

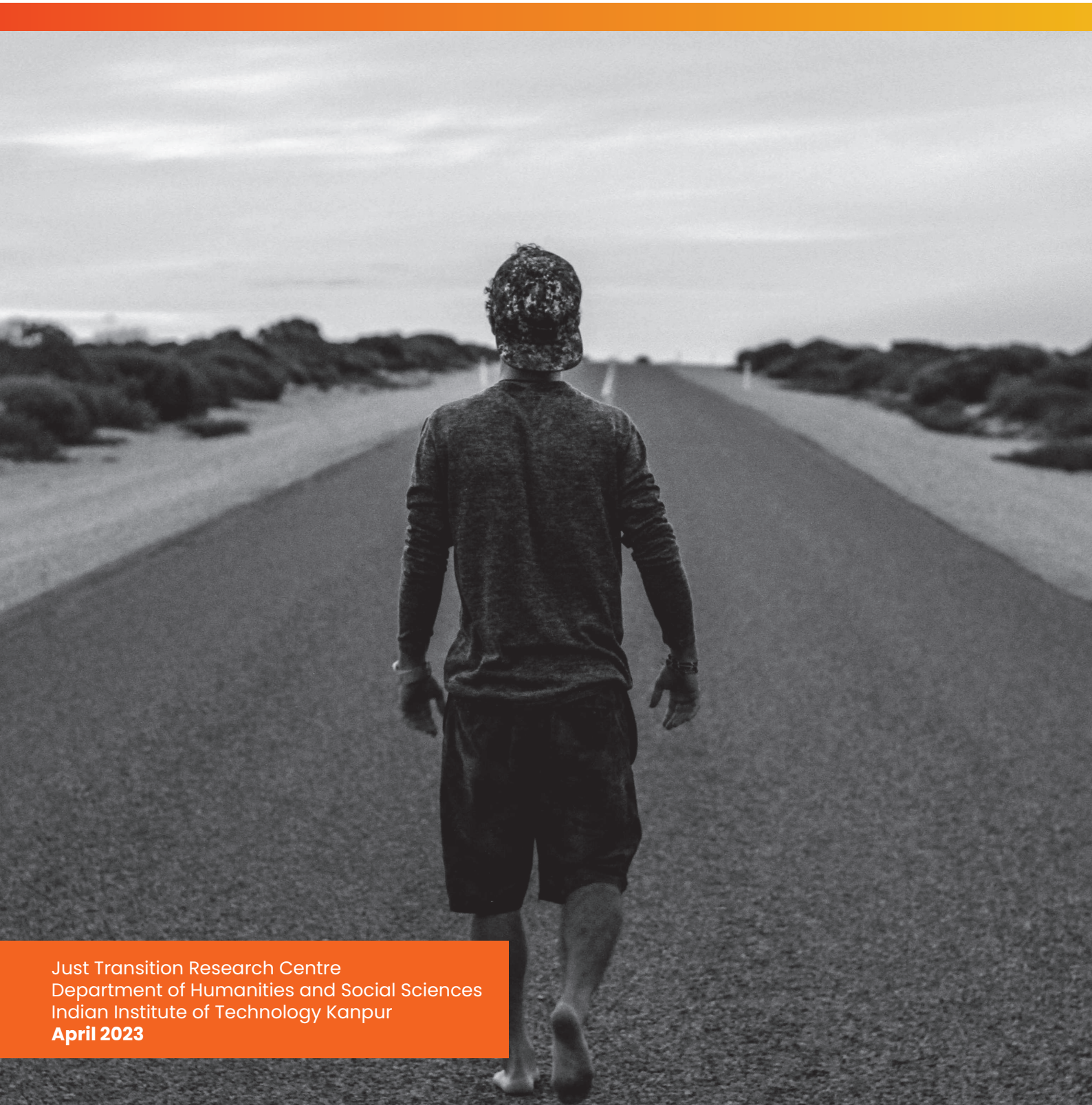
A Brief Report



JTRC
IIT KANPUR

Just Transition and the Youth

Addressing Challenges and
Opportunities for India



Just Transition Research Centre
Department of Humanities and Social Sciences
Indian Institute of Technology Kanpur
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Contributing Authors:

- Riti Chatterjee
- Pradip Swarnakar

Reviewer:

- Pritha Sarkar

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Abbreviations

CIL	Coal India Limited
COP	Conference of Parties
CSR	Corporate Social Responsibility
DMFT	District Mineral Foundation Trust
ICT	Information and Communication Technology
JTRC	Just Transition Research Centre
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoSPI	Ministry of Statistics and Programme Implementation
NEET	Not in Education, Employment and Training
NGO	Non-governmental organization
NYP	National youth policy
PSU	Public Sector Undertaking
RPL	Recognition of prior learning
SDG	Sustainable Development Goals
TV	Television
UN	United Nations

Executive Summary

There is no 'one size fits all' for just transitions. Policies and programmes for just transition need to take care of each segment of coal-dependent community, from social, economic and ecological viewpoints.

This report is primarily intended for national, regional and local policymakers who are in charge of implementing the just transition in fossil-fuel sector as well as other process stakeholders. The process of just transition aids with and provides direction for planning the meaningful engagement of young people. The youth aged 15 to 29 comprises one-fifth of India's total population. As they are subsequent generations to live in those fossil-fuel dependent regions, young Indians in particular have the crucial role to play in the development of just transition policies and programmes.

This report offers a set of guidelines, tools and techniques to maximise the meaningful involvement of the youth in the planning, execution, supervision and evaluation of the just transition. Additionally, it provides instances of how specific strategies have been applied successfully in the past. The report concludes with a few policy recommendations:

- **Establish an institutional role for young people in the just transition's governance mechanism.**
- **Create a special just transition fund for the youth, drawing on available company funds and national resources.**
- **Incorporate 'youth drain retention' as a measure of the effectiveness of just transition programmes and policies.**
- **Set up a platform for promoting dialogue and awareness among the youth.**
- **Make a roadmap for designing and implementing skill-based just transition plans for the youth.**
- **Leverage existing schemes for Indian youth for a just transition.**
- **Recognize the prior learning (RPL) of the youth community.**
- **Establish an institutional role for young people in the just transition's governance mechanism.**
- **Use digital tools, as they help keep participant involvement levels high and expand the audience.**



“A major challenge for greening labour markets and job creation is to make sure that workers and jobseekers, especially youth, are equipped with the right skills, fully understand the importance of shifting to a green economy and contribute to make it happen”

- International Labour Organization (2022)



Background

India surprised everyone when it announced that it would achieve net-zero emissions by 2070, in COP¹ 26 that held in Glasgow for submitting climate plans to slash emissions.

Additional declarations by the Prime Minister Shri Narendra Modi regarding challenging short-term (2030) energy and emissions goals further demonstrated India's readiness to quicken its response to climate change. At the same time, India has also started a plan to produce 1.2 billion tonnes of coal by 2023–2024 (Hindustan Times, 2023).

India currently relies heavily on coal for its electrical needs. The coal industry is estimated to directly or indirectly employ 3.6 million people (Aggarwal, 2021).

By 2022, 70% of India's coal-fired power facilities may not fulfil pollution regulations (Mohan, 2020). To phasedown coal power, India must ensure that the jobs lost are replaced with positions in renewable energy and that its human capital is retrained (Das, 2021).

It is obvious that youth have a significant influence on the context of just transition. India is home to the world's largest youth population (ILO, 2023).

It is anticipated that India's demographic advantage, in terms of its youth population, will be a driving force for the country's economic progress. Thus, their needs, opinions, worries, and hopes are crucial to the just transition, as the impending transformation will have a direct impact on their future.



Who are youth in India?



Globally, youth are frequently categorised as people between the ages of 15 and 24, for statistical purposes. Regional variations are there in defining national youth age groups.

In India, according to the National Youth Policy-2003, "youth" was defined as someone between the ages of 13 and 35. Later, the National Youth Policy-2014 redefines youth as people between the ages of 15 and 29. This age group is also considered in National Youth Policy-2022. It is preferable to think of "youth" as a time of transition rather than an age bracket. This is pertinent to employment because young individuals transition into, out of, and within the work market in their early adult years based on options like education, societal practices, and individual goals.

Sources: Authors; International Labour Organization. ILOSTAT (2021); World Bank (2006); Youth in India (2022)

¹ The Conference of Parties (COP) is a yearly gathering of nations and territories to review the situation, discuss and develop mitigation and adaptation measures against climate change impacts.

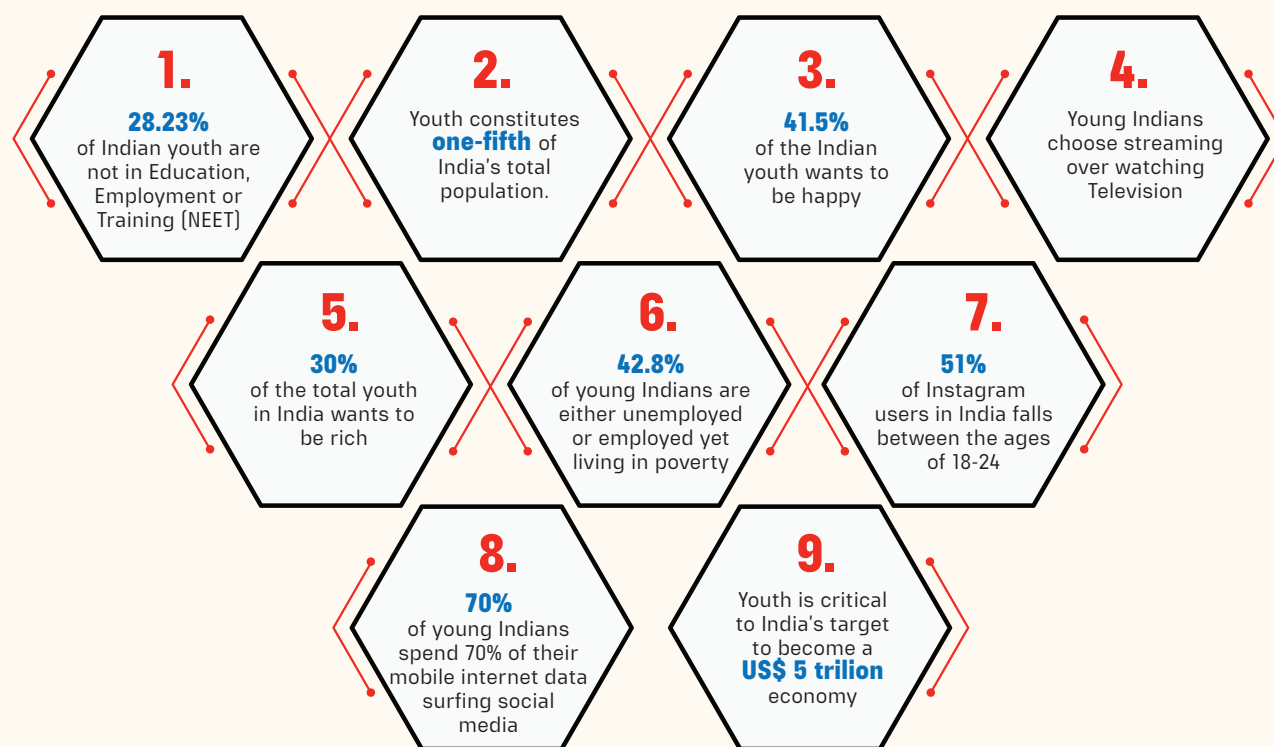
A close-up photograph of a young man with dark, wavy hair looking through a metal grate. The grate is made of thick, dark metal bars that create a geometric pattern over his face. He has a serious expression and is looking slightly to the left. The background is dark and out of focus.

Facts on Indian youth

The degree and magnitude of youth unemployment in India are considerable. India has more unemployed graduates than employed graduates (Tilak & Choudhury, 2021). According to the Consumer Pyramid Household Survey of the Centre for Monitoring Indian Economy, the employment rate of Indian youth (group of 15–24 years were taken) was 10.4% in 2021–22, compared to 10.9% in 2020–21. This is far less than what the World Bank predicted for 2020 (23.2%) (Seth Sharma, 2022). Figure 1 presents nine facts on Indian youth regarding their present status, significance and contributions towards growth of India:

Figure 1

Nine facts on Indian youth



Source: Dharni, 2019; Ministry of External Affairs– Government of India, 2021; BBC, 2018; Kundra, 2013; Trading Economics, 2023

The percentage of youth in India's population is anticipated to decrease to 42.9% in 2036, from 52.9% in 2021, according to the latest report by the Ministry of Statistics and Programme Implementation (Rampal, 2022). If the reduction in the youth population is rapid, the increase in the working-age population will also be significant, resulting in a 'demographic dividend' for India. However, realising the benefits of a possible **demographic dividend**² is not automatic; in the absence of appropriate policies, an increase in the working-age population could result in a rise in unemployment, hence heightening economic and social concerns. This necessitates forward-thinking policies that incorporate population dynamics, education and skills, health care, gender sensitivity and the provision of rights and opportunities to the younger generation.



Do You Know?

According to the 2011 Census, more than 58.3% of the nation's population is aged 29 or younger, while 41.4% are aged 30 or older (the remaining 0.3 per cent did not state their age during the census exercise)

² The demographic dividend is the potential for economic growth that arises from changes in a population's age structure, particularly when the proportion of the working-age population (15 to 64) is higher than the proportion of the non-working-age population (14 and younger, and 65 and older).

A young man with a beard and mustache, wearing a yellow hard hat and an orange work shirt, is looking off to the side. He is in a factory or industrial setting, with various pieces of machinery and equipment visible in the background. The lighting is bright, and the overall tone is professional and focused.

**Why are the youth
critical in just
transition?**

“As young climate leaders, we must ensure that our voices are central to shaping a just transition to a net-zero future”

- United Nations (2021)

-
- **The youth are among those who will be most negatively impacted by the climate change issue;** they are the people leading the way in promoting progressive ideas and climate justice projects. In areas that are weather- and climate-vulnerable, a larger network of youth must still be involved (Friedrich-Ebert-Stiftung Asia, 2022).
-
- **It is now necessary to launch a significant local campaign to raise the youth community’s understanding of just transition so they may offer new insights and answers to their own communities.** In addition to discussing technological solutions to the acute issue of the climate crisis, the just transition debate also addresses the kind of future that young people want for themselves.
-
- **Young leaders can play a crucial role in forging a cohesive voice for youth** in the debate over India’s transition to sustainable energy sources.
-
- **The youth are already responsible for a sizeable portion of jobs in the renewables sector,** and they are emerging as a key source of talent for reaching energy access, renewable energy and energy efficiency targets. Youth are also becoming more involved in climate change and energy transition issues.
-
- **The youth can benefit from improved skill development and decent employment prospects in the clean transportation and sustainable energy industries.** The corporate sector and educational institutions should work together more closely to improve the quality and accessibility of training, while also pursuing initiatives to promote business and technical skills and create jobs geared towards young people.
-
- **In order to overcome political resistance and create the political incentives required for the transition,** we also need to lay the groundwork for better governance in the energy sector and promote multi-level energy and climate conversations among stakeholders. Promoting shared ownership of transition initiatives and securing political support for their implementation will result from involving young people in decision-making.
-
- **The youth are increasingly seeking more just, equitable and progressive chances and solutions in their societies, making it imperative now more than ever to address the many problems they confront,** including access to decent health and education, improved employment possibilities, and gender equality.
-
- **Just transition can be a tool for attaining the United Nation’s Sustainable Development Goals (SDGs) keeping in mind the youth who are dependent in fossil-fuel sectors for their livelihood** (see Figure 2). In the coming years, SDGs will develop with the maturation of today’s youth. They will be the ones to determine whether the 2030 Agenda is successful, and they will also be key players in attaining its objectives.
-

Figure 2**Sustainable Development Goals (SDGs), youth and just transition**

Goals 4
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Goals 5
Achieve gender equality and empower all women and girls



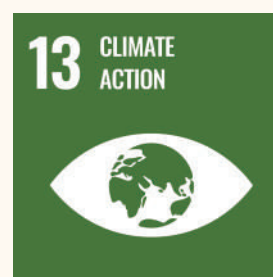
Goals 7
Ensure access to affordable, reliable, sustainable and modern energy for all



Goals 8
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



Goals 10
Reduce inequality within and among countries



Goals 13
Take urgent action to combat climate change and its impacts



Goals 16
Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



Goals 17
Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Source: United Nations, Sustainable Development Goals



“In India, capacity-building measures to bolster the national skills capacity, particularly for women and youth, are supporting the green jobs revolution.”

- United Nations Development Programme (2022)

A close-up, profile view of a woman with dark skin and hair, looking towards the left. She has a bindi on her forehead, a nose ring, and a gold earring. She is wearing a green and white striped sari. The background is blurred, showing what appears to be a pile of bamboo or logs.

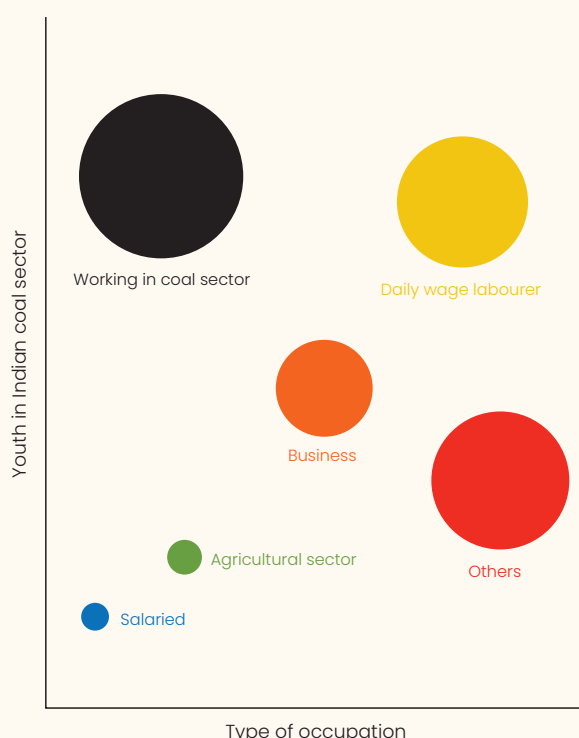
Multiplex transition challenges for youth

The mining industry has grown to become the third largest employer in India (Financial Express, 2019). Five of the eight major economic sectors—coal, steel, cement, electricity and fertilizers—rely heavily on the supply of raw materials from mines. The mining industry is currently experiencing slow growth, talent and skill are becoming two critical drivers instead of enablers; along with the traditional constraints like access to energy, environmental footprint, volatility of commodity prices, access to capital and health and safety (Abenov et al., 2023). Under such circumstances, addressing unemployment in both rural and urban India is difficult. In resource-rich states like Jharkhand, Chhattisgarh, West Bengal, and Odisha, coal is a significant source of income and job creation (Spencer et al., 2018). Coal India Limited, however, plans to reduce its non-executive workforce by around 60% over the next 6–7 years (Rakshit, 2022).

In coal-dominant regions, the majority of the youth workforce are still employed in coal companies (Figure 3), there is a considerable part of the population works as daily wage labourers. In these regions, even youth who are not the coal employees indirectly depend on coal as they run their businesses in company townships.

Figure 3

Intensity of different occupations among the youth in the Indian coal sector

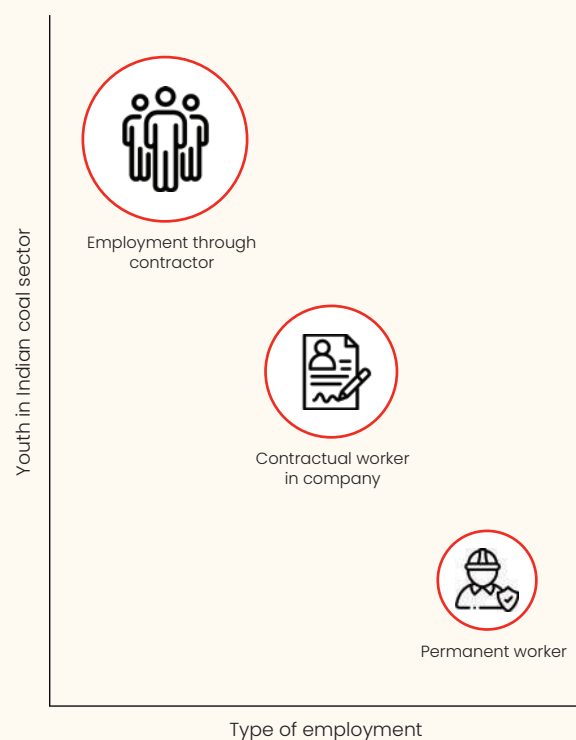


Source: JTRC Databank, 2022.

Among youth coal employees, the majority are either employed through contractors or in contractual positions with the coal company (Figure 4). In recent days, companies have preferred contractual employment due to convenience. Companies are not liable for these workers and are usually not required to provide them with social security. There are some kinds of social security due to labour laws, but only for those who transport coal from the point of sale to the point of consumption. Permanent jobs in the coal industry are now becoming difficult to find and even tougher to keep.

Figure 4

Intensity of different types of employment among the youth in the Indian coal sector



Source: JTRC Databank, 2022.

Therefore, a significant aspect of just transition for India would be to offer economic and social support and growth chances for the employees and local communities, especially the youth, who will define the country's workforce and spearhead development. However, planning and investment are required to increase adolescent labour force participation and secure their decent and dignified employment.



Quintet of youth engagement in just transition

While travelling through India's fossil-fuel regions, notably coal mining districts, it is impossible to overlook young men working as contract labourers in coal mines and thermal power plants. The just transition plans and programmes, hence, must be implemented with youth participation at its core, since it is a constant process that cannot be left to improvisation. It is crucial to decide on motivations and goals before starting any youth engagement process, as well as to evaluate the resources at disposal. Special attention should be paid to budgeting because effective youth engagement requires sufficient funding.

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Specific objectives and a defined scope must be established before creating any youth engagement strategy; then any available resources and potential limitations can be evaluated (Figure 5).

Figure 5

Quintet of youth engagement in just transition

1 Hear the unheard youth sector and empower them

- Create forums for intergenerational dialogue
- Reach out to young people from less active and underrepresented backgrounds

2 Consider 'Youth' as a community

- Make sure you are aware of the many needs and possibilities of youth
- Be receptive, as each of them comes from a distinct history and holds distinctive values and ideas

3 Responsive to the gender

- Ensure representation of women and other marginalized groups

4 Build a sustainable connection with the youth in coal sector

- Create a database of young people and youth groups in coal sectors
- Aid in youth networking, collaboration, sharing of experiences, and participation

5 'Youthify' just transition dialogues

- Modify procedures and communication methods, be entertaining while also raising important questions
- Put stress on digital tools

To guarantee that everyone who has a stake in the just transition process is included, it is crucial to reach out to young people from less active and underrepresented backgrounds, particularly when it comes to climate transition. These may include, but are not limited to, people of colour, young people in foster care, those living in poverty, young people seeking asylum, third-gendered youth, young people with impairments, young people without jobs, and those who left school or their education early. The success of a just transition depends on educating young people who are frequently left out of political discourse about the importance of their experience, beliefs and opinions as well as the need for their voice to be heard.

There is a chance that public engagement methods will train their focus disproportionately towards men because sectors that are highly dependent on carbon are frequently substantially dominated by them. To prevent current biases and inequities from becoming entrenched and simply transferred from today's coal-based industry into the new industries of tomorrow, it is important for the Indian Government and private industries to ensure that both genders are able to participate equally in the next generation.

Better mutual understanding, however, results from making a conscious effort to 'youth-ify' just transition dialogues when interacting with young people in novel and creative ways. It is crucial to interact with youth in a respectful manner and through proper channels. To encourage young people to participate in policy making, it is vital to modify procedures and communication methods, be entertaining while raising important questions and place emphasise on digital tools.

Political discussions and interactive events are frequently quite formal, intellectual or technical. For those who have less experience working with institutions and participating in mainstream participation processes, this may be inaccessible. As a result, it is critical to make sure that meetings and conversations are public and open to everyone who has an interest in the transition. Language and terminology support the knowledge-building and skills development necessary for participation, and they give the youth community the space and tools to be able to act.



Can digitalisation

ease just transition

for the youth?

Social innovations are facilitated by digital technologies. Thus, it is also important to create equitable opportunities for youth who may be left behind due to the digital divide. Inequalities in digital access are very large. Facilitating digital inclusion for the youth is crucial to increase their skills and employability, enable more meaningful participation in economic activities, and facilitate engagement in their communities. Digitalisation can also facilitate social inclusion for least-favoured populations like young peoples. Through digital tools, they can become more involved in social and political activities, voice their concerns and ideas and organise themselves better. Digital inclusion requires collaboration across the public, private and civil society sectors, as well as increased awareness and subsidies for accessing digital tools.

According to academic research, the use of certain digital tools and youth empowerment may be positively correlated (Middaugh et al., 2017). Additionally, digital media promotes wellbeing for those who have intellectual or physical disabilities (Pacheco et al., 2019). They are crucial for assisting at-risk youths (Van Deursen & Helsper, 2015).

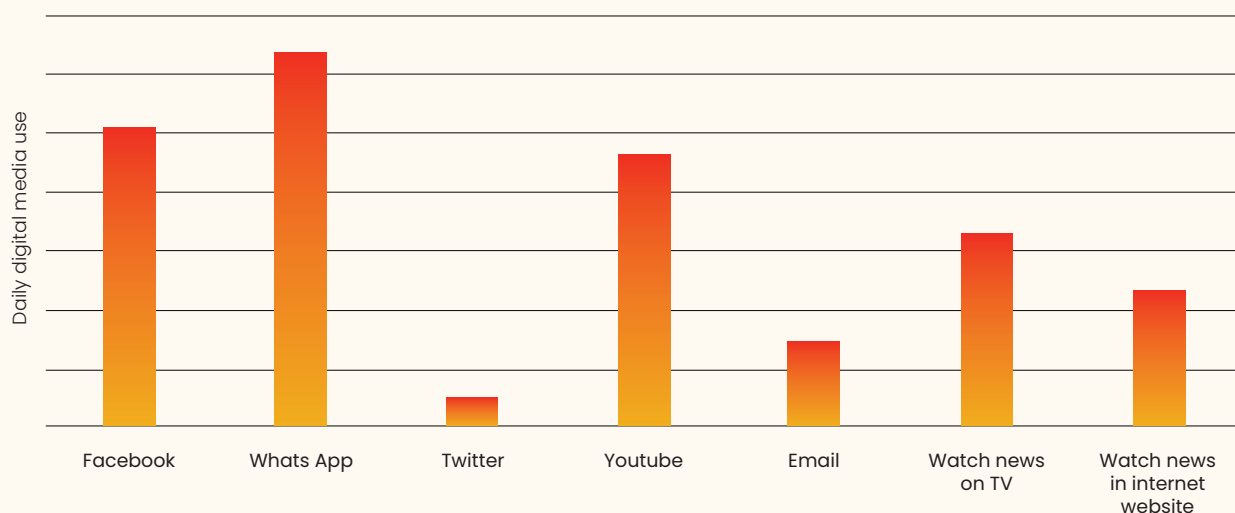
Instead of stifling the discourse about climate change, social media is advancing it. Genuine initiatives to move energy systems away from fossil fuels can readily gain traction and reach people wishing to do their part in the just transition process. A 2019 study by experts at Japan's Keio University reveals that people prefer practical tools like social media platforms to greenwashing (Keating, 2021).

WhatsApp, Facebook and YouTube are the three most popular digital media platforms among young people, who are some of the critical stakeholders of just transition. A study conducted in Indian coal sector found that email is also quite popular, while Twitter has a very adoption rate within the youth community. Television (TV) is still a popular media in the Indian households; the same is true in the case of the coal-dependent youth community. A good portion of youth watch news on TV, though different news portals and channels that are accessed with the internet and streamed on mobile phones cannot be ignored (Figure 6).

According to Social Europe newsletter (2022), the expansion of "social media" platforms holds enormous potential. Every day, traditional media lose importance, and the young generation may have meagre or never even develop the habit. Nowadays, everyone has the ability to be a journalist and can spread news using the practically universal tool of a cell phone. It is essential for spreading the just-transition message to encourage and support people in doing this, especially those whose voices are unlikely to be heard and fairly portrayed in the mainstream media.

Figure 6

Intensity of different occupations among the youth in the Indian coal sector



Source: JTRC Databank, 2022.



How can digital skills be used for youth sensitisation for just transition?

To include young people in the value chains of renewable energy and energy efficiency, digital skills are essential. A lack of digital expertise in the part of employers has impeded the development of net zero energy systems (DNV, 2020). Giving young people digital skills will help the nation to achieve SDGs 7 and 8 (achieving decent work for all and inclusive and sustainable economic growth, respectively) This necessitates collaboration from a variety of stakeholders (e.g., the private sector, government, development banks, NGOs and UN agencies). The development of young people's ICT skills will be crucial to their capacity to participate in and gain from the green economy. The widespread use of ICT applications from web portals, text messages, mobile phone-based monitoring systems, community mapping and social media tools is opening up new ways for young people to contribute to 'smart', energy-efficient economic growth and environmental protection in addition to jobs. Figure 7 also details a few roles played by digital platforms in mobilising youth for a just transition.



What are the 10 Essential Digital Skills?

- # 1 Social Media Marketing
- # 2 Content Marketing
- # 3 Search Engine Optimization (SEO)
- # 4 Email Marketing
- # 5 Video Marketing
- # 6 Data Analytics
- # 7 Website Developer
- # 8 Copy Writing
- # 9 Blogging
- # 10 Mobile App Developer

Figure 7

Role of digital platforms in mobilising youth for a just transition



Source: JTRC Databank, 2022.



“The Transforming Education Summit, convened by the UN Secretary- General in September 2022, secured commitments from governments to build more inclusive, resilient and relevant lifelong learning systems that address evolving skills demands and the transition towards green and digital economies.”

- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2022)



Summary for Policymakers

If properly handled, just transitions offer great potential to take care of the youth's well-being and to ensure social justice.

This section will provide an overview of how just transition policy, including its various instruments, can be strengthened in order to be responsive towards the youth in the concerned sectors and continue to be able to protect over the course of transition processes by considering the changes in needs and requirements throughout the transition—in line with national and international policies.

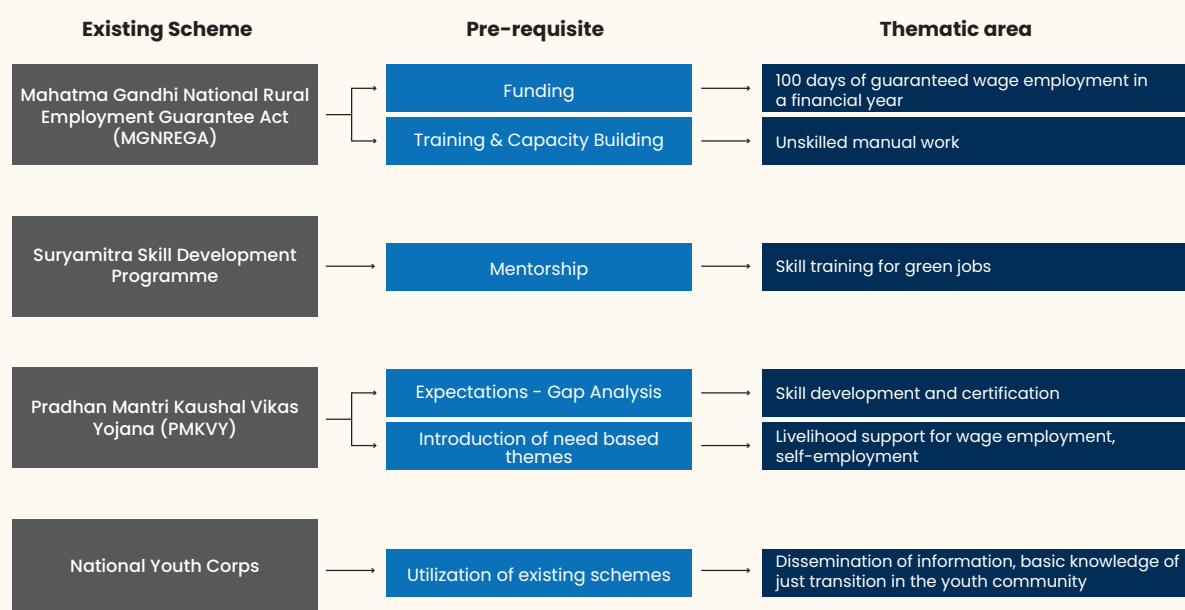
- **Make a roadmap for designing and implementing skill-based just transition plans** for youth to mitigate the human resource impact due to fossil-fuel phasedown in order to provide transformative support to the most aspiring segment of the workforce with provisions for skilling/upskilling/reskilling, employment and livelihood opportunities for transitioning to green or other emerging sectors. As a one-stop solution, this roadmap will help policymakers plan and implement for a just transition with the youth in the fossil-fuel sector.
- **Recognition of Prior Learning (RPL)**, a skill certification system, can be used to convey the experience that has been acquired through time. As opposed to learning in

formal educational and training institutions, skills acquired in the workplace or through extracurricular activities are important for the vertical and horizontal mobility of experienced workers. This opens up a world of opportunities for easy movement to preferred jobs. A phased programme must be developed by all human resources working in PSUs engaged in mining activities to guarantee RPL certification for all of its personnel.

- **Innovation in youth engagement tools and techniques in just transition**, e.g., organising debates and dialogue sessions at schools, colleges near coal mines or thermal power station townships; the initiation of youth ambassador programmes that will disseminate awareness of just transition among peer groups; organising hackathons; and encouraging youth to present their ideas online, in writing, and in webinars and share with policymakers.
- **Leverage existing schemes for Indian youth for a just transition.** For example, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) can engage youths who want daily wage jobs for restoration of mined land, water body reclamation and afforestation. Figure 8 provides more details on this:

Figure 8

Existing central government schemes for youth and the overlapped thematic areas with just transition



Source: JTRC Databank, 2022.

- **Establish an institutional role for young people in the just transition's governance mechanism.** Ensure the youth community a seat at every decision-making table and give them a voice to express their views. Enable young people to propose ideas for actual responses to implementation issues or youth-sensitive components in policy for just transition.
- **Create a special just transition fund for youth** drawing on the available DMFT, CSR funds and national resources.
- Include **youth drain retention** as a success measure for just transition programmes and policies.
- **Use digital tools**, as they help keep participant involvement levels high and expand the audience. To this end, invite young influencers and creators to just transition events so they may create original content for the debates. The digital skills that exist among the young coal-dependent individuals can pave the way for an alternate livelihood after coal mine/ power plant closure.



Do You Know?

"The new Green Jobs for Youth Pact , launched by ILO and UNEP at COP27, aims to create 1 million new green jobs"

- (United Nations Environment Programme, 2022)



Photo credit: Just Transition Research Centre

Conclusion

The youth of India, as a critical and dynamic demographic group of stakeholders, can play a prominent role in achieving a just transition toward a sustainable future. In the due course, as the country India undergoes rapid industrialization and develops in every facet, it is crucial to ensure that economic growth is balanced with social and environmental considerations. The youth, as the future generations, will be the ones to benefit from the infrastructure, employment opportunities, socioeconomic conditions, and ecological restoration that the just transition will create. However, a community's future cannot realistically be chosen without the input of its people. To ensure that the just transition meets its goals, benefits the end of the communities it supports, and ensures intergenerational justice in the decisions that are made, young people's participation is essential.

To achieve a just transition, it is imperative to empower and involve young ones in decision-making processes at all levels, from local to national. This includes provisioning access to proper education and training on sustainable practices and technologies and promoting youth-focused and youth-led activities that address local social and environmental challenges. It is also crucial to ensure that youth have ample access to adequate resources and support systems, including financing, mentorship, and networking opportunities. Such support can help overcome barriers to youth-led innovation and ensure that young people's voices are heard and valued in the process of just transition.

Youth can, furthermore, leverage their digital skills and social media platforms to promote sustainable and just behaviours and connect with like-minded individuals and organizations. These all exercises can help establish a groundswell of public support for the just transition in the Indian context.

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Contact us:

Just Transition Research Centre
Department of Humanities and Social Sciences
Indian Institute of Technology Kanpur
Kalyanpur, Kanpur, Uttar Pradesh 208016



jtrc@iitk.ac.in



[@jtrc_iitkanpur](https://twitter.com/jtrc_iitkanpur)



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