Just Transition: Planning for a Post Coal Future

June 24, Thursday, 2021
Background

- Policy discourse over the last few years in case of a coal phase out has primarily focused on how to best foray into an energy that is green

- The conversation on how a coal phase out will impact the socio-economic paradigm, the local population and the economy has found little relevance

- Concept of ‘Just Transition’ focuses on a sustainable energy transition framework and how it can improve the different socio-economic elements that will be impacted by the transition

- To analyse the same, TERI has formulated two working papers
  - Working Paper 1 - ‘Assessing Vulnerability from Coal Dependence and Need for a Just Transition’
  - Working Paper 2 - Harnessing opportunities for a Just Transition in India
Need for Just Transition

• The coal state’s economic structure and revenue stream
• Loss in livelihood
• Existing infrastructure and vulnerabilities associated with it
• Social capital of the land
• Informal mining sector (*health and security*)
Understanding Challenges (1/3)

Livelihood Issues

- People residing in lowest two wealth quintiles. Chhattisgarh - 59%, West Bengal – 53%, Odisha – 63.8%, Jharkhand – 68% Madhya Pradesh – 54.7% (National Average: 40%)
- Long unemployment spells for coal workers. People may witness an earnings reduction by up to 30% over the next 15-20 years
- 400,000 people skilled annually under govt. programmes. Only few coal workers are skilled annually

Dependence of the state on coal revenue

- Royalty paid from coal mining in India has increased from INR 99.73 billion in 2014-15 to INR 147.46 billion in 2018/19 with a CAGR of 8.14%
- Coal royalty provided 4.2% of tax revenue receipt while 14% of non-tax own revenue receipt for most coal states between 2014-18
- Coal companies also contribute 26% of their profits into the District Mineral Fund
- Royalties received in Chattisgarh, Odisha, Telangana and Madhya Pradesh from coal mines – 15% of total royalty collected
Vulnerabilities arising from phasing out coal

- Mining activities bring basic infrastructure facilities such as schools, hospitals, and construction of improved transportation and communication to remote villages
- Coal India spent INR 19.78 Billion between 2017-20 on CSR
- Coal phase out will put such facilities in jeopardy

- Coal phase out would mean loss of both existing infrastructure and the provision of any future developments.
- Community support and independent economic wealth development will be jeopardized
- Lot of support for women comes from established social linkages. Displacement from land would severely deny them social welfare opportunities
Vulnerabilities arising from phasing out coal

- Jharkhand accounts for close to 300,000 individuals employed within the illegal coal mining industry of which 100,000 are children
- Demand for coal opens employment opportunities in the informal sector, drawing individuals who are impoverished, uneducated, and have few livelihood options available to them
- Gradual phasing out will put the livelihoods of lakhs of people, involved in informal mining activities, at risks.
- Existing regulatory framework cannot comprehensively handle the interlinkages.
Harnessing Opportunities

**Objective**

- **Revenue Augmentation**
  - Increasing Labour intensive industrial activities
  - Supporting land leasing models

- **Rural Entrepreneurship**
  - Enterprise creation around accessible products
  - Opportunities for support services
  - Microfinance Institutions

- **Improved and Sustainable Infrastructure**
  - Bringing private sector initiatives under CSR for upkeep of social infra.
  - Provision of additional grant under untied FC devolution

**Solution**

- Improved rural connectivity (Jharkhand)
- Suppression of resource curse
- Increased private capital inflow
- Creation of a market economy
- Increased employment opportunities
- Improved skillset
- Continued and better access to social services
- Reduce social inequality and improve state’s performance in SDGs
## Action areas

### Improving Overall Paradigm Development

<table>
<thead>
<tr>
<th>Solar Parks</th>
<th>Industrial Parks</th>
<th>Storage Facilities</th>
<th>Developing Rural Enterprise</th>
<th>Access Through Renewables</th>
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<tbody>
<tr>
<td>• 1 job in manufacturing creates 2-3 indirect jobs</td>
<td>• Certain coal States are solar energy hotspots</td>
<td>• Can save 15-20% energy that RE looses</td>
<td>• Rural enterprises around nutritious and accessible food products</td>
<td>• RE products, services, and infra will drive development and help improve QoL</td>
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<td>• Efficient supply chain transportation facilities</td>
<td>• Land lease model of utility solar parks can become a source of revenue</td>
<td>• Can replicate solar parks land lease model</td>
<td>• Will create employment and add economic stimulus</td>
<td>• Pivotal for rural communities as decentralized energy source is an efficient option</td>
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<td>• Jharkhand building 10,000 kms of rural roads, Odisha’s establishing 108 industrial estates</td>
<td>• Rooftop: 24.72 jobs per MW, Utility: 3.45 jobs per MW</td>
<td>• Technologies like gravity energy storage can be installed in deep shaft mines</td>
<td>• National Rural Livelihoods Mission and MFI’s</td>
<td>• Sustainable produce storage solutions</td>
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### Drivers to Support Just Transition

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<th>Augmenting public and private sector financing</th>
<th>Strengthening human Capital</th>
<th>Enhancing Educational Outcomes</th>
<th>Promoting Social Dialogue and Partnership</th>
<th>Bringing Conducive Policies</th>
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<td>Finance infrastructure projects through off-budgeting borrowing mechanism. The process of securitization is another financing route that can be taken</td>
<td>Bringing together relevant stakeholders, skilling initiatives can be undertaken through public private partnerships</td>
<td>For a smooth transition, a resilient workforce is required. The key lies in education and in strengthening school education to build better capabilities.</td>
<td>Through consistent social dialogue building, and creation of task force with government, private sector and civil society to engage with relevant stakeholders</td>
<td>For efficient coordination and implementation, suitable policies addressing barriers, promoting the enabling factors and supporting the smooth transition should be in place</td>
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Conclusion

• Changing environment quality, climate change threats, affordable renewables, suggest a faster transition away from coal in the coming years.

• Potential implications on social equity and distributional impacts in mining-rich states is high and, hence, solicits for a transition that is just and fair.

• Just Transition needs to consider a broad range of social and economic sectors, geographic locations, and diverse stakeholders.
Thank you