Governing energy for Sustainable Development: An Analytical Framework for Energy Governance in India: Dr Bibhu Nayak & Ms Veena Aggarwal

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| Conceptual framework                                                 | Defining Governance  
Why Energy Governance Framework for Analysis |
| Challenges in Energy Sector in India                                 | Across availability, Access, low carbon systems                          |
| Actors in the Governance Process and their impact on governance goals| Government, regulator, utility, private players, community/consumers      |
| Some Suggestions                                                      |                                                                         |

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Conceptual Framework
• Governance refers to a process through which a group of people, not necessarily government, set and enforce the rules needed to enable that group to achieve desired outcome (Florini and Sovacool, 2009).

• Governance has much broader ambit, goes beyond the traditional activities of the government and involves multiple actors in varied forms like self-regulation by societal actors, private-public cooperation in solving of societal problems and so on.

• Governance has three major dimensions i.e., institutions, interface/interaction between the stakeholders, and norms of behavior of the stakeholders (Rahman, 2009).

• Good Governance is defined as the ability of the government as well as all other actors involved to ‘deliver public policy objectives in an effective, efficient, equitable, transparent and accountable way’ (Paavola et al, 2008).

• Agencies/actors involved can have conflicting interests

What is Governance?
Academic work on:

- **Environmental Governance**: New institutional economics recognizes the need to involve local actors in decision making (Ostorm, 2006), greater emphasis on inter-generational equity and sustainability.

- **Global Energy Governance**: Treaties and Associations

- **Recent discussions on electricity governance**: Greater consumer/community role and also focus on environment and social impact (WRI, Prayas).

- **Discourse on Domestic Governance**: In countries such as US, Bulgaria focus on issues on governance for ‘sustainable low carbon development’.

- **Limited discourse on Energy Governance in the Domestic Context in India**
Energy Challenges for India:

• Growing economy, growing consumption
• Huge dependence on oil imports
• Large energy and electricity deficit
• Inadequate transport and transmission capacities
• Financial ill health of utilities/companies
• Politics of Subsidy
• Energy Development has impact on environment and community
• Growing international pressure on emissions

Why Energy Governance?
Issues of energy governance classified into three arenas

- Energy Access
- Energy Availability
- Low Carbon Energy Systems
Challenges in the Energy Sector
• Demand /Supply Gaps:
  *Per capita energy consumption in India in 2009 – 585 kgoe (Middle income countries -1268 kgoe, High Income countries 4801.1 kgoe WB 2011).*

• Huge Import dependence for crude oil –volatility in international prices-geopolitics and energy security

• Electricity Deficits (2010/11, the peak and total deficits were 10.2% and 8.8%, rural areas not even 6-8 hours of supply) -fuel shortages

• Depleting coal reserves coupled with production inefficiencies of CIL – higher imports –higher prices – energy security?

**Energy Availability**
Energy Access: A household having reliable & affordable access to clean cooking facilities, a first connection of electricity and then an increasing level of electricity consumption over time (IEA, 2011)

A third of people without access to clean cooking fuel in the world live in India (IEA, 2011). This constitutes 72% of India’s population

Provision for access through subsidies for kerosene, LPG and diesel, lifeline electricity but distortions and leakages in system- subsidies only partially reach the poor

Electricity - Access do not ensure availability- less than 6 hours of supply in rural Bihar (TERI, 2012), Peak hours supply –not even 1 hours, electricity of no use (huge capex in RGGVY)
• India third largest emitter in the world (India’s energy related Co2 emission estimated at 1.6GT in 2010 (IEA,2011) , Lower Per-capita emission

• Electricity generation accounts for largest amount of emissions (energy constituted 58% of a total CO2 emissions in 2007, 65% of the total energy emissions were accounted for by electricity)

• Thermal generation accounts for 67% of total installed capacity.

• Coal dependency to continue - 200GW coal based plants received environmental clearance and another 500 GW in various stages of clearance (Prayas, 2012)

• NAPCC - Focus on Demand side Management

Low Carbon Energy Systems
Actors in Governance Process

- Government
- Utilities/Companies
- Consumers
- Communities
- Private companies
- Legislature
- Independent regulator
- Judiciary

Diagram showing relationships between governance actors.
• Energy & electricity - basic needs-hence politically sensitive
• Energy –primarily state controlled –responds to political pressure
• Subsidies: kerosene, diesel, LPG, electricity
• Ineffective governance of subsidies – malpractices-insufficient reach of the poor
• Energy utilities health suffers- under-recoveries, losses
• Coupled with inefficiencies of monopolies (coal India) under patronage of state government –lower production, higher cost
• Impacts availability and access
• Centre-state issues- Sharing of revenues from resource development
• Sharing of revenue from generation of electricity (Denial of open access)
• Inter-ministerial issues – Lack of Co-ordination (Go-No Go)
• Limited authority of MNRE
• Weak local government -Panchayat

Government: Central, State & Local
1. Coal:
   - Coal India’s inefficiencies
   - Captive blocks not utilized (delayed clearances/private profiteering, go-no go-controversy)?

2. Oil & Gas
   - Health of exploration companies due to under-recovery

3. Electricity- Health of utilities, losses, fuel

Public Utilities: Impacts availability & Access
• Much greater private participation expected in 12th Plan

• Coal
  • still CIL monopoly, private participation only in captive
  • Private players raise concern on quality of blocks, delays in clearances, go-no-go
  • CAG reports discrepancies in coal allocation (Screen committee/competitive bidding)

• Oil and Gas
  • Oil marketing – lack of level playing field,

  • Gas – pricing an issue -- NELP (CAG Reports on RIL) Ruling of Supreme Court on Centre’s Power on Gas Pricing under NELP- private sector vary
    • CAG audit states RIL inflated its capital expenditure for KG-D6 by almost four folds (OEDC/IEA, 2012)
      – efficacy of DG as upstream regulator

• Fuel shortages turns investors in electricity generation cautious (UMPPs, Chattisgarh (ET))
• Major hike in power tariffs in Delhi

• Independent regulators - oversight and level playing field and protection of consumer interest

Private Investment
• To distant policy makers from policy implementation
• Reduce influence on utilities particularly on pricing decision

Regulation in practices:
• Oil & Gas Regulator has limited jurisdiction and its powers curtailed (Section 16)
• Coal regulator still to be introduce- will it have control over pricing
• Nuclear regulator – Legally subordinate to central government, no authority to set rules for nuclear and radiation safety (should be made independent says – CAG)
• Electricity – over a decade of experience. However
  Issues in appointment of regulators
  Pricing still a government decision - subsidy – legal routes & policy directives (Uttar Pradesh, Delhi)
  Under pressure from government regulators find roundabout ways of curtailing pricing hike – regulatory assets, unrealistic performance targets under MYT

Independent regulation
Citizens at work:

- Increasingly aware citizens, both consumers & local community putting pressure on government
- NGO’s
- Public hearings in electricity: Delhi – RWA
- Kundakulam & Jaitapur Protest
- Posco - Mining Protests by local communities
- Protest against Hydro projects
- RTI
Some Solutions

- Energy Ministry or Energy Regulator
- Draw from both success and failure of electricity regulator (success - more information/data, more awareness, greater consumer participation, structured redressal process)
- Direct cash transfer for subsidy
No Power more expensive then no power
Thank you

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