

Vichaar-Vimarsh

JUST

Transition

NEWSLETTER



Issue No. 02- EFD | TERI | September, 2022

TRANSITIONING FROM COAL AND RESETTING PRIORITIES

Message from the Desk of the Senior Director, TERI

We are glad to bring out the second Issue of the Just Transition newsletter, Vichaar-Vimarsh that offers a space to share reflections on the key theme. We hope that this newsletter helps bring the discussion on fair transition at the core and retain the focus on minimizing carbon footprint amidst rising energy demands and ever increasing coal production targets.

I am sure the space created here aptly captures views of thought leaders and blends varied perspectives with deeper insights to bring to the table real life issues around coal. It further establishes a basis for re-setting priorities while thinking of moving away from coal. I am sure this newsletter will allow the readers to examine imaginations with a greener lens and strengthen the optimism of building a resilient ecosystem as we look beyond coal. I hereby invite all to engage in a meaningful dialogue that can ensure building a greater empathy and a secure future.

A K Saxena
Electricity & Fuels Division



TERI's Mission

To usher transitions to a cleaner and sustainable future through the conservation and efficient use of energy and other resources, and innovative ways of minimizing and reusing waste

Editorial

The second Issue of the bi-annual newsletter addresses the key theme “Transitioning from Coal and Resetting Priorities” and attempts to build a narrative around Just Transition through perspectives shared by thought leaders, researchers and student interns. It gives us an opportunity to generate an interest and a dialogue around Just Transition, making it a part of the mainstream debate. This will also enable like-minded people to articulate their thoughts with a shared vision and it may eventually shape future thinking and action.

Visualising a resilient ecosystem in the coal belt in India through informed dialogue and deliberation would also mean creating a will to build a requisite momentum for changing the status-quo of over-dependence on fossil-fuel. It calls for a sustained campaign for a pro-non-coal economy. As thoughts get crystallised in the minds of researchers, actors, policy makers and stakeholders, an urge for exploring the alternative pathway that does not leave anybody behind may propel efficient and people centered planning.

This newsletter can go a long way in disseminating insights on Just Transition and triggering alternative thought process. Eventually this dialogue may help us introspect more on how we deal with the dual challenge of meeting our net zero aspirations in a time-bound manner and finding sustainable solutions to our immediate concerns pertaining to increasing energy demands. A constructive dialogue on the key theme could result into demonstrations of actionable ideas, resource pooling, and diversification of economic choices through consolidation of proven and collaborative ideas, mutual learning and adoption of sustainable practices.

- Jayanta Mitra, PhD



The 5Ws of Just Transition

Apoorva Singh, Research Associate, TERI

What is Just Transition?

Just Transition is a framework developed by the trade union movement of the United States to encompass a range of social interventions needed to secure worker's rights and livelihoods when economies are shifting from conventional fossil fuel consumption to renewable, sustainable energy production methods. (Just Transition, 2022) It refers to a shift from an extractive economy to a regenerative economy with an emphasis on redressing past harms and working on all-round social inclusion. (Climate Justice Alliance, 2022)

Why Just Transition?

Just Transition is pertinent for a number of reasons the primary one being that economies around the world are bearing the brunt of anthropogenic climate change. It'll ensure the economic transition is more democratic, resilient and avoids the power-imbalance of traditional energy systems.

Who does Just Transition affect?

There are multiple stakeholders ranging from contractual mine workers, their families and the near-by communities to trade unions as well as businesses and national- and state-level governments. Additionally, there are ancillary bodies, local vendors around mining sites, researchers, media, officials etc.

Where should Just Transition be carried out?

It should be carried out across the coal-belt regions where a large number of stakeholders would be impacted, both directly and indirectly, due to any shift away from coal. A robust national framework for a transition could accordingly be put in place to bring about a graded transition.

When should the Just Transition dialogue be carried out?

The transition away from coal would require systemic and institutional level changes at every stage which makes it crucial that dialogue and deliberation on the same should begin as soon as possible. For a country like India which has diverse demographic segments and a rising economy to balance, it's even more important that key stakeholders are involved and a fair, equitable and resilient actionable agenda is formulated at the earliest.

Reference: Just Transition. (n.d.). Retrieved September 12, 2022, from

Wikipedia: https://en.wikipedia.org/wiki/Just_transition

www : <https://climatejusticealliance.org/just-transition/>



THE JUST TRANSITION IN INDIA CHALLENGES AND OPPORTUNITIES

Ernesto Noronha, Premilla D'Cruz, Professors, Organizational Behaviour
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The 2015 Paris Agreement provided the much-needed impetus to address the issue of climate change. They limit global warming to 1.5°C per year by embarking on a low carbon developmental policy. Besides this, the cheapening of that renewable energy has compared to coal means closures of coal mines in the future. This has grave implications for India with 70% of the country's primary energy coming from coal. Further, in the budgets of some Indian state, revenue from coal constitutes about 5-6% of the total. Similarly, 44% of the Indian Railways freight revenue comes from coal, while the coal economy creates 0.35 million jobs in the formal sector and about 15 million jobs in the informal sector in the subcontinent (Bhushan et al, 2020). With such substantial number of workers informally employed, will the burden of this transition to a decarbonised future fall

upon the poorest and the most vulnerable? The answer is that most informal workers will not receive the benefits if the transition to a low-carbon economy is not well planned or managed and does not take into account the dismal social infrastructure, poverty and a large informal economy.

The just transition will have to be located within India's 'right to develop' while taking care of those most burdened by transition. Climate change mitigation policies will be feasible only if the aspirations of the affected workers and communities are accommodated. Therefore, just transition necessitates a broad-based socio-economic inclusion. Accordingly, action should be aimed at addressing livelihood and health and safety problems of workers in the formal as well as informal economy, while protecting the natural environment.



The government must play a key role in the process by pooling resources and bearing the cost of labour transition programmes. A just transition involves investment in new green jobs and skills and income protection. This can be achieved by diversification of existing coal companies to renewable energy companies. The transition towards renewables calls for training of workers to manufacture, install and operate renewable energy and low-carbon technology. However, the experiences of other countries show that renewables are less labour intensive and may not absorb redundant workers (Roy et al, 2019). Therefore, it would be in India's interests if the funds of the district mineral foundations (DMFs) are used to promote local industries such as forestry, fishery and tourism to create jobs (Pai, 2021). Further, while coal-producing areas are concentrated in India's Eastern states the investment in renewables is taking place in the Western and Southern states of India. This disparity raises concerns about equity and political feasibility of the transition. Therefore, policies should focus on creating renewable energy installations in coal-bearing states. However, the extent to which coal-mining employees would find jobs in low-carbon technologies depends on their substitutability, education and skills levels (Malik and Bertram, 2022).

While the just transition provides a challenge, it also comes with an opportunity. India has the opportunity to reorient its coal sector towards social welfare as the sector eventually phases out. Given that India's coal sector is also densely unionized, space is opened up for a social dialogue between stakeholders to build an inclusive plan. Any just transition plans in India should include plans to secure coal workers' pensions in the case of formal workers and decent work for all in the case of informal workers. In the latter case, initiatives should include the targeting of disadvantaged groups such as those living in poverty, those belonging to marginalized communities and women workers in the informal economy (Noronha and D'Cruz, forthcoming). Even so, the opportunity presented via the just transition faces constraints that need to be addressed: the pervasive informalization of labour in renewables dominated by the private sector complicates the realization of the aforementioned opportunities as the workforce functions in an openly hostile environment that neglects worker's rights and unionization. Not surprisingly, unions demand public sector investment in renewables as workers and their social concerns are likely to be side-lined if the renewable energy sector is solely led by the private

sector. As a result, the just transition for India cannot be solely aimed at decarbonization but must also include the extension of modern energy and services to informal workers who are central to building this new low-carbon world in the country (Roy et al, 2019). In this regard, Oskarsson and Chhotray (2022, pg 22) argue that closed coalfields provide an opportunity to create new forms of democratic politics around land restitution that generates hope and 'mobilises a sense of autonomy and self-determination.'

THE JUST TRANSITION WILL HAVE TO BE LOCATED WITHIN INDIA'S 'RIGHT TO DEVELOP' WHILE TAKING CARE OF THOSE MOST BURDENED BY TRANSITION. CLIMATE CHANGE MITIGATION POLICIES WILL BE FEASIBLE ONLY IF THE ASPIRATIONS OF THE AFFECTED WORKERS AND COMMUNITIES ARE ACCOMMODATED.

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SOCIAL ASPECTS OF COAL TRANSITION IN INDIA

Swati Dsouza, India Lead Analyst and Coordinator, International Energy Agency (IEA)



In FY21, India produced 716.01 MT of coal, of which ~648 MT was produced by CIL and SCCL employing about 3,03,792 people (white and blue collar workers) (Ministry of Coal, 2021). This translates to ~12 lakh people, based on a 4-person household, who are dependent, at least in part, on coal mining. This is of course a conservative estimate as bottom-up studies by research scholars ((Pai, 2021), (Dsouza & Singhal, 2021)) has shown that the number of those employed in the sector is far higher, particularly given that it does not include employees engaged in outsourced activities in coal mines, contract and permanent employees working for Mine Development Operators (MDOs), those employed

in captive mines under private players, those employed in coal transportation activities, particularly, railways where coal accounts for ~40 per cent of its total freight revenues, not to mention those employed in coal consuming sectors like power, steel, sponge iron, brick kilns etc.

Examples from other countries undergoing coal transition provide a blueprint for India to manage economic and financial impacts. But on the social impact side, India presents a unique case given the political economy of coal mining and the profile of an average an Indian coal miner. The prevalence of the informal coal sector implies



that we do not have accurate estimates on the actual number of people directly employed in coal, i.e., the percentage of the population in a district dependent on coal. Moreover, any formal sector transition plan is likely to leave out those working in the informal coal economy. Adding to this challenge are factors like education, skill levels, and willingness to migrate.

In India, using the Periodic Labour Force Survey it can be seen that the socio-economic profile of labourers in the coal industry are endemic of the larger trend in the Indian labour market. 81 per cent of the labour force in India is employed in the informal sector/shadow economy (with no social benefits) and if one were to include the portion of informal sector workers (contract/casual labourers), then the proportion is as high as 92 per cent (Punia,

2020). This trend is mirrored in the coal sector where more than half of the labour force is informal (figure 1). District level case studies in Korba and Angul ((Bhushan, Banerjee, Shalya, & Pande, 2022) that about 48 per cent and 69 per cent of the labour force respectively in coal mining and thermal power are informal in nature.

As Mehrotra (2019) has detailed, one of the reasons for growth of the informal economy has been low education and skill levels of the workforce. This trend is captured in the graph below for coal and its major consumers. Barely, 12 per cent of the workforces in coal are graduates and only about 3 per cent have post

graduate degrees (figure 2). This trend is further exacerbated in the case of the brick sector where 37 per

Share of contract labour in coal and related sectors

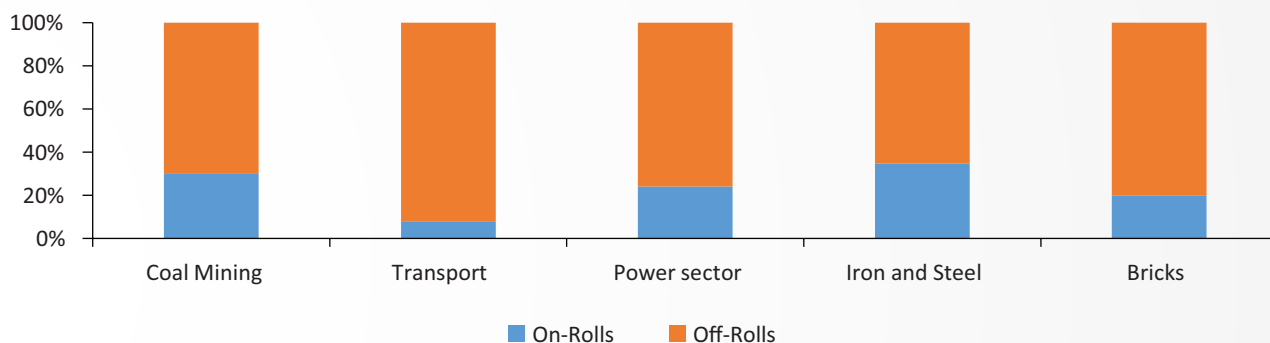


Figure 1: Division of formal and informal workers across the coal supply chain (mine-to-mouth)

Source: (Dsouza & Singhal, 2021)

Education levels across coal and its major consumers

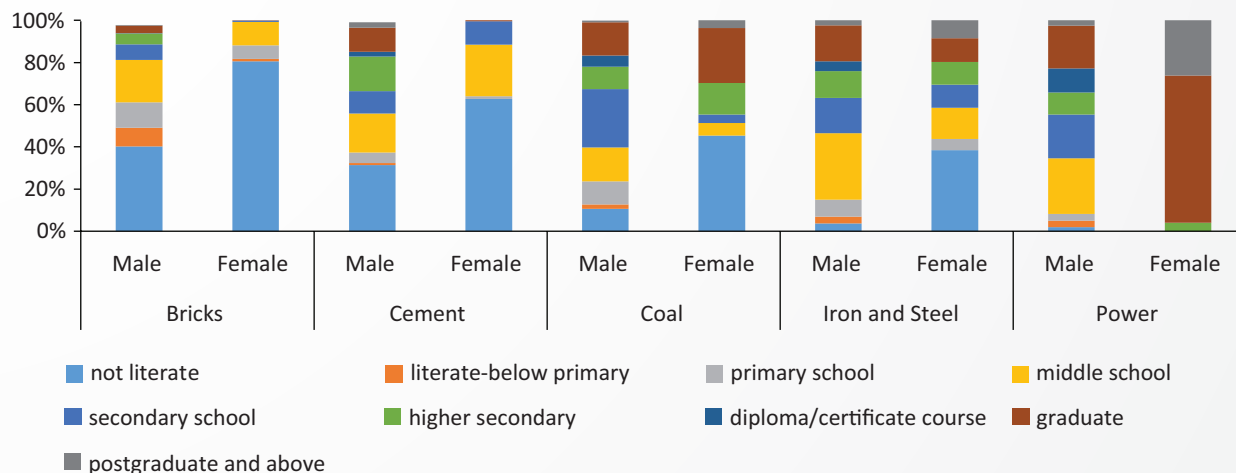


Figure 2: Education levels across the coal supply and value chain

Source: (Dsouza & Singhal, 2021)



Percentage of workers with technical education

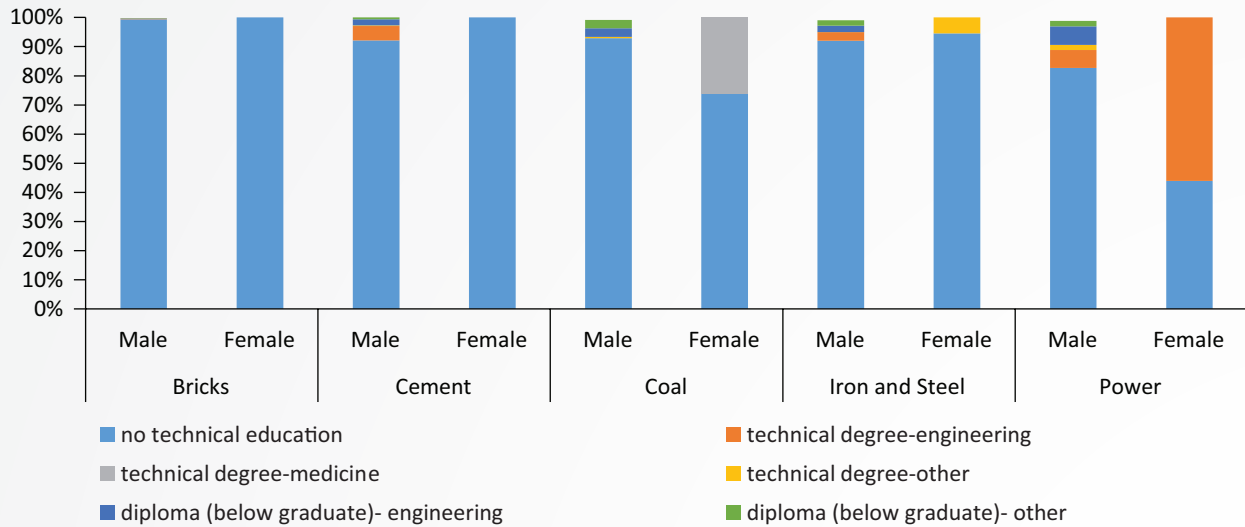


Figure 3: Workers in coal mining and coal-consumption industries with technical education
Source: (Dsouza & Singhal, 2021)

Percentage of workers received vocational training

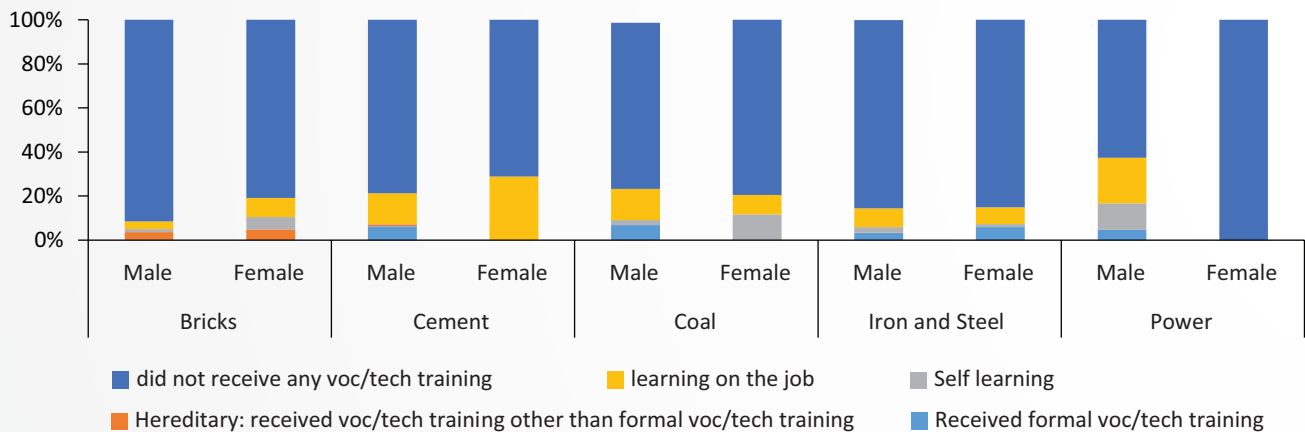


Figure 4: Workers in coal mining and coal-consumption industries who have received vocational training
Source: (Dsouza & Singhal, 2021)

cent of the labour force is illiterate Further, mirroring broader trends, women fare worse off than men across all sectors (barring power).

Similar to education, the skill levels of the informal labour force also hamper their capacity to transition to technical industries. As seen in Figure 3, the disparity between men and women is minimal when it comes to technical education, i.e., most of the workforce does not have access degrees in medicine, engineering, or

for that matter even a diploma. Vocational training of the labour force is dependent on the industry and policies of the labour union (figure 4). For example, in coal mining, the informal labour force is not part of the different coal unions and as such does not have access to the union-led vocational training programmes. In the iron and steel sector, there are separate labour unions for contract workers. These unions conduct 3-4 training programmes in a year such that even if a person enters the industry with no training, he/she becomes a skilled



Type of job contracts

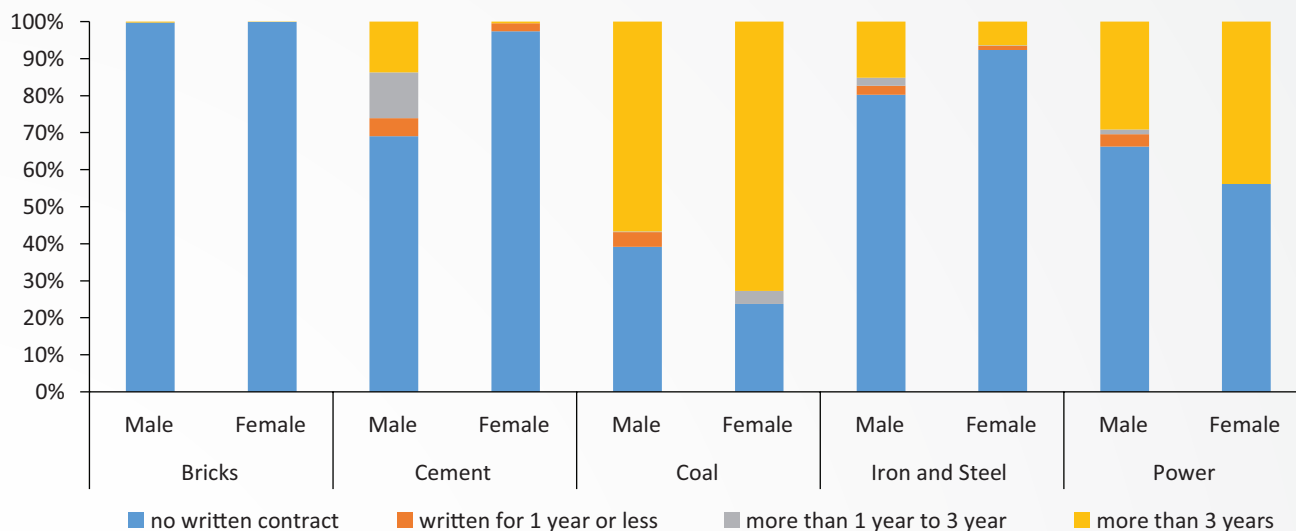


Figure 5: Nature of job contracts in different coal consuming industries
Source: (Dsouza & Singhal, 2021)

labour within 5-8 years. Bricks is the only sector where one receives hereditary training. This is due to the nature of the industry where entire families are involved in brick making which allows for skills to be passed down.

Low education and skill levels are also reflected in the kind of work assigned to informal workers, the nature of their contracts and wages. These workers are typically not part of any union. They are employed for labour intensive profiles within the industry. They do not have job contracts (figure 5) which reflect rights of the workers in terms of number of hours, wages, and social security benefits (pensions). While labour rules state that it is the responsibility of the contractor to ensure that all workers are part of the national pension scheme in reality these are not implemented. Without a contract there is no

guarantee that the wages paid are above the minimum wage of the state. This stark difference is noted in wages of formal sector and contract workers and informal workers (figure 6). Studies by iForest in the Korba and Angul districts have shown that most informal workers are paid below INR 10,000/month (Bhushan, Banerjee, Shalya, & Pande, 2022).

Comparisons at the state level (figure 6) for Jharkhand and Chhattisgarh reveal that wage differentials between informal or casual workers and formal sector employees are quite stark. While formal sector workers earn about INR 4.5 lakhs/annum (which is more than the average wage in both states even after separating agriculture and casual workforce), informal or casual workers earn 1/9th of this annually or ~INR 4000/month.

2018-19	Chhattisgarh	Jharkhand
Annual Production (Million tonnes)	162	135
GSDP (constant prices) (in INR million)	2,318,200	2,328,210
GVA (Industries and Mining)		11%
Total Receipts (in INR Million)	801,790	661,340
Revenue receipts (in INR Million)	650,950	561,520
Non-Tax Revenue in Revenue receipts (in INR Million)	77,030	82,580



Revenue from Coal royalty within NTR (in INR Million)	4,033	3,679
Share of Royalty from coal mining in GSDP (%)	0.17%	0.16%
Labour force participation (%) (15-59 years)	66.60	50.50
Unemployment (%) (15-59 years)	2.60	5.50
Employment in coal mining (000)	525	513
Employment in non-coal mining (000)	181	263
Total employment (000)	31,972	28,080
Average Wage for coal supply employees (non-Casual Labour) (INR/yr)	442,462	384,194
Average Wage for coal supply employees (Casual Labour) (INR/yr)	46,347	53,766
Average wage for all employees (INR/yr)	93,888	88,791
Average wage for all employees (INR/yr) (excl casual wage and agriculture)	151,067	165,991

Figure 6: A tale of two coal mining states

Source: (MOSPI, 2020)

Thus, not only are the informal workers not accounted for in the labour force, but that their socio-economic characteristics make them especially susceptible to any policies on coal sector transitions. Further, without institutional support mechanisms such as labour unions, often their voices and demands will go unheard.

Efforts are being made from think tanks to include the cause of informal workers within the larger just transition debate. But it also requires intervention from the government (central/state) to create a database as a baseline for targeted intervention. Such a database will account for the number of people employed in coal bearing districts (directly or indirectly) and their socio-economic characteristics (education, skill level, vocational training, income, coal sector dependency). Such a database will allow for targeted intervention in terms of skilling, economic diversification of the region and the allocation of funds to transition coal bearing districts and communities.

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Transitioning from Coal and Resetting Priorities

Own reflections shared by Sanket Kumar, Manager – DMF, Sundargarh

With the improvement in alternate fuel technologies and changes in Government policies, it won't be long before the current coal mines are either closed or may just run out of viable coal. In such a scenario the local and peripheral economy which is dependent directly or indirectly on the mine will collapse. It's wise for the federal system, local governance and the community to prepare for the inevitable and the only way to do it is planning the Just Transition well in advance and resetting our current priorities.

Working on livelihood programs is one of the solutions and it is the need of the hour to build convergence and put in persistent effort in ensuring that the several livelihood programs currently run by the government are sustainable in the long run. For this, resources need to be invested for building local capacity, product diversification, and market promotion. Enhanced economic opportunities and overall empowerment of the vulnerable communities presently dependent on coal should be the ultimate objective and the change needs to be measured over time through monitoring predetermined change indicators.

The royalty received from coal mining industry is channelized through development projects designed and executed by the DMF. However, once coal phases out, the fund flow may dry up or get diverted to other immediate priorities. The inherent belief is that coal will be the mainstay forever and hence the real departure from the conventional pathway is hardly perceived by the industry and the larger system. Thus, overdependence on coal manifests itself in the form of apathy and lack of proactive policy to change the narrative that supports this transition. We need to proactively think about such coal transition and remain prepared to cope with future effectively. There are numerous cases where after closing of mines or factories, the local schools don't get enough funds to run and the locality doesn't see any signs of development.

Just Transition has a long way to go and more research and studies are needed and also it should be kept in mind that each area has unique economic and cultural systems thus the design of the work plan should be different and aligned with local needs. A strong foundation for just transition lies in education. Providing a quality education along with job oriented skill training as well as entrepreneurship training will make the next generation future ready.



WHY FACTOR IN WOMEN IN A JUST TRANSITION FRAMEWORK?

- By Arpita Victor, Pursuing Masters in Sustainable Development Practice at TERI SAS*



Early in 2022 four women were among five people who died when a series of mines collapsed in Dhanbad, Jharkhand. They were illegally mining coal in the abandoned mines of Bharat Coking Coal and Eastern Coalfields Limited (Times of India, 2022). Jharkhand's Jharia coalfields also see the involvement of many women in illegal coal mining under coal mafias that run in the abandoned mines. It is hard to imagine people choosing to work in conditions of bondage because they had a choice, especially women and young children (Thadani, 2022). Whether they are drawn to the pay or whether they are coerced into such conditions of labour - it should be a matter of concern for administrators and public authorities that numerous people, among them

women and children work illegally in abandoned mines as bonded labour under local mafia. Even though the ban on women working in underground mines was lifted in 2019 (ANI, 2019), the official numbers do not reflect a change in the proportion of women mine workers (CIL, 2015; CIL, 2020). This means that the large numbers of women directly involved in mining activities are not accounted for in these numbers and thus the nature of their engagement is informal and/or illegal. This nature of engagement implies a lack of social security offered alongside employment which is bound to have an adverse impact on their health and economic outcomes given the physical conditions of work are far from ideal.



Evidence from the ground in Odisha

While women being directly involved in coal related work is more common in Jharkhand, the same is not the case in other coal producing states, especially Odisha. This does not mean that women do not still get differentially impacted by coal mining. Studies in Odisha's coal mining belt have shown that women were accustomed to maintaining kitchen gardens to supplement their families' diets with vegetables and other such produce of choice. This would give them a way to supplement the household's needs in kind. Having lost their land for kitchen farms in the process of displacement, these women lost their means of agency in the household, and are now dependent on their husband's income which gives him greater say in what choices are to be made for food in the home. With the potential closure of coal mines it is most likely that the sole breadwinners of the homes will lose their income, making the women's position domestically even more precarious, given how it is their responsibility for ensuring the nutrition needs of the household is met. Being a displaced female in the vicinity of coal mines is a significant risk factor for unfavourable life outcomes. Sundargarh in Odisha also has a high number of unmarried mothers and an increased vulnerability to such exploitation is linked to women displaced by coal mining activities in addition to having lower levels of education/literacy among local women in the area. Alcoholism is also rampant among the local male population forming a grave indicator of domestic violence and abuse. Women are also affected by

BEING A DISPLACED FEMALE IN THE VICINITY OF COAL MINES IS A SIGNIFICANT RISK FACTOR FOR UNFAVOURABLE LIFE OUTCOMES.

coal mining in terms of livelihood not only through the loss of land based livelihoods after displacement, but also when families that do retain their land are affected by the by-products of mining activities since agriculture is more or less the exclusive domain of women. Coal dust settling on paddy crops (which are the only crop cultivated and done so solely by women) affects the quality of the grain and prevents its sale in the market. The runoff from mines pollutes surface water sources and tanks that the locals use for bathing and washing purposes since it is common to not have running water in homes. This again impacts the fields which women routinely tend to by contaminating water with high mineral and ash content (CIRTD & CPR, 2020). Local women in Hemgir district suspect the bad water quality to be responsible for infections and putting pregnant women and unborn foetuses at risk of complications. Such risks take a higher toll on the locals than it should because they need to go all the way to Sundargarh city for proper health checkups. The groundwater levels have also fallen low due to mining activities and this again involves women because it is their responsibility to ensure there is enough water in the house for consumption (CIRTD & CPR, 2020).



Building a gender equitable future

Thus, it is imperative that any plan to move away from coal must factor in the already precarious situation of women associated with or affected by coal mining, since coal mine closure is more likely than not to worsen existing local social scenarios. While Coal India Limited plans to scale domestic coal production up by 2030 to ensure India's self-sufficiency, this plan is going to be accompanied by the phasing out of many loss making mines (Bhushan, 2022). As 75 percent of the CIL's profits come from 35 large mines (Bhushan, 2022), the PSU is likely to phase out the others or auction them to private bidders. To give an idea of the severity of the situation for coal labour, 40 percent of labour is engaged in the remaining mines that are loss making (ibid.) and thus most likely to cease operations putting entire communities out of employment. The threat to coal dependent communities and by extension, women and children is imminent and needs to be addressed on a priority basis. This will involve measures like a prioritisation of healthcare schemes in mining areas in addition to a strengthening of the Pradhan Mantri Khanij Kalyan Yojana through a robust use of District Mineral Funds. Field experience in Hemgir showed that rural women were eager to learn and skill themselves. They had SHGs but they lacked the knowledge to leveraging the platform to initiate entrepreneurial activities. Intervention before it is too late in terms of families

THE THREAT TO COAL DEPENDENT COMMUNITIES AND BY EXTENSION, WOMEN AND CHILDREN IS IMMINENT AND NEEDS TO BE ADDRESSED ON A PRIORITY BASIS.

getting displaced again or before coal mines close is crucial to enable local women to gain a say in their means of income and agency in the house and community.

* A blog written basis field visit carried out during the internship at TERI

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** A blog written basis field visit carried out during the internship at TERI*



GROUND SCENARIO IN SARANGJHARIA IN SUNDARGARH (ODISHA)

A REFLECTION ON POSSIBILITIES AHEAD

– Ayushi Saharan, Pursuing Masters in Sustainable Development Practice at TERI SAS**



As we arrived at Sarangjharia, a village about 12 kilometers away from coal mine, we found the locals gathered around a tree with baskets in their hands, waiting for a man climbing the tree in front of us to get them some jackfruit. This is symbolic of the quiet and simple life that people live in the village which is not yet claimed by any mining companies and hence the area remained untouched by any major industries as yet and the village coexist with nature.

According to the villagers, while the majority is engaged

in agriculture, one-fourth of the residents are engaged in temporary labour work at MCL. With most of the mine related work being outsourced, the local labour force is drawn from the surrounding villages by the contractors. Given the short duration of employment, fear of exclusion and losing the chances of wage earning opportunity, and due to the lack of alternative employment opportunities around, locals often accept what they are offered. Ironically the poor and uneducated labour force are hardly aware of the nitty gritty of CMPF (Coal Mine



Provident Fund) and neither do they have the courage to inquire about CMPF funds and other deductions from their wages during this short term engagement by the contractors. Owing to blocked opportunities the labour force complies with norms imposed by the contractors and hardly gets a chance to voice their grievances. In the informal labour sector they lack any safety net and hence remain vulnerable. Basic rights of rural populace in and around the coal belt are often denied and dignity gets compromised. It raises questions about access to fair wages, safety net, social security system, quality education and health opportunity, and access to healthy work environment. Over dependence on coal and mono-industry also creates a monopoly and in a way it restricts growth of other livelihood choices and its market promotion. A balanced view of diversified livelihood options creates market opportunities, enterprises, offers greater choices and competition across multiple players who engage labour and this also provides a space for bargaining and an urge for fairer practices in labour engagement.

An important alternative source of income for the locals comes from forests. Collection of mahua flowers and kendu leaves fetches households an average income of 10,000-30,000 rupees within 1-2 months. The collection is usually done by women and children, bundles are made by men and collected by the forest department for making secondary forest based products.

Agriculture, however, is the main source of income of the village. But it has suffered primarily due to labour unavailability. While the locals can offer 200 rupees as daily wage to work on the fields, MCL offices offer 300 rupees. Therefore, residents prefer to engage in labour work rather than working on fields. However, the older generation and women play an active role in keeping

agriculture alive in the village. The staple crops sown and produced are corn, rice, and seasonal vegetables. The fields are rainfed, and surplus is sold to the local weekly market. While schemes like MGNREGA is functional in the village, Ujjwala, Swacch Bharat, Ayushman Bharat, PMJAY, health card issued by state government, and other policies linked to farmer's welfare doesn't seem to be reaching the people in the area. In a way, people lack the knowledge about several such schemes and hence could not benefit from these schemes.

Today's youth in these villages are often allured to pick up non-agricultural wage labour particularly in any coal dependent industry settings. Young boys of Sarangijharia are also known to migrate in groups to cities like Goa for work in fishery sector, work for six to seven months, and return back with the earned income (about 30000-40000) only to spend it away on alcohol. Therefore, the money earned is hardly invested in the region in a productive manner.

OWING TO BLOCKED OPPORTUNITIES THE LABOUR FORCE COMPLIES WITH NORMS IMPOSED BY THE CONTRACTORS AND HARDLY GETS A CHANCE TO VOICE THEIR GRIEVANCES. IN THE INFORMAL LABOUR SECTOR THEY LACK ANY SAFETY NET AND HENCE REMAIN VULNERABLE.



The problem of alcoholism is said to be further aggravated by the mining activities given the influx of migrant truck drivers from different states who drive up the demand for alcohol. In the village itself the residents indicated that some households make alcohol using chemicals to derive some additional income. Several cases of loss of young lives owing to consumption of country made liquor have been reported.

Coal industry, MCL in this case and DMF can play crucial role in mapping vulnerable pockets, carrying out a socioeconomic baseline, assessing skill, resource and information gaps, and develop a blueprint in consultation with the credible research institutes and development



AS PART OF THE JUST TRANSITION INITIATIVE, IT WOULD BE LOGICAL TO IMPART NEW SKILLS, ENHANCE SUSTAINABLE AGRICULTURE, DEMONSTRATE AND ENCOURAGE ADOPTION OF GREENER PRACTICES IN MANUFACTURING OF LOCAL PRODUCTS, AND PROMOTE DIVERSIFIED LIVELIHOOD STRATEGY, ENHANCE FINANCIAL INCLUSION, HEALTH AWARENESS AND SAFETY NETS.

practitioners to enhance the living condition of people living in and around the coal belt. As part of the Just Transition initiative, it would be logical to impart new skills, enhance sustainable agriculture, demonstrate and encourage adoption of greener practices in manufacturing of local products, and promote diversified livelihood strategy, enhance financial inclusion, health awareness and safety nets. All in all, such measures will help minimize vulnerability, build resilience and improve the quality of life of the poor people living in and around the coal belt. The plans must include those who are engaged in coal sector as contractual labourers and their families but also others who are daily wage earners, agricultural workers, who depend on others' land and also other socially backward sections who often get alienated or left behind due to their backwardness.

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Some of TERI's key initiatives on decarbonisation

Roadmap to India's 2030 Decarbonization Target: This discussion paper argues that achieving these targets is feasible and in possibility affordable as well. Given the scale of the ambition, a well-planned strategy would be required. This paper examines various pillars and strategies for achieving India's decarbonization target for electricity and 500 GW of renewable energy. This will not only help achieve energy security but also make India a global manufacturing hub in renewable energy.

[To know more](#)

Achieving Green Steel: Roadmap to a Net-Zero Steel Sector in India: This roadmap provides an overview of the current state of steel sector and deep dives into a range of possible mitigation strategies. The implementation of low carbon technologies and facilitation of finance would assume significance. These measures could incentivize large scale switch that will put entire sector under a net-zero trajectory.

[To know more](#)

Just Transition, sectoral planning based on demand profiles – TERI's suggestions for draft National Electricity Policy 2021: TERI's presentation and detailed comments on India's draft electricity policy. It also iterated that locking of investment in new coal capacity should be last resort.

[To know more](#)

Roadmap to India's 2030 Decarbonization Target: With four of the five clean energy transition goals announced by India at Glasgow set for 2030, TERI released a roadmap charting the feasible pathways to achieving the ambitious decarbonisation targets.

[To know more](#)

Japan-India Partnership Towards Net Zero Society - Outcomes, Lessons Learned and Way Forward of JITMAP: TERI and IGES Japan organized a webinar on 'JapanIndia Partnership towards Net Zero Society - Outcomes, Lessons Learned and Way forward of the Japan-India Technology Matchmaking Platform (JITMAP)' on 8th February 2022.

[To know more](#)





A YOUNG BOY LACKING ALTERNATE SKILLS AND CHOICES TO LEAD A LIFE WITH DIGNITY IS COMPELLED TO TRAVERSE MILES CARRYING LOADS OF COAL ON THE BICYCLE TO MEET THE BASIC DEMANDS OF LIFE ...

“We have one chance; that is to cut emissions, go into clean, green renewable energies, limit waste, look into circular economy. We are deeply convinced that this is our new growth model.”
- Ursula von der Leyen, President of the European Commission
(Articulated during her visit to TERI in April, 2022)

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