

*Governing energy for Sustainable Development: An
Analytical Framework for Energy Governance in India :
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Energy Security and Development —The Changing Global Context

AES, 2012

IGIDR. Mumbai 25-27th October, 2012

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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 |
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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 (Ostom, 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 Governance

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

Energy Arenas



Challenges in the Energy Sector

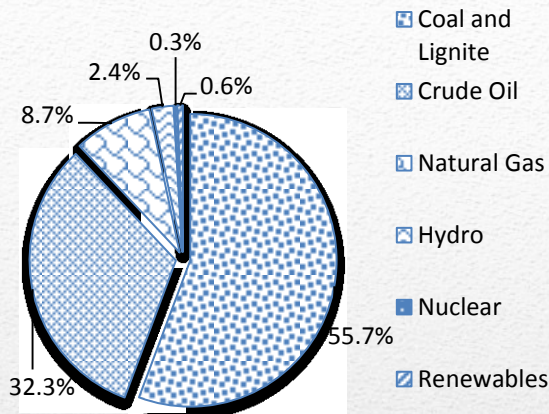


Fig 1. Sources of Commercial Energy in India 2008-09
Source: TERI, 2012, pp 5

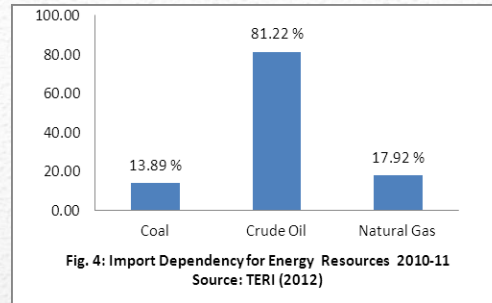


Fig. 4: Import Dependency for Energy Resources 2010-11
Source: TERI (2012)

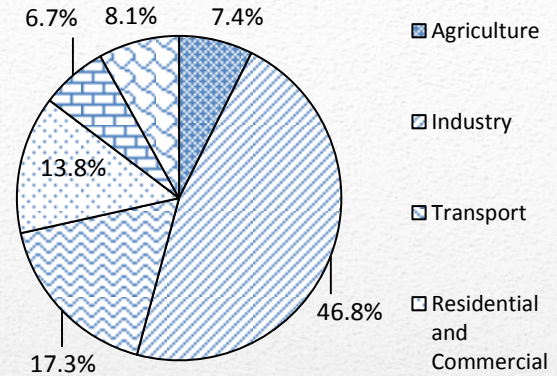
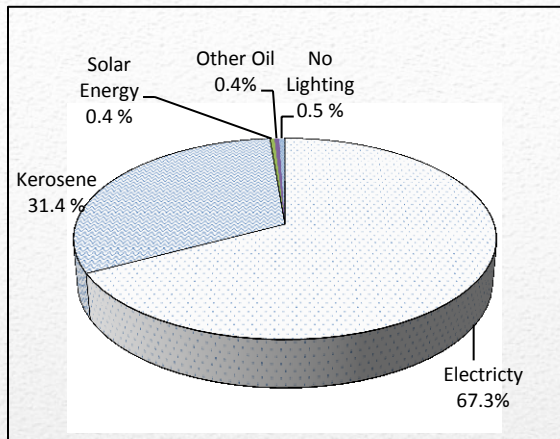


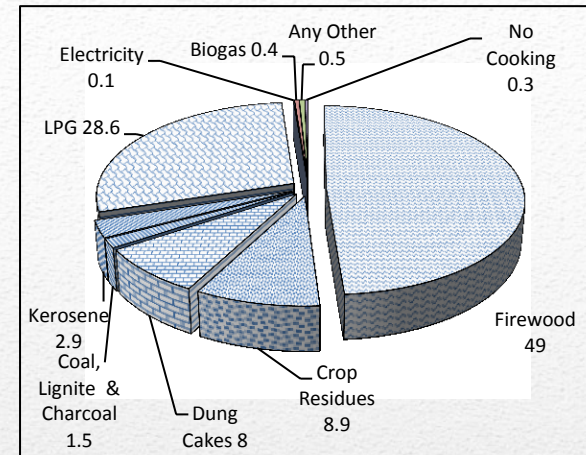
Fig.2-Final Commercial Energy Consumption 2008-09, Source: TERI, 2012

- 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



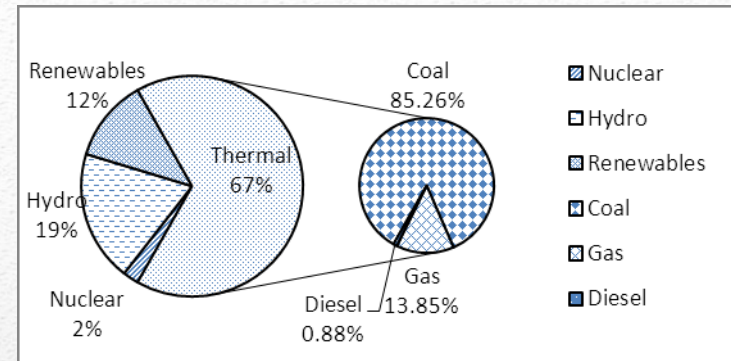
Sources for Lighting for Indian Households (Census.2011)



Sources for Cooking for Indian Households (Census.2011)

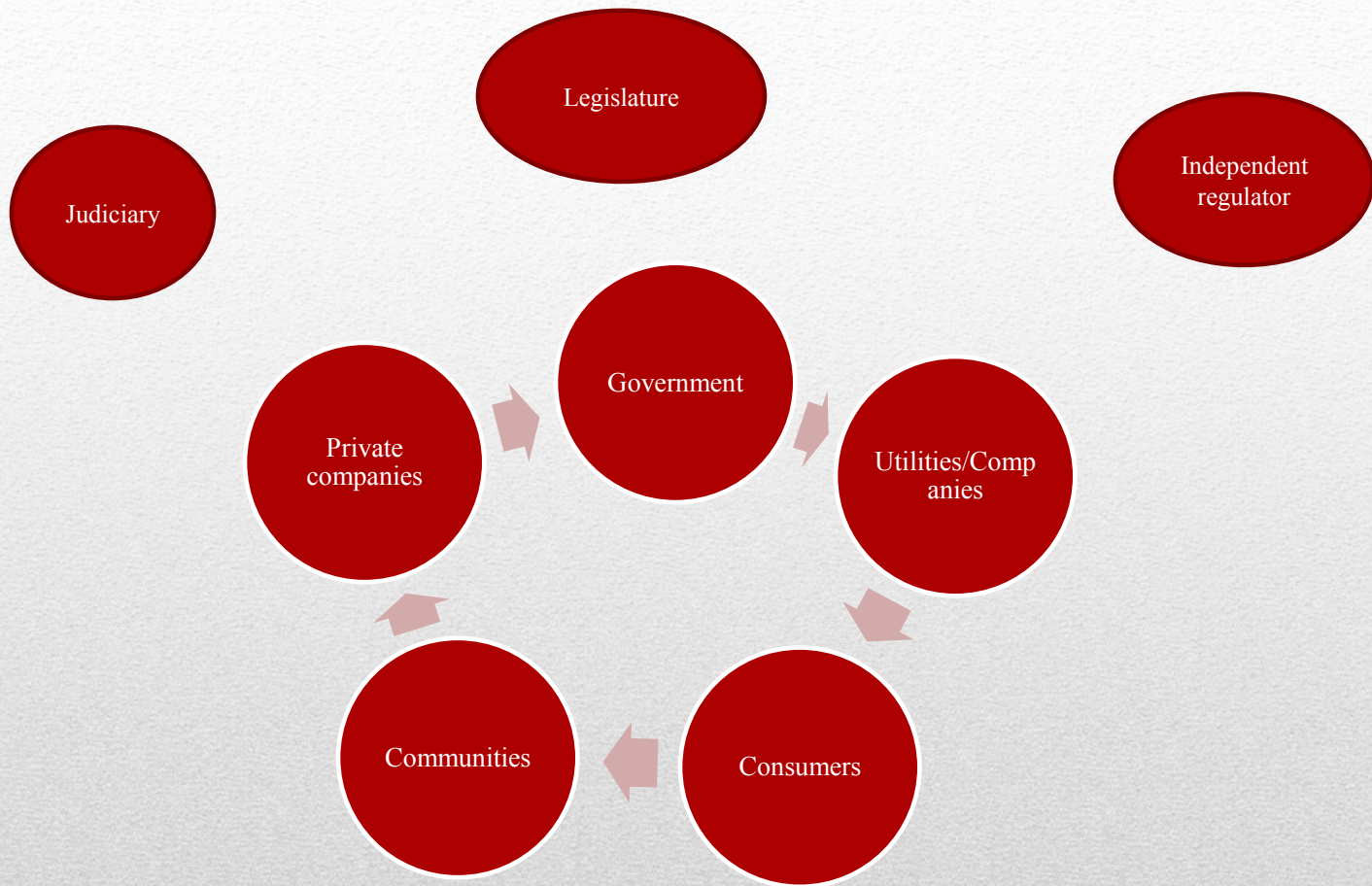
- ***Energy Access : A household having reliable & affordable access to clean cooking facilities, a first connection of electricity and then an increasing level of electricity consumption over time (IEA, 2011)***
- A third of people without access to clean cooking fuel in the world live in India (IEA, 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)

Energy Access



- 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

- 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 introduced- 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

- 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

Citizens at work:

- 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

Some Solutions



**No Power more
expensive then no
power**



Thank you

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