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A REGIONAL POLICY PERSPECTIVE ON ENERGY ACCESS AND JUST TRANSITION IN JHARKHAND

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The Initiative for Sustainable Energy Policy (ISEP) organized a workshop in Jharkhand's state capital of Ranchi on June 4, 2019. Its aim was to understand the energy access situation in the state and how the state can manage the shift towards sustainable energy sources in a just and equitable way. A number of national-level civil society organizations working in the state participated in the discussion. Based on these discussions, this document highlights the barriers and challenges to energy access, power and just transition persistent in the state and tries to identify their plausible solutions.

INTRODUCTION

Over the past several years, the state of Jharkhand has seen a substantial increase in the number of households with access to grid electricity (Jain et al. 2018). Nevertheless, the state's power sector continues to face the twin problems of (i) poor quality and reliability and (ii) significant financial losses in the power sector caused by limited revenue (Chandra 2017). At the same time, the state is making a major effort to increase the state's reliance on renewable energy sources, as exemplified by its effort to expand the state's rooftop solar capacity to 500 MW (Government of Jharkhand 2015). The state needs to take into account the population dependent on coal, as the shift to renewables may present an economic threat to those dependent on the mining industry for their livelihood.



ENERGY ACCESS

In light of recent expansions of energy access, the key issues facing Jharkhand today include not only supplying affordable and reliable energy to all households, but also ensuring efficient delivery of service for the purposes of water supply, livelihood generation, and healthcare and education facilities. In particular, workshop participants identified the following three issues as needing to be addressed:

- a) Poor quality of supply
- b) Power sector financial losses due to billing and collection inefficiency as well as theft
- c) New class of electricity defaulters

About 15 lakhs households in Jharkhand were connected to the national grid under the Saubhagya scheme, and the state government has declared all districts in the state 100% electrified (according to Saubhagya dashboard). However, the quality of electricity supply still remains one of the biggest problems and is marked by frequent power cuts, voltage fluctuations, low quality supply and limited hours of electricity availability.

One reason for the poor quality of supply can be attributed to inefficient distribution of electricity, leading to massive financial losses on the part of the distribution companies (discoms). Technical limitations such as poor maintenance of infrastructure, protection system malfunction and technical faults in sub-transmission and distribution lines results in huge T&D losses. Jharkhand, with 31.95% T&D losses, is one of the worst performers under the Ujwal Discom Assurance Scheme (UDAY) scheme (UDAY Dashboard, Ministry of Power). Out of the 5 distribution licensees functional in state, the state discom JBVNL (Jharkhand Bijli Vitran Nigam Limited) is responsible for catering to the domestic consumers. Due to low power availability from state generation units, the state discom often overdraws power from the central grid resulting in heavy unscheduled interchange charges, thus increasing the cost of power procurement. This further increases the cost of supply to consumers. On the other hand, domestic tariffs in the state are highly subsidized. Low billing and collection efficiency and unprotected distribution lines resulting in electricity theft further widens the ACS (Average cost of Supply) and ARR (Average Revenue Recovered) gap, which is currently Rs.0.54 per unit (UDAY Dashboard, Ministry of Power). Moreover, political patronage to low paying consumers and non-payment of bills by other government departments add to the power sector's woes.

Another challenge amidst the concerted push for more household connections is that of electricity defaulters. Though they have been connected free of charge, many poor households still find it difficult to pay the monthly costs associated with their connections, and many fail to pay their bills and eventually lose connection. This has produced a new group of consumers called defaulters, who are connected on paper but no longer continue to enjoy the services and have difficulty re-connecting.

POWER AND JUST TRANSITION

Jharkhand is the second largest coal producing state in the country, making its economy as well as its power sector significantly dependent on coal. Transition towards renewables will have to take into consideration a number of technical, social, financial and governance issues.

Workshop participants identified three key issues the state's power sector will need to face in this regard:

- a) Alternate livelihood creation
- b) Appropriate use of the District Mineral Fund
- c) Electric utility to participate in transition & sustainable discoms

The coal industry in Jharkhand employs just 2.3% of the workforce in the state formally. However, all 7-8 major coal districts in the state have significant populations which depend on the industry for their livelihoods. They are either involved in contractual jobs, loading and transportation, collecting coal and selling it in the nearby market, or other related activities. As renewable energy sources become a larger source of energy generation, a considerable population in these districts would lose its primary source of income. According to reports, coal jobs in India, in the period of 2000-14 have declined by 1.8% per year (Spencer et al. 2018). Alternate livelihood opportunities for population are limited geographically. The land is no longer fit to carry out agricultural activities and people have limited skills. It is often hoped that renewable energy industries will offer many new job opportunities that will offset these job losses from the coal industry. But most of these jobs are either one time construction jobs or O&M jobs that would require a very limited workforce (Jairaj et al. 2017). Thus on the socio-economic front, the state needs to take into consideration the following questions: (1) what are the jobs that will be created (and lost) under a transition to renewables?; (2) whom do they go to?; (3) what are the skills required for new jobs and placement opportunities for those who lose their jobs? An elaborated livelihood assessment research can help the people identify alternatives to their present livelihood activity and discourage mining.

One source of institutional support for a just transition already exists in the form of the District Mineral Foundation (DMF). The DMF is a non-profit body created to work towards welfare of people and areas affected by mining and is funded generously by the mining companies. Jharkhand is the second largest state in terms of DMF collection. These funds should be targeted towards livelihood creation, skill development, and economic security of the local population. However, care needs to be taken so that the possession of DMF fund does not become yet another reason to promote mining.

Transitioning from coal to renewables is more of a challenge in Jharkhand due to the condition of its power sector. Discoms will remain crucial players in the power sector, and thus the transition needs to address their technical and financial concerns. The Ministry for New and Renewable

Energy in India is already roping in discoms to promote RE, and they are the prime drivers of the KUSUM and solar rooftop schemes. However, manpower crunch, lack of technical skills and lack of awareness have resulted in slow growth of renewable energy projects in the state. Moreover, the rise of renewables is likely to impact discom finances differently depending on which consumers make the shift. Because commercial and industrial consumers cross-subsidize agricultural and households consumers, they have the greatest incentive to adopt renewables, but such a shift would have an enormously negative effect on discom finances, causing them to lose major sources of revenue. Thus, there may need to be different solutions for different consumers.

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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.

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