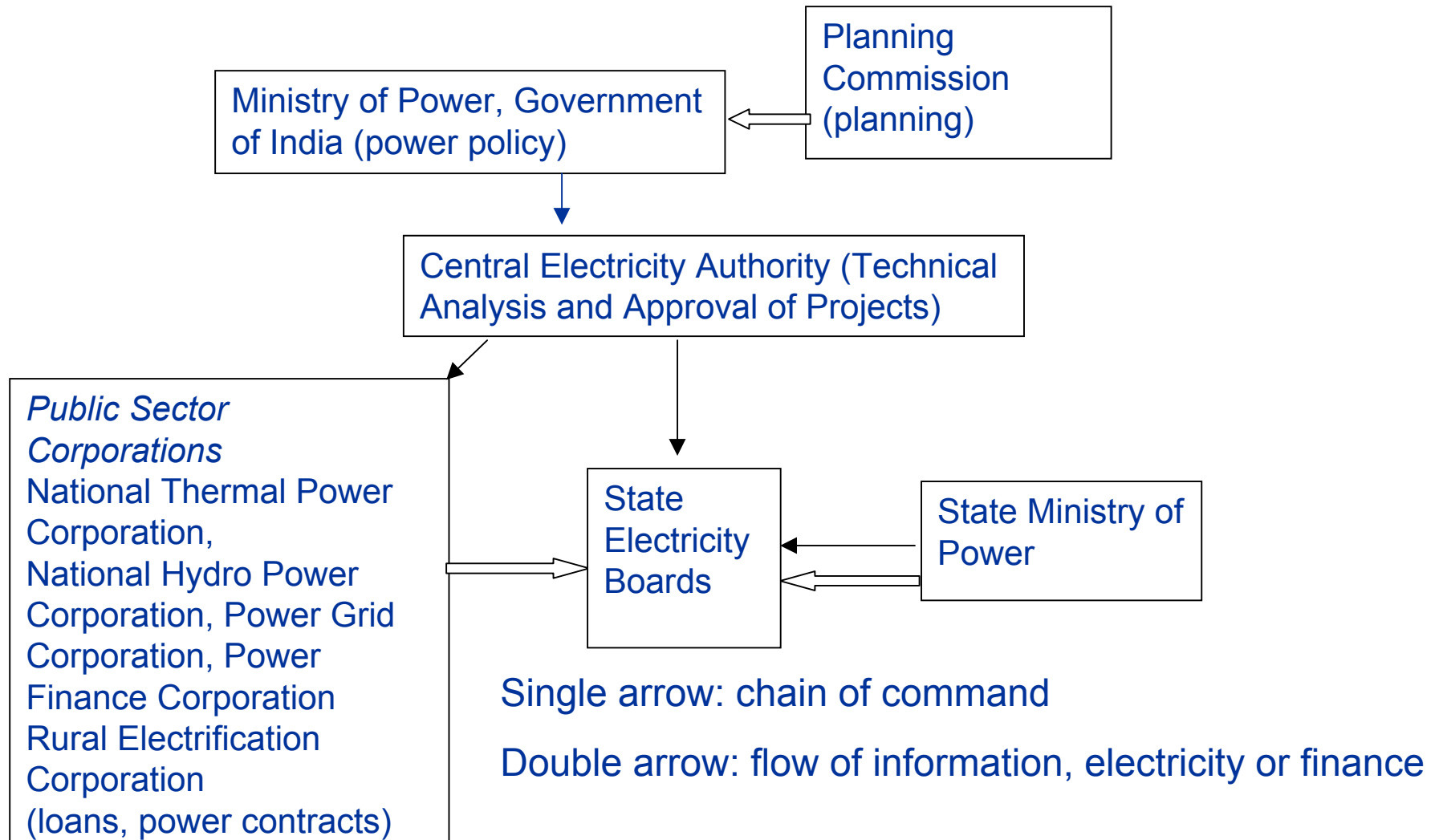
World Resources Institute

Four Periods in the Reform Story

- Subsidies for agriculture, and de-metering
- IPP policy
- Reform of State Electricity Boards (SEBs)
- Central government-led reforms



India's Electricity Sector pre-1991



Subsidies for Agriculture

- Flat rate tariffs for agricultural pumping
- Annual subsidy of \$4.6 billion (1.5% of GDP) for agriculture + residential
- Captured by wealthy farmers => vote bloc
- De-metering
- Soft accounting allowed leaking and theft throughout system including HT lines
- Cross subsidies increased tariffs for industry => captive power
- Result: Technical, institutional and political “lock-in”



IPP Hangover in Asia

- 1991-97: 137 IPPs, 67GW, \$65 billion in contracts
 - Asia: 103 IPPs, \$54 billion
- Generous government incentives, IFC help
- Capacity addition:
 - India: Overwhelming interest; little new capacity
 - Pakistan: Overcapacity
- Undermined electricity institutions
- Non-competitive, non-transparent bids
- Undermined least-cost expansion approach
- Locked into long-term PPAs
- Result: technological, institutional, financial lock in.



State Reforms: Uneven Track Record

- Many SEBs in a technical and financial mess, eg. Orissa (1996)
- Reforms jump-started by World Bank conditions: unbundling, privatization, regulatory agencies, tariff reform
- Distribution privatization has been unsuccessful (Orissa)
 - Limited interest from investors
 - Little new capital invested, and few improvements
 - Public transmission co. carried majority of debt (75%)
- Yet, several states now view privatization as the only credibly way of limiting state involvement
- Some states choose to retain public ownership



Orissa: Public Benefits Record

- Decision-making: relatively closed
- Access not factored into reform agenda
- DSM: “a chair in the corner”
- Decentralization of retail services: village level institutional innovation
- Independent Regulator:
 - Tariff increases tied to T&D loss targets
 - Model web site and commitment to transparency
 - Politically savvy: “Not only one God in the Indian pantheon”
 - Narrow approach to regulatory tasks: no space for social or environmental considerations.



The Central Government Follows

- Electricity Bill 2002 (under debate)
 - Regulatory commissions mandatory
 - Wholesale competition
 - Mandatory metering
- Growing public debate and dialogue
- Grand bargain between states and centre
 - One time settlement of dues + capital restructuring
- Renewable Energy
 - target: 10,000 MW by 2012
 - Proposal: 10% of renewable in mix, up to states to implement
- Energy Conservation Bill, 2000 (enacted 2001)
 - Institutional development, standards, labeling, audits etc.



Social and Environmental Summary

- Short run environmental impact may be positive from basic management and technical improvements.
- Risk of a planning vacuum at the national level
- Short run financial considerations drive reforms
 - Tariffs continue to be a sticking point
 - Estimated 50% of all households can't afford commercial rates
 - State reforms over-shadowed by past financial burden
 - Financial crunch restricts talk and action on environmental and social concerns
- Access concerns absent from electricity reform
- Promising experiment with decentralized distribution
- End-use efficiency efforts at the state level have been growing
- More support for renewable energy promotion
- Mixed story on regulators: potential “lock-in”
 - Efforts at transparency are promising
 - Not empowered to address economic-environmental interface



Messages for this workshop

- Start reforms by deciding analysis of ills and priorities in the sector
- Policy mechanisms are important; how they are sold politically are as important
- Financial arguments are often extremely important for public benefit mechanisms
- Energy efficiency can loosen the tariff constraint and a political constraint
- Electricity reforms should not ignore the need for long-term planning
- Regulators are a critical new leverage point – training workshops with a focus on public benefits can help
- Complex governance-public benefits link



India: Sector Profile

- Installed capacity 103GW
 - Thermal 76%
 - Hydro 21%
 - Rest 3%
- Access to electricity 46%
 - Rural 33%
 - Urban 82%
- Emissions from electricity as % of national
 - CO₂ 47%
 - NO_x 25%

