

FRAMING

JUST TRANSITION

IN INDIA:

Context, Opportunities,
& Challenges

Proceedings

Key Insights and
Recommendations



Table of Contents

1. Introduction	3
1.1 Objectives and Themes of the Events	4
2. Details of the Knowledge Exchanges	5
2.1 Summary of the Workshop	5
2.2. Summary of the Online Exchange	7
3. Key Lessons and Recommendations from the Events	10
4. Conclusion	11

1. Introduction

The need to address just transition is being realised globally. Countries are making the climate crisis-induced transition away from an energy sector dominated by fossil fuels towards the one based on renewable energy sources. With its roots in labour union movements, just transition denotes framing an inclusive and equitable process of transitioning energy sources so that the livelihood and security of fossil fuel workers are not compromised. As the transition unfolds, the challenge for countries is to adapt this concept to their national contexts and incorporate it into actual policymaking. The acceptance and legitimacy of the changes must come from the people and communities who are directly or indirectly dependent on the current fossil-fuel sector—the sector that will be most acutely affected by the transition.

India, due to its deep-rooted, historical, and socio-economic dependence on coal, has a more complex challenge than other nations. First, the fossil-fuel sector is riddled with socio-economic inequalities in terms of caste, indigenous identities, and gender. Second, the coal-rich regions have remained economically backward and less dynamic and diverse in terms of employment opportunities, resulting in people depending on employment in coal mines. In the transition process, this lack of economic diversification will deepen the problem of unemployment and underemployment. Third, a large section of the informal workforce further complicates the process. India has an entire value chain with multiple sectors, such as railways and steel etc., that depend on coal. If this workforce are not considered properly, they are at the risk of being excluded from any sustainable livelihood opportunities and ecosystem rehabilitation.

The above points highlight the need to introduce the notion of justice in the transition process so that the existing structural inequalities are not carried forward to the new energy systems in the making. For India, just transition planning would demand a significant push in the long term, given the impacts of the energy transition on multiple stakeholders, including the workers, communities, and government revenue systems.

Under the Indo-German technical cooperation project 'Supporting the Institutionalisation of Capacities on Climate Change Studies and Actions (ICCC)', the Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, and the Just Transition Research Centre (JTRC) Department of Humanities and Social Sciences, Indian Institute of Technology Kanpur (IITK) organised the workshop 'Framing Just Transition in India: Context, Opportunities, and Challenges' with various stakeholders, including central ministries, coal industries, NGOs, and academicians involved in the just transition process. The overarching aim is to brainstorm and capacitate stakeholders from national, state, and regional contexts on the issue of just transition in India via an exchange of knowledge and understanding.

GIZ India implements the ICCC project on behalf of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety, and Consumer Protection (BMUV). Among the various objectives, the project promotes dialogue and knowledge exchange among governments, research institutes, academia, and civil society organisations to coordinate actions on climate change, contributing to India's climate goals as well as the Sustainable Development Goals (SDGs).

1.1 Objectives and Themes of the Events

The two events had the following objectives:

1. Building knowledge on ways to mould the concept of just transition in the Indian context and sensitising various stakeholders in relation to this concept. The themes linked to this objective are as follows:

- Communicating just transition to grassroots stakeholders, local communities, women, youth associations, local non-government organizations (NGOs), self-help groups (SHGs), etc.
- The challenges to and potential for just transition in India
- The need for a bottom-up approach

2. Exploring various stakeholders' perspectives on ways of diversifying the current coal-dependent economies. The related themes are as follows:

- Mapping the just transition capacities in India
- Recognising the vulnerabilities of coal-dependent communities
- Exploring the dimensions of livelihood and rehabilitation beyond jobs (e.g., social and psychological security, climate, and the environmental aspects of economic development)

3. Formulating an actionable set of recommendations to help policymakers frame a policy roadmap for just transition. The related themes are as follows:

- Learning good practices from global approaches
- Capacity building of responsible institutions
- Understanding the challenges in decision making and developing a set of solutions and approaches to effective grassroots participation
- Understanding and finding environmental solutions
- Mapping the financial institutions and the need for finances

2. Details of the Knowledge Exchanges

2.1. Summary of the Workshop

The workshop 'Framing Just Transition in India: Context, Opportunities, and Challenges' on 12 September 2022 was inaugurated by Professor Pradip Swarnakar, Founder and Coordinator of Just Transition Research Centre. Professor Mini Chandran, head of the HSS department, showed appreciation for the efforts of the JTRC members on behalf of the department. Dr Vijeta Rattani from GIZ India highlighted the importance of just transition in the national and international climate discourse and partnerships.

Professor A. K. Sharma kickstarted the first session as the moderator; this session centred on the theme of defining just transition in the Indian context. Highlighting the importance of a well-defined strategy, Peer Muna of PricewaterhouseCoopers (PwC) stated that unless a well-devised plan is implemented, the voices of vulnerable groups, such as informal miners, will remain unheard. She emphasised on the need for transformational change. The representative of the World Resources Institute (WRI) mentioned that just transition frameworks from across the globe will have to be adapted for the Indian context, for which various perspectives on justice need to be understood. New vulnerabilities emerging from the renewable energy sector also need to be addressed in the process.

Gunjan Jhunjhunwala from the Council for Energy, Environment and Water (CEEW) stressed the need to address key data gaps, especially with respect to emerging working relations in the green economy and emphasised that efforts should be made

towards building institutional capacity, which can be made possible by robust civil society networks and innovation. Gulab Chandra Prajapati from Damodar Bachao Abhiyan stated that there are twenty-nine types of informal groups and three types of formal groups engaged in the coal sector that will be affected by the coal phase-down. He suggested a few alternative livelihood options, such as eco-tourism, modernised agriculture, animal husbandry, and fisheries, which can be developed for phase-down-affected populations.

The second session revolved around the socio-economic and environmental aspects of just transition and was moderated by Madhura Mitra of PwC. Enumerating the just transition efforts and experiences of other countries, Swati D'Souza from the International Energy Agency (IEA) highlighted the key aspects that India can take away as well as the uniqueness of the Indian scenario. She addressed five questions about the global coal transition process: Who will be impacted? What will be the impact? How would the transition be funded? How should the transition be governed? How can consensus be built?

Ms D'Souza highlighted that the just transition can be codified through existing legislation and policies at the central and state levels and that funds for just transition can be sourced through both adaptation and mitigation strategies. Abhijit Sinha from the Central Mine Planning and Design Institute (CMPDI) emphasised that before any reskilling schemes are implemented, the workers' existing skill sets should be mapped, and the new employment should suit these existing skill sets.

He added that a large sum of the District Mineral Fund Trust (DMFT) is unutilised and suggested the constitution of a multi-level task force to enhance coordination between policymaking and implementing agencies. He concluded by saying that coal mines should be given ten to fifteen years before its complete closure. Shaiwal Bhatnagar from the Institute of Entrepreneurship Development, Uttar Pradesh (IEDUP), highlighted the institute's work on the skill development of people who have lost jobs due to the closure of industries. He emphasised that there is no dearth of funds or policies for reskilling but, rather, a lack of awareness. Sachin Dubey from National Thermal Power Corporation Limited (NTPC) presented a counterargument stating that there is a fund crunch for energy transition and emphasised on the challenge of inclusive transition to renewables.

Speaking on behalf of the International Institute for Sustainable Development (IISD), Balasubramanian Viswanathan was of the opinion that diversification should be understood as an opportunity and that economic diversification necessitates an evidence-based assessment of the rate of change and nature of intervention. From JTRC, Rajshri Shukla, Naorem Nishikanta Mangang, Dr Mudit Singh, and Dr Riti Chatterjee presented the theoretical and practical work experiences captured by the organisation.

The third session was moderated by Professor Swarnakar and focused on the way forward for just transition in the Indian context. Madhura Mitra from PwC focussed on the types of policy frameworks in order to achieve a net-zero target by 2070. Highlighting the challenges of repurposing the land around coal mines, she stated that agricultural activities can be implemented only beyond a ten km radius of the coal mines. She emphasised the significance of interdepartmental communication. Kunal Chhabra from NTPC informed us that the company has set a target of 130 giga-watt (GW) by 2032, of which 60 GW will come from renewable energy. Shedding light on

the company's efforts to repurpose land around closed power plants, he added that 885 acres of land has been converted into eco-parks with 37 million trees being planted. Davinder Sandhu from the World Bank said that just transition is being led by India without any external imposition. He further stated that although coal production may increase in the coming years, job opportunities in this sector will decline and there will be a widespread geographical transformation. Abhinav Jindal of NTPC enlightened the audience by discussing the three types of financial risks: physical or climate risk, transition risk, and regulatory and policy risk. He recommended the incorporation of financing into the just transition framework (e.g., refinancing; equity, debt, and concessional financing; and climate financing).

Nakul Sharma of Climate Action Network South Asia (CANSA) put forth his view that just transition should take care of the minimum sustenance and minimum monthly income of every affected household. Rajiv Ranjan stated that a transition project has already started in NTPC, and the company has a roadmap for reducing per megawatt carbon emissions. Aarti Khosla from Climate Trends emphasised the importance of local context, saying that just transition can be a way to unlock progress and that there should be change in the political economy of the coal-rich regions.

R. Apoorva from the World Resources Institute (WRI) stated that regional and intersectoral dialogues must be encouraged and that academic knowledge should be communicated using simple vernacular language. She added that there should be string networks among state and non-state actors. Highlighting the importance of a bottom-up approach, she said that more qualitative data should be collected from the communities affected by the transition.

During the workshop, it was recognised that another exchange was needed to

further deep dive into the aspect of financing just transition. The workshop concluded with a vote of thanks delivered by Professor Swarnakar, Dr Vijeta Rattani, and Dr Mudit Kumar Singh.

2.1. Summary of the Online Exchange

The online exchange on 'Mobilising Finances for Just Transition' held on 7 October 2022 sought to deep dive on the aspect of financing just transition. In this regard, Dr Sandeep Pai, (senior research lead at the Global Just Transition Network Center for Strategic and International Studies) and Mr Souvik Bhattacharjya, (associate director of the Integrated Policy Analysis Division at The Energy and Resources Institute [TERI]), were the key resources for this exchange. The exchanges held were between by forty-three participants, including individuals from research institutes, think tanks, business organisations, international organisations, local-and national-level civil society organisations (CSOs), and academic institutions.

Dr Sandeep Pai provided an overview of the just transition initiatives being taken globally and then explained the implications of energy transition in the Indian context. He explained the challenges of just transition and the different ways for exploring financing mechanisms for just transition. The presentation comprised an analysis of possible job loss and of the financing required by India to mobilise annually for just transition.

It showed that coal sector's (coal mining and power districts combined) spill over effects in total 284 districts with varying levels of dependency, such as 159 districts have about 38 lakh direct and indirect coal jobs, excluding induced or informal jobs. Roughly there would be nearly 5-6 lakh pensioners in 199 districts as the stakeholders of the just transition. Whereas corporate social responsibility (CSR) spending in about ninety districts is about 1,000 crores per year-coal mining and power

companies combined, and the District Mineral Fund (DMF) collection is about 3,500 crores. These numbers give an idea of what this ecosystem looks like and how many people would be impacted. There are forty-three districts that have more than 10,000 direct and indirect coal jobs and that feeds into the induced jobs making a huge coal dependent population

The presentation focused on three main areas that need financing: taxes and royalties (US\$8 billion per annum), pension obligations (US\$2-2.5 billion per annum), and CSR spending (US\$1.4 billion per annum). Workers' salaries and payments for informal workers would further increase the financial burden on the state and firms concerned. Dr Pai mentioned that the obligations for only three elements (taxes and royalties, pensions, and CSR) account for US\$11 billion, or 80,000 crores, per annum!

The speaker opined that the Western model of just transition cannot be copied and pasted in India given the completely different nature and dynamics of the coal-dependent states, such as Jharkhand, although there are drivers and learnings that can be looked at from other countries. In the Indian context, local factors must be considered. The key aspects of just transition are the sensitisation and capacity development of stakeholders, including companies, unions, and local people.

In the case of South Africa, it was suggested by the expert that clear roadmap for requirement of funds and their utilisation could have been the better approach. Dr Pai also put forward the opportunity for India to identify just transition projects for implementation, followed by appropriate funding channels and inviting prospective investors.

For many countries, the energy transition has already taken place, leaving opportunities for learnings and knowledge exchange for several nations including India. The representative from TERI, Mr Bhattacharjya, delved into the ambiguity of the definition of just transition investment and investigated just transition financing from a climate finance perspective. He was of the view that the existing classification is not enough to gather resources that can support just transition activities and outcomes, just transition means a shift towards a low-carbon, climate-resilient, ecologically sustainable economy, and society. He mentioned five drivers of just transition finance.

- Augmenting public and private-sector financing
- Strengthening human capital
- Enhancing educational outcomes
- Promoting social dialogue and partnerships
- Bringing conducive policies

Mr Bhattacharjya underlined that just by addressing the aspects of just transition, India would be able to achieve many nationally determined contributions (NDCs), would address concerns for mobilising just transition finance, and would be able to cater to a lot of the developmental requirements that the nation is facing today.

Mr Bhattacharjya added that state- and district-specific mapping is missing on the alternative sources of revenue generation to coal-centric activities while considering social and developmental goals. He suggested using

social finance, stating that the role of Social Stock Exchanges (SSEs) is vital in financing just transition; additionally, he listed tentative resources to pool finances.

- USD100 billion climate finance
- Multilateral development banks (MDBs)
- Green bond disclosure
- Environmental, social, and governance (ESG) standards
- World Bank insurers must have just transition as a core component in their net-zero plans, including coal labour standards, human rights, and associated financing
- Development impact bonds (DIBs) and social impact bonds (SIBs)
- Micro-credit financing (enabling entrepreneurship, raising the standard of living, and improving livelihood maintenance); similar just transition impact bonds could be created, which could be a game changer in terms of raising resources from the market
- Leveraging Social Stock Exchanges (SSE) and Business Responsibility and Sustainability Report (BRSR)

Mr Bhattacharjya outlined appropriate mechanisms through which mitigation or adaptation finances can be used in coal-dependent countries. How the concerned mitigation project, for instance, being implemented in a coal district will absorb labour from displaced communities, particularly from mining activities is also critical to be studied. Such finances should have very specific indicators for the implementing agency to evaluate how investments made in the mitigation and adaptation can create opportunities for affected people; such evaluation would otherwise become very difficult in coal dominant countries and states.

The talks were followed by a Q&A session. On the question of the social impact of energy transition, experts suggested for on-ground research involving communities and people who are indirectly affected by the closure of coal mines and coal-based power plants. Moreover, the impact on infrastructure built by coal subsidiaries in coal mine districts—including hospitals and schools—after coal mine closure and the consequences on local communities availing these company welfare

services in the region needs to be considered for research activities and follow-up actions. In India, Eastern Eastern and central-eastern states are highly dependent on such infrastructure, and the impact of such closure would be very high.

The CSR investments by companies, regardless of whether they are engaging in CSR activities in a specific region or state, must ensure that CSR-based infrastructure and activities run smoothly, even after the closure of coal mines.



3. Key Lessons and Recommendations from the Events

Building national framework for just transition

India would benefit greatly from a national, inter-departmental, and inter-ministerial just transition framework. A set-up proposed by a national committee on just transition would help formulate the just transition framework. The process should also incorporate extensive stakeholder engagement with states, unions, NGOs, CSOs, coal industries, business firms, local communities, etc. The states and coal industries can then use this national framework to build state implementation plans for just transition. (*State implementation plan for just transition and coal industry implementation plan for just transition*)

Scope of social finances and the role of Social Stock Exchanges (SSEs) in just transition financing

Social finances have massive potential in terms of just transition project funding. For instance, philanthropic funding could be used to promote entrepreneurship in rural and coal-dependent states and to implement demonstration projects while the national framework for just transition could be constructed. An important step would be to address social finances' limitations, such as conflicts of interest, economic uncertainty, cost, and regulatory reforms. SSEs could be employed in India apart from the traditional grant funding systems. SSEs are self-regulated and possess the benefits of creating transparency and disclosure in the social investment marketplace.

Just transition as a regional opportunity in India

India aims to expand coal usage in the coming years; however, at the regional level, there

have been reports of closure of certain mines and power plants. This has provided India with a tremendous opportunity to enable a just transition policy work for such mines and power plants, which will in turn become a model for the larger transition that India will face in the coming decades because of its commitment to becoming net zero by 2070.

Understanding different layers of financing for just transition

It is critical to explore the roles that climate investment funds, MDBs, philanthropic funding, etc. India should take up the issue of just transition and financial requirements at international forums (e.g., COP 27).

Cooperatives representing the communities as shareholders in power purchase agreements

Post-mining land-use policies and planning necessitates consultation with local stakeholders. It is recommended to encourage cooperatives to work closely with local communities in the implementation of community-based projects.

Management of land abandoned by coal mine companies

The implications of coal mine land abandoned by coal mining companies need to be thoroughly investigated. The ownership of land, and whether small business groups would be allowed to operate on such land, needs to be understood. Both energy and non-energy sources can be considered as the ground

for post-mining land-use activity. Building infrastructure on such land would be extremely capital intensive; however, more dialogues and assessment studies to investigate this matter are required.

Transition away from coal is not happening soon

A coal phase-out is not a realistic vision for India within the next twenty to thirty years. Estimating job loss numbers, addressing environmental loss, and planning to rehabilitate the affected population require a lot of time and resources.

Sensitisation of grassroots stakeholders

Most of the communications regarding just transition occurs at the international and national levels. Sensitisation of grassroots level stakeholders in the coal sector and enhancing communication and knowledge exchange on existing problems, challenges, and the issue of just transition should be treated as a priority. The involvement of unions, CSOs, NGOs, tribal communities, women, youth groups, etc., is essential for creating a just transition framework in India.

The need for more discussion and debates on just transition

More discussion and debates on just transition—online and offline platforms—are the need of the hour. These dialogues may be held at various levels (e.g., international, national, regional, and local).

Conclusion

Just transition should go beyond the immediate focus of workers and dialogues among the various stakeholders to formulate the policy as the key to a successful energy transition. The government needs to look at just transition from a human security point of view, securing the jobs and livelihoods of fossil-fuel-dependent people instead of equating to renewable energy. Various agencies, including multilateral, bilateral, and civil society, must create more dialogues, discussion, and capacity development initiatives on the topic of just transition. A detailed map of financial and resource needs is a prerequisite for a just transition policy. In a country like India, the focus can be on mapping available resources and matching them to location-specific needs.