# Livelihood opportunities for a Just Transition in Jharkhand





India has committed to achieving Net Zero emissions by 2070, which rests primarily on transitioning its economy to clean energy sources. Over time, this would mean India phases out fossil fuel sources of energy. India's clean energy transition must be planned in a way to benefit the vulnerable communities most impacted by this i.e. an estimated 13 - 20 million people directly and indirectly dependent on the coal sector. The economy of many Indian states such as Jharkhand, Chhattisgarh, Bihar and several others, is driven by the revenues generated from the coal sector. In the absence of Just Energy Transition plans, the livelihoods of millions of coal workers and associated industries are at risk.

As of March 2021, Jharkhand has 113 operational mines that account for 26% of all coal mines in the country, and generates more than 115 MT of coal every year. The state supports nearly 300,000 direct coal mining jobs, 38% of all such jobs in India. The impact of energy transition in Jharkhand on these jobs and the gaps and opportunities for alternate livelihoods requires further research and analysis.

To this end, Climate Trends, in partnership with EY, undertook a perception study of 6,000 respondents covering 4,000 organised workers in the supply side (mining) and thermal power plants, and 2,000 unorganised workers in 5 districts of Jharkhand, as well as 26 policy and sectoral experts working at the national and state level. The districts include Bokaro, Dhanbad, Chatra, Ramgarh, and Ranchi. The study captures the perceptions around 'just' transition from a supply, demand, and policy perspective, and provides recommendations that will lead to inclusive and sustainable growth for people working in the coal sector.



### **Key Findings**

#### PROFILE OF THE RESPONDENTS

81%

of respondents were male with over 72% falling between the ages of 18 - 45, and needing upskilling.



of the respondents have been employed in the coal sector for over a decade, due to lack of other employment opportunities. >50%

respondents believed that the coal sector is the only available source of employment in Jharkhand.

of respondents had an employment contract with coal sector companies.



1/3rd

of the organised workers had obtained at least a primary level education.

informal jobs for one formal job





1/3rd

of all supply side mine workers and unorganised workers suffer from diseases caused by dust from coal mines.

28%

of these suffered from silicosis and 25% suffered pneumoconiosis.

60%

supply side mine workers and 90% thermal power plant workers were unaware of coal mine or power plant closures.

34%

of those who reported hearing about coal mine closures, feared losing their livelihoods due to coal mine closures raising.

#### ADAPTIVE CAPACITY AND FINANCIAL STABILITY OF WORKERS



respondents believe that they did not have the prerequisite skills required for getting employed in alternate sectors.



of respondents did not have any savings to provide a small buffer in case they lost their current employment.





#### **ALTERNATE SKILLING AND EMPLOYMENT OPPORTUNITIES**

94%

of respondents reported not having participated in any training programs, indicating a major gap in any upskilling planning.



were willing to get engaged in skilling or reskilling programs. 24%

were involved in trainings for the renewable energy sector out of the 6% who received any training for alternate livelihoods

150 GW

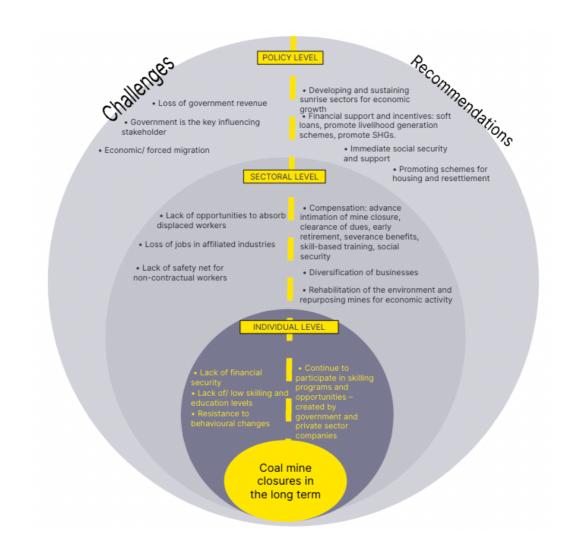
of solar potential in Jharkhand, the state must prioritise upskilling programmes for workers across the coal value chain 32%

respondents ranked agriculture and allied sectors as preferences for alternative livelihoods

82%

of respondents also preferred migrating within Jharkhand, in search of alternate livelihood opportunities.

### LONG-TERM MAPPING OF CHALLENGES AND RECOMMENDATIONS ACROSS POLICY, SECTORAL, AND INDIVIDUAL LEVELS



## LONG-TERM MAPPING OF CHALLENGES AND RECOMMENDATIONS ACROSS POLICY, SECTORAL, AND INDIVIDUAL LEVELS

	Overlapping policy & individual level	Overlapping policy & sectoral level	Overlapping sectoral & individual level	Overlapping across policy, sectoral and individual
Challenges	Increasing livelihood dependency on the coal sector in the short term due to the high demand for coal	Substantial dependency on Central Government Lack of finance for just transition and alternate livelihoods	Closing of small and underground mines in the short term	Lack of awareness of mine closure timelines and government plans at the state level and among coal industry workers  The future speed of advancement in the energy sector is uncertain
Recommendations for <u>State-level</u> policymakers	Mapping skill sets of coal sector workers, especially for unorganised and indirect workers, with existing industries in the state that have the potential to growl	Advocate for coal sector workers to relevant stakeholders in the Central Government in terms of 'just' transition preparation and preparing for an alternate livelihoods plan  Quantifying the level of investment needed for just transition and identifying the sources of funding for the same	The Government may make it mandatory, through orders, for private companies to inform the government which mines they plan on shutting at least a year in advance so that timely action can be taken to rehabilitate displaced workers	Commission district-level reports on the current status of the region's economy (like the type of jobs, social spending etc.), to plan for a 'just' transition in coal-dependent economics  Identify sunrise sectors to catalyse investment in them, especially in areas where mines already exist  Establish a state-level joint committee as a backbone organisation to enable stakeholder representation in the coal ecosystem to facilitate and convene on activities specific to the state  Facilitate open forums and seminars to explain coal phase down activities and tentative timelines and assuage workers' concerns regarding jobs and loss of livelihood
Recommendations for <u>National-level</u> <u>policymakers</u>	Taking cognisance of the impact on unorganised workers and the local community arising from mine closures, the 'Guidelines for the Management of Mines discontinued/ abandoned/ closed before the year 2009' should be updated. Further, the guidelines may consider employment generation when planning the repurposing of land in and around closed mines.  Such guidelines may be piloted with coal companies that are in the process of closing mines to test its effectiveness	Using the G20 presidency as an opportunity to set national priorities for a just transition and ensuring the same are shared by State Governments.  Updating 'Guidelines for the Management of Mines discontinued/ abandoned/ closed before the year 2009' to include suggestive plans to accommodate workers affected by mine closure through steps such as providing temporary income support, providing training to displaced workers, connecting workers to potential employers  Enabling the inclusion of net-zero and energy transition goals in the central banks' mandate for percolation to the rest of the financial sector  Establishing a cess for just transition activities		
Recommendations for other stakeholders		Coal Industry (PSUs): Support the state government in terms of skill set mapping at a district level and trainings for organised workers  Coal Industry (Private): Invest in sunrise sectors identified by the state government  Financial sector: Private and public banks may look at further aligning their portfolio to address climate change, including just transition to encourage the private sector and corporations to invest in related projects	Coal Industry. (PSUs): May provide severance pay and benefits to workers that will be losing their jobs. May relocate their employees to new mines that they will be opening while ensuring travel and relocation allowances for the same  Coal Industry (Private): Private companies operating coal mines should adhere to government guidelines and as mandated by the government, they should share their yearly mine closure plans with the government at least a year in advance so that timely action can be taken to rehabilitate displaced workers  Individuals/Coal Sector Workers: Both organised and unorganised workers may be proactive and participate in training, skill development and education programs of the government	