ISEP POLICY BRIEF

Year 2018/Issue 1

IN THIS ISSUE

A doctoral student at the Harvard Kennedy school discusses the role of coal in India's economy and why a transition away from coal will be neither easy nor painless. The issues that will arise, both apparent in employment and more subtle in terms of the social role of coal, are discussed and policy recommendations are made to mitigate this impact.

Coal Mining in India.

EMBEDDEDNESS AND PERSISTENCE: INDIA'S COAL INDUSTRY

Rohit Chandra, Harvard University Kennedy School

INTRODUCTION

Coal as an industry is deeply embedded and enmeshed with the Indian state. Since nationalisation in the early 1970s, Coal India (CIL) and its subsidiaries have not only collaborated with the Indian state, but oftentimes substituted for it where state capacity has been lacking, especially in eastern India. Deep networks of financial and political patronage have developed around the industry. For any possible large-scale energy transition away from coal, these institutional linkages will have to be gradually dismantled and hopefully replaced. Such changes are unlikely to happen quickly.

When the Indian coal industry was nationalised in the early 1970s, among the strongest critiques of the industry was its flouting of labour standards. Legally, private mining companies were expected to provide housing, medical care, and contribute to local welfare funds, but in practice they were often able to avoid these costs because of a weak monitoring and regulatory apparatus. While nationalisation did not cure all the ills of the industry, by bringing it within the Indian state it certainly managed to make local welfare spending a more desirable activity. Partially unburdened by the profit motive, CIL and its subsidiaries constructed housing stock for over a million people, opened schools which educated not only mine employees' children but also some of the best students in industrial towns, provided medical services in hinterland areas and mining towns, and built up road, power, and water infrastructure in among the most remote areas and underserved regions of seven different coal bearing states.

Particularly in eastern India, where state capacity was severely lacking, CIL's welfare spending was often a substitute for state public service delivery. State governments often had neither the fiscal means nor the competence for well-distributed local development. Within a 15-20 km radius from a mine CIL had a direct interest in the development of mining neighbourhoods; coal was (and remains) a heavily politicised industry and managing local politicians and residents was key to keeping coal supply chains flowing. Blockading roads and preventing miners from entering mines was common as a strategy to encourage local spending and largesse by mining companies. Consequently, a large chunk of CIL's "labour" expenditures went not just to employees, but to local populations as well.

Naturally, many of these services were politically and socially mediated. Being within the social network of CIL officers, or the patronage networks of influential local politicians in coal-bearing areas made it much easier to get treatment in CIL hospitals, or get children into CIL schools, or get a village electrified or a regular water supply. In fact, in many coal bearing areas, particularly in West Bengal and Jharkhand, being a credible mediator with CIL was essential to being a successful local politician.

Prior to liberalization in the early 1990s, such welfare expenditure was facilitated by the fact that CIL received most of its capital costs from the Central government's budget. Assured financial resources, the company operated more on a loss-minimization basis, than on profit maximization. However, once budgetary support was withdrawn from CIL in the early 1990s, the company faced major financial problems which culminated in $500+ million loan by the World Bank to restructure the industry. Until the company was profitable in the early 2000s, many of these welfare expenditures were scaled back considerably.

However, after regaining profitability in the early 2000s, CIL has emerged as one of the top 100 CSR spenders in the country. Since 2013 there is a stipulation that at least 80% of a regional subsidiaries' CSR spending must be concentrated within 25 km of projects/mines and the other 20% must be spent within the State of operation.

ANALYSIS

There is a techno-optimistic narrative around the rise of renewable energy (RE) and the decline of fossil fuels which seems to extrapolate from short-term market results (eg. capacity auction numbers) to predict a drastic and precipitous energy transition in India. Such predictions ignore the deep institutional roots that the Indian coal industry has, and the potential distributional consequences of a steep decline in this industry. Among Indian state-owned enterprises, CIL is not only one of the largest employers in India (with roughly 350,000 permanent employees, and about 100,000 additional contractual employees), it also has an enormous amount of interaction with local institutions through land ownership and its welfare functions. CIL makes major financial transfers to multiple state exchequers through royalty payments; considering that mining is over 10% of state GDP in certain states, this is a considerable revenue source for mining states. It also supports the perpetually loss-making Indian Railways, since coal accounts for about 50% of all railway freight in India.

"The decline of the coal industry will not only affect the direct livelihoods of at least 10-15 million people dependent on the industry, but will also affect a larger social contract which has existed between the industry and its local populations for decades."

The decline of the coal industry will not only affect the direct livelihoods of at least 10-15 million people dependent on the industry, but will also affect a larger social contract which has existed between the industry and its local populations for decades. Given that only a small portion of the employment benefits of grid-connected RE is expected to reach eastern India, there is the possibility of serious political opposition to the perceived injustices of hasty energy transition. The financial and environmental logic of an RE future may look inevitable, but the speed and modes of transition are far from obvious. And this transition needs to be done thoughtfully and purposefully, rather than as a knee-jerk reaction to RE capacity prices.

"*Our inability to comprehend the behaviour of complex and interdependent wholes – the interactions of biospheric processes, energy production use, economic activities, technical advances, social changes, political developments, armed aggression – makes any specific (and now so commonly proffered) scenarios of distant futures mere speculation.*"

POLICY RECOMMENDATIONS

- *The Ministry of Coal and Ministry of Power should commission a joint study on the fiscal and social consequences of the decline of coal power in India and its knock-on effects. This will go a long way towards identifying the true social costs of a decline of the coal industry.*

- *The recent spate of low prices at RE capacity auctions have led to buyer's remorse among the financially beleaguered and myopic distribution companies (discoms) in India as they look to* *get out of more expensive past power purchase agreements (PPAs). Given that the entire state-owned banking sector is exposed to these PPAs, such a contractual transition must happen at a system-wide level, not sporadically. The Ministry of Power should strongly discourage discoms from try to renegotiate past PPAs unless a larger transition strategy is in place.*

- *Given the considerable exposure of India's state-owned banks to power generation and coal mining and their current problems with non-performing assets, these same institutions should not be taking on further exposure to the industry by financing RE as well. The financing of RE should be left primarily to private investors and banks who will not face the dual balance sheet problems that state-owned banks face.*

Initiative for
Sustainable Energy Policy
Energy, Resources and Environment
Rome Building, 4th Floor
1619 Massachusetts Ave, NW
sais-isep@jhu.edu
@sais-isep
www.sais-isep.org

References

Bhaskar, Utpal, Gireesh Chandra Prasad and Jyotika Sood. "Indian Railways' freight revenues to be hit on declining coal traffic." LiveMint. 31 January 2017. http://www.livemint.com/Politics/rxbHUfflqjCJ9QEDOpO4zL/Railways-freight-revenues-to-be-hit-on-declining-coal-traff.html

Bhattacharjee, Subhomoy. India's Coal Story: From Damodar to Zambezi. SAGE Publishing India, 2017. Ch. 3.
World Bank. 2002. *India - Coal Sector Rehabilitation Project (English)*. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/381761468750023338/India-Coal-Sector-Rehabilitation-Project

Chandra, Rohit. "Renewable Energy and Its Regional Consequences." India in Transition. 15 Jan 2018. Center for Advanced Study of India. http://casi.sas.upenn.edu/iit/rohchandra

Futurescape. " India's Top Companies for Sustainability and CSR 2016." https://www.futurescape.in/india-top-companies-for-sustainability-and-csr-2016/

Ghosh, Amiya B. Coal Industry in India (An Historical and Analytical Account): Part II (1947-1982). Calcutta: Coal India Ltd., 1990.

Indian Railways Year Book 2015-2016. "Freight Operation." http://www.indianrailways.gov.in/railwayboard/uploads/directorate/stat_econ/IRSP_2015-16/Year_Book_Eng/6.pdf

Kumaramangalam, Mohan. Coal Industry in India: Nationalisation and Tasks Ahead. New Delhi: Oxford & IBH Publishing Company, 1973. Print.

Ministry of Coal. "CSR Work by Coal Companies." Press Information Bureau. 13 Aug 2013. http://pib.nic.in/newsite/PrintRelease.aspx?relid=98080

Mishra, Twesh. "Centre to give regulators more teeth to punish PPA-dodging discoms." 26 September 2017. https://www.thehindubusinessline.com/economy/centre-to-give-regulators-more-teeth-to-punish-ppadodging-discoms/article9874476.ece

Siva, Meera. "Mining Royalties." The Hindu Business Line. 25 Aug 2014. http://www.thehindubusinessline.com/opinion/slate-mining-royalties/article6350668.ece

Smil, Vaclav. Energy and Civilization: A History. Cambridge, MA: MIT Press, 2017.

Subramanian, Arvind. Sixteenth Darbari Seth Lecture 2017. TERI. http://www.teriin.org/themes/teriday/darbariseth2017.php

About ISEP

The Initiative for Sustainable Energy Policy (ISEP) is an interdisciplinary research program that uses cutting-edge social and behavioral science to design, test, and implement better energy policies in emerging economies.

Hosted at the Johns Hopkins School of Advanced International Studies (SAIS), ISEP identifies opportunities for policy reforms that allow emerging economies to achieve human development at minimal economic and environmental costs. The initiative pursues such opportunities both pro-actively, with continuous policy innovation and bold ideas, and by responding to policymakers' demands and needs in sustained engagement and dialogue.

ISEP Policy Briefs

ISEP policy briefs are short pieces that use high-quality research to derive important and timely insights for policy. They are posted on the ISEP website and distributed through our large network of academics, NGOs and policy-makers around the world. If you are a scholar or policy-maker interested in submitting or reviewing an ISEP policy brief, email ISEP at sais-isep@jhu.edu.

JOHNS HOPKINS SCHOOL of ADVANCED INTERNATIONAL STUDIES | ISEP