

Neha:

Thank you so very much Ajay, Srestha, and Mike for joining us, we're really lucky to have you today, given your extensive experience on energy issues and challenges in India, but also because of your contributions to the yet nascent, but increasingly more active conversation on just transitions in India. We're really eager to get this conversation started. So, I'm going to dive straight in, and I will start with Ajay. Ajay, you know in India, coal is often called king and India is referred to as a coal nation. Coal is credited to be at the center of growth and development in India. So, the question really is for us today, is there an energy transition taking place in India? What is this transition and what are the factors driving it?

Ajay:

Neha, we are in the midst of an energy transition and it's largely driven by economics. The cost of renewable energy is nosediving in India. What is also true is this price is when the sun is shining, but in the evenings, when the electricity peak occurs, all electricity is the cheapest form of electricity, but I've no doubt that in a couple of years, three years, four years at the most renewables plus storage will be providing electricity around the clock at prices that are more than competitive with coal electricity. Now apart from this, also note the huge benefits that occur because of lower air pollution when we use renewables instead of coal or petroleum fuels, and that is driving a lot of change, especially in urban areas. This leads to lower health impacts, and because of that, this provides an opportunity, especially for the youth to say, "I am using an electric two-wheeler. It is my contribution to society. It is my contribution to cleaner air. It is my contribution to lowering climate emissions." So there's this mix of factors that drives the energy transition.

Neha:

Thank you for that Ajay, that was a really helpful start and Srestha, turning over to you. Do you agree with the factors that Ajay has just highlighted for us? He spoke about declining costs. He spoke about the health and pollution impacts. Would you add anything to these drivers? And I'll add one more thing to this, which is really the big question we're here to discuss what factors do you think we need to consider or ensure to make sure that this energy transition is just?

Srestha:

So, Neha, just to add to Ajay's point, I would like to actually reemphasize one of the last things that Ajay mentioned, our contribution to the cause of climate change. And I feel that it is the urgency to act on climate change which must drive the energy transition and actually leapfrog in many ways, because, you know, the Global Climate Change Risk Index of 2020, which has just come out, is saying that India is the fifth most vulnerable country to climate change impacts and, in fact, the Ministry of Finance in 2020 came up with a report where the adaptation costs from climate change has been estimated to be about 1.2 trillion US dollars. Now, if we think of this and in the wake of a COVID crisis that we all are trying to grapple with the difficult times we are in, this is something we just can't afford.

Srestha:

Now, to answer your second question, I would say that yes, the energy transition process must be fair. And in fact, this is where we are still lagging behind. The energy transition, to make it fair, we really must start talking about just transition. And as I put it often, the just transition, if we do it, it will be a strategic, economic and political move as well for the India government and as well, it will be complimentary.

First of all, you know, there is when we are talking of the energy transition, when we are talking of creation of renewable energy jobs, we really need to think of the ~~energy, or sorry,~~ the employment complexion of the fossil fuel sector, which is largely coal in India. Here, the large labor sector consists of an informal economy. And so the first question comes that how do you account for these people who are part of this informal economy? The second question that we also need to think of is that the jobs that will be created by the RE sector is not going to be in the same areas where we have the coal regions.

Srestha:

It is a very different region geographically. It has issues of mobility. It has various other issues. So, this is where the initial transition must plan for a just transition aspect. The third and most important thing, which we are not really recognizing right now is that a just transition process and the decline in coal is already happening at the sub national level, given the cost competitiveness of RE, given the progress in RE we are having. And given the, you know, the coal is losing its edge because of a number of reasons. So in many of India's coal regions where the Coal India Limited, which is the biggest coal producer of India, is still recording a profit at the national scale. But if we look at the subnational picture, actually many of the mines are unprofitable, and these are closing down temporarily or permanently without any plan for a transition planning. So, while we are looking at a win-win side of the energy transition, this is a big picture that has been completely missed out, which I personally believe should be part of the energy transition ambition as well. And if I want to put it, I feel that just transition should be part of the energy transition ambition, as well as climate change mitigation policies and strategies.

Neha:

Srestha, you've highlighted some really key considerations for just transitions, including the need for fairness and equity, and especially the impacts on informal labor, the geographical disparities, lack of social mobility. Mike, turning over to you, you've been doing a lot of research on just transitions in India. You've also been deeply involved with doing similar research in South Africa and other developing countries. So, from your perspective, can you share what you may have found unique to a country like India? Is there anything that surprised you?

Mike:

Neha, I think you mentioned that the kind of nascent use of the term just transition in India and I think we've seen an explosion of interest in the actual concept. And I think that it's new relative to some of the other developing countries, you know, South Africa, for example, very early on in 2011, already had a very strong labor policy on just transition that was very clearly articulated. I think though, that in India, there are many streams of environmental and social work that have been developed over a long time. So things like "environmentalism of the poor" that Joan Martinez Alier kind of articulated really grew up in India. And they looked at things like who is involved in decision-making, who gets the goods and bads in development decisions. And I think that there's that rich history of social justice environmentalism network that needs to be drawn into the just transition discussion.

Mike:

It will enrich it globally I think. Srestha mentioned that the kind of lack of information really on the informal sector and I think that that really is surprising when you look at the sheer number in that sector and yet how poorly understood it is. The role of the railways I think is one that certainly caught me by surprise and the cross subsidization of passenger mobility by the transport of coal is going to have very

widespread just transition implications as the transition out of coal happens and it impacts on many people's ability to move around. And then finally, I think the thing that struck me was the enormous achievements of the Indian government around electrifying villages and households. A huge effort and yet there are still challenges around access 24/7 to electricity. And that is going to have implications for the kinds of energy systems that we use. And, of course, the possibilities for things like distributed solar power to support access, if it's done with a focus on justice and inclusion.

Neha:

Thank you, Mike. You've already started highlighting several of the development challenges and how they intersect with just transitions. For example, Mike, you started speaking about energy access, which is going to be critical to the conversation of just transitions in India. But just taking a small step back and looking at what a just transition is and how to achieve it. The Just Transition Initiative has conceptualized just transitions through three interrelated concepts. The first is distribution impacts, or who gets what in a transition. In the case of India, this will mean transitions away from fossil fuels and towards more renewable energy, as Ajay was describing, who might win and who might lose from the changes that are about to occur and are occurring. The second dimension is social inclusion or who gets to decide who was really part of the decision-making processes. And this refers especially to those who may have historically been excluded from decision making processes. And the third really is, will the transition lead to fundamental, systemic, and at scale change or transformational change for the better in terms of how communities and societies function. So with these dimensions or concepts in mind, particularly distributional and inclusion aspects, Ajay, could you share some thoughts on who you think might win or lose from the energy transition in India and who will get to decide?

Ajay:

Neha, I have found it convenient to break this down into three pillars, or three elements. When we look at distributional impacts of social inclusion, the first is the economic impacts. So whether it's employment, whether it's income impacts, it's clearly the people who are employed in coal mining and in the conversion of coal into electricity are the people who are most affected. The coal mining occurs in particular pockets of coal bearing areas in India. That is where this is going to occur. And most importantly, it's going to occur for the coal miners. And this comes to the second component that I was talking about, which is the environmental component, because the miners are the people who actually were there earlier, they were earlier farming. Now the mining activity has destroyed the farmland. These people can't go back to farming, also it has been one or two generations,

Ajay:

They've actually lost the skills, the expertise that is needed for farming to happen. So the first is economic, the second is environmental, and the third is social because, you know, there are communities that are broken up. Once you've created these kinds of coal mining communities, what happens is you have a huge influx of people who come in, and this is particularly as far as skilled in the higher grade jobs are concerned. These are supervisors, engineers, and so on, the technocratic people who are out of mining colleges who come in, who are managing this, and there's a wonderful study that has come out, which is looking at places where mines have closed. We also have been involved in some parts of this country. First thing that hits you is that these places become ghost towns because all of these people who have regular employment, who have formal degrees move out of those places, there are no economic lifelines to sustain them. So socially, environmentally, economically, these are broken regions, they are broken communities. The other issue that we are foreseeing is that the places where investment in the renewable energy technologies that occur are obviously geographically separate.

They're also economically a different class of people, need a certain set of skills to be able to provide wherewithal to the services, to the solar or wind energy sectors, which implies that skills and expertise becomes a key in the concept of a just transition.

Neha:

Thank you, Ajay, for bringing in the nexus between economic, environmental and social concerns, which is really at the heart of any conversation on just transitions. And I'm wanting to continue looking at this nexus and ask you Srestha, do you think given what Ajay has just said, especially his focus on social considerations, do you think that traditional forms of measuring benefits and loss, are going to capture the elements of a just transition? What are we at risk of missing if we only look at say, job creation or economic value added?

Srestha:

To begin with, Neha, I would like to say that, we need traditional forms of cost benefit analysis. And I say it for the reason, because given the complexity of the coal industry media and the challenge of this topic on the policy front, we need to bring on board various stakeholders. So in that sense, a traditional sense of cost benefit analysis will be important to move the needle on the policy front and to bring together stakeholders like the investors, the policy makers, and so on. But I feel it will be just limiting if we just limit to that. And here is where the challenge is. So, if you solely go by the traditional measures of cost benefit analysis, and history has shown us, and if we look into what has happened from globalization, the economic impacts, and the studies that we have, the experience that we have from it, is yes, there will be certainly many who will be falling through the cracks.

Srestha:

For example, the biggest challenge for India is, and I can't emphasize less on this, is the challenge of the informal sector, the huge proportion of the informal workforce. It's very, very difficult to measure what kind of benefits they'll have, the costs of them, and all that. So that's the reason we really need to think a little differently when we plan for a just transition in India, talk about it or model for it. What we need to do is, fundamentally, we need to think of some of the fundamental changes, which can be transformative in nature. This is because the idea of justice that underpins the concept of just transition in the Indian context. If you go to some of these coal regions, it is very clear they suffer from poverty, they suffer from under development, some of the worst human development indicators. In fact, there is something called the Multidimensional Poverty Index, which has ranked many of the coal districts having suffering from previous indicators of multi-dimensional poverty, such as healthcare, education, living standards, and so forth, and income levels are also very less. Now, this is something we need to address. And then there comes the question of procedural justice, and this is more important because when the development projects have come in these regions, people have been in many cases, excluded from the decision-making process. There have been issues of displacement. There have been issues of inadequate compensation, and we have very poor records on this, but there are enough volumes that has been written on it.

Srestha:

Now, how do we account for that? And we believe that just transition is an opportunity to address this process of social exclusion, distributive injustice, and what has happened. So this is how I would say that we need to look into just transitions from the process of social exclusion and going beyond the traditional way of measuring cost benefit and driving decision-making just based on that.

Neha:

Srestha, I really appreciate your characterization of this as an opportunity to sort of right historical wrongs and focus on social inclusion. So I'll just open up and maybe ask Mike, Ajay, and Srestha if you want to answer this as well, but how do you capitalize on this opportunity for social inclusion? Are there existing mechanisms that can be used? Are there new mechanisms that will need to be created?

Mike:

Maybe I'll jump in as a start to it. I think that there are certainly a number of issues and opportunities here. And when we talk about kind of transformational change, we start to highlight issues of scale and the systemic needs to work. And I think I highlighted the importance of the geographic distribution of the benefits and harms in these transition processes. And I think that there is an opportunity and there are examples of district level, state level and national level governments working together to start to address some of these issues and they will need to work together across the different geographic dimensions. And there, I think that there's an opportunity for the Climate Investment Funds and other climate funds that are committed to things like a programmatic approach to support with the convening power to support engagement that works towards what Srestha is referring to as procedural justice.

Mike:

It engages and works with people. I think that there are opportunities still for climate funds to invest and to use concessional finance, as I just said at the beginning of the podcast, things like photovoltaics and wind are probably commercially competitive, but certainly the opportunity exists to provide concessional finance for things like storage to support the work with things like grid integration, that kind of work. And then this notion and an opportunity to do some long-term planning, again Srestha mentioned cost benefit analysis, I think that there are many kinds of systemic modeling tools that we can develop and allow us to understand better where and what needs to be part of just transitioning work.

Neha:

Thanks for that, Mike. And now turning to you, Ajay, I think Srestha and Mike have brought up three things that are quite interesting. One is the need for skills development and the

Neha:

role that that will play. Srestha spoke about social inclusion and procedural justice and I wanted to ask you what I was asking before about mechanisms to ensure that this might happen. And Mike is speaking about really transformative change and the role that climate finance can play. My apologies, I know these are quite distinct and quite large topics, but we'd love to hear from you on your reflections on all or any of these.

Ajay:

I believe that climate finance is essential to address some of the issues which no other kind of financing can address. I'll give you an example, which I spoke of earlier, which is skills. Now, let me give you an example. I have a postage stamp size farm in central, in the state of Uttar Pradesh, which is the most populous state in the country and the central part of that state. I have a photovoltaic pump on my farm, but if I want it repaired, or if I want something done to it, I need to bring in mechanics or technicians

from about 70 kilometers away, which is the nearest large town. There are guys in this village who say that they are trained in solar, but they don't have any knowledge. How will these guys develop the skills that are necessary? So, whether it is the people who are losing jobs or whether it is the new jobs that we create, ensuring that these start providing opportunities to people is important.

Ajay:

And therefore, I imagine that to have a skills development program, which reaches out at the level of villages, at the level of youth, is important. The other point that I would like to mention is that at the end of the day, many of these are really very local, localized issues. We were looking at a district in Madhya Pradesh where mining has stopped because of the exhaustion of resources. The impacts are not even at the level of a district, forget a state. They're not even at the level of a subdivision of a district, which is called a *tehsil* which is actually smaller than that. Who helps, who does that? So what we need to empower, that means we need to train, the people who are called block development officers. These are the guys who actually provide the kinds of intellectual resources, they bring in the channels, the states, the governments' financial resources with going to various kinds of infrastructure. This is the level at which action actually occurs and is essential in order to move ahead. My own belief is that unless we start looking at this level of granularity, we will miss out the vote for the trees.

Neha:

Ajay, staying on some of the things that you said, what do you think are the impediments to this actually taking place? Is it finance? Is it coordination? What is stopping this from occurring today?

Ajay:

Right. So, the biggest problem is that it is not yet understood what a large-scale operation this will ultimately be. Because right now is occurring at very, very small scales in the case of the closure of coal mines, it's only happening at the level of mines which face exhaustion. And as I mentioned earlier, this turns into ghost towns. I imagine if there are hundreds, now thousands of ghost towns across the country, it will pique us all of a sudden. Now it is correct that we have like any other developing countries, we have approximately 30 years to plan for it, consequently bringing in the kinds of models that are needed. If you're going in for large scale skill development, then you will need to train trainers. That has to happen now, in order for those guys to be able to provide the training that is needed tomorrow.

Ajay:

So I do not see that governments in India or in any other country are unwilling, it's that we need to provide them the kinds of models that are needed in order for this to happen. So we need pilots. We need to see what is it that can happen. You need pilots in more than one geographies. This will come out with the kinds of economic enterprises that you can do. It will tell us what is the kind of social infrastructure that you need to build, whether it is marketplaces or whether it's transportation hubs, so that the people who are affected continue to have high quality lives. And the new kinds of technologies are also able to provide the kinds of opportunities that people can then use to take advantage of the change that has happened.

Neha:

Ajay, you're speaking about long-term transformative planning, but you're also speaking about anticipatory skills development and, taking advantage of the fact that I worked quite closely with Mike

on just transitions so I know how passionately he feels about skills development, Mike, I wanted to ask you if there's something you wanted to add.

Mike:

I think it's a very perceptive point that we can't wait until these new opportunities are there and then suddenly you realize that, in fact, we need to improve the skills. We need to anticipate what skills we're going to develop, and we need to start to put in place the curricula, and, as Ajay said, train the trainers. The flip side of that of course is that we need a process of economic diversification. We need to open opportunities for people to get jobs with the enormous levels of unemployment in many developing countries. And so that economic diversification, I think iFOREST in the new book talks about induced dependence on coal and that induced dependence comes from the fact that in some instances, coal mining, for example, has destroyed traditional agriculture, it's destroyed access to forests, and we need to recognize that part of the economic diversification will also be rural economic diversification. It will be restoring agricultural potential of this land. It will be the restoration of ecosystem services, and we need to value those ecosystem services so that people can be paid to restore them. And then we need to start to develop the skills that allow for that move into a very radically diversified economy in these places that have been so dependent on coal for so many reasons.

Ajay:

Neha, if I can jump in, I think Mike has hit the nail on the head. Economic diversification. I remember reading an article in the New York Times that said that in the Appalachian areas, what may make more money than even coal mining is beekeeping, honey bottling. Now it opened my eyes because in my mind, the coal mines will be replaced by solar panels. No, it's the wrong areas. We're looking for other kinds of jobs. And then I realized sitting in Delhi, there's no way that anyone can figure out you need X job here. No, those will come bottom up. That is the kind of institutional mechanism that we need. That's why the block development officers are important. They are the people who actually know what is it that can happen in those types of places.

Neha:

Srestha, your book from iFOREST has been brought up. We would be remiss if we didn't ask you, if you had some thoughts to share on this idea of economic diversification and also the energy agriculture nexus. Please, over to you Srestha.

Srestha:

Neha, I would like to just step back a little bit and first comment on what we have been discussing about the mechanism of social inclusion and then I'll just respond to your question on the economic diversification. When we talk of mechanisms of social exclusion in India, actually it is emphasized in various regulations that are applicable to those regions. To begin with, the constitution of India emphasizes on local level planning and inclusive planning, particularly involving the local level institutions, which are called the village councils. There have been planning mechanisms clearly outlined how to go about inclusive learning process and social exclusion process. And it has been outlined by the planning commission of India. It has been used in various kinds of poverty alleviation planning.

Srestha:

One of the biggest programs in India, in fact - and World Bank is very knowledgeable of it - is the Backward Regions Grant Fund. It was a major program and it also talked of social inclusion. And so there

are underpinnings under various laws, the mining law itself, something right now we have the District Mineral Foundation law, which is there in every district, which is talking of inclusion. We have the Environment Protection Act under which we have the Impact Assessment Notification, which talks of inclusion. We have the Forest Rights Act. So there are mechanisms, there are regulatory obligations, which obligates social inclusion. Unfortunately, that has not taken place very often. And this is where I feel instead of thinking of again a new set of mechanisms, we can learn from these experiences, bring together the experience of this loss and develop a just transition framework and the planning mechanism, just building on these opportunities that we already have. And in the book, since we have already referred to it, this is something we have really tried to build upon when we speak of governance.

Srestha:

Coming to the point of economy diversification, I think for a just transition of any coal region, and coal being the main fossil fuel here, there are a couple of mechanisms through which this economic diversification should happen. I would suggest that, what Ajay actually gave an example of, is there is a huge opportunity of tapping on the natural resource base. Most of these coal mining regions, in fact if you look at the map of the coal mining districts of India, a lot of them have enormous amount of forest cover left. And The Forest Rights Act talks about social inclusion, improving the lives and livelihoods of the forest dependent communities. So this is the resource we really need to tap on. Then there is the tourism sector. Then there is the - of course you cannot close all the mines and backfill it all the way, but you can develop fisheries around it.

Srestha:

And there are many examples. So tapping on the natural resource base is one of the major areas. The second point of economic diversification, and this is something we uniquely pointed out, and I would like to emphasize on it, is a coal mine area redevelopment. Now, coal mine areas really need planning through mine closure and also you notice there is a huge amount of infrastructure that has been created by coal companies in the coal area, such as some amount of hospitals, some amount of schools and so forth. We really need to think of reusing this infrastructure and also coal mine closure and there are jobs that can be created during the process of coal mine closure and post coal mine closure.

Neha:

Thank you Srestha, lots to think about there, but maybe I can post a subsequent question and ask about District Mineral Funds and for the benefit of our listeners, maybe you can describe what these are as well.

Srestha:

Yeah. So this is something I feel which gives us the opportunity to start planning on just transition with or without even a policy framework on it right now, because honestly speaking that will take a little time. District Mineral Foundation is something which has been created under the Mining Act as a benefit sharing mechanism with the local community in the mining radius. Now it is not just restricted to coal, but for that matter, any mineral of that sort. Now this is actually - the idea of it was started more than 15 years ago and the conversation was around to institute a benefit sharing mechanism, given the things we are talking today, like historical injustice, the lopsided development that is there. So mining companies currently are paying an equivalent share of the tax, they pay to the state government towards this fund and funds right now are huge.

Srestha:

It is estimated that about, in Indian rupees, it is some 6,000 crores can come through this. And some of the mining districts are plush with this money. And it's local level money that is currently there with the local level institutions and District Mineral Foundation. In fact, I have drawn a parallel in my writings, is that it mandates exactly the thing that just transition needs to do. For example, it is telling that this fund must be used for livelihood development. It must be used for healthcare. It must be used for improving education. It must be used for ensuring long-term sustainability of this region so something like ghost towns are not created. And when we talk of just transition planning, these are the exact things that we need. So I would like to say is that District Mineral Foundation right now, the money is there.

Srestha:

And if we start properly planning to even using this fund, it gives us the seed money to start on just transition. We just need to go with it, that's it.

Neha: And, Ajay, do you agree with some of the ideas as Srestha shared for economic diversification on the role of District Mineral Foundation?

Ajay:

Absolutely. I think as she rightly points out, number one, the money is there and it's available at a decentralized level. This is important because we'll be increasing centralization of funds. The availability of such distributed pots of money is difficult to find, that's number one. Number two, there is obviously a strong correlation between the place where this money is available and the place where it can be spent with the people who are affected or will be affected. The key issue is that the way it's organized is today essentially around perpetuating more of the same. As Srestha says, you will need a lot more inputs into these kinds of actions. The planning is done at a much more de-centralized level to use these resources, to create jobs. It will be great, for example, if social planners become part of the process of thinking how this redevelopment work is carried out using these funds. I think it's a great idea, both the core redevelopment plan as well as using the funds, as I said, they provide good pillars on which we could work.

Ajay:

And it's also very important lesson. I think traditionally what we have had in India is there's a little amount of royalty on the sails that accrued to the state governments, but this issue of a District Mineral Fund is, as Srestha mentioned, relatively new. There's no reason why this lesson cannot be multiplied across the developing world and applied at a decentralized enough level so that actions that occur can reflect the places where the harm has also occurred or will occur.

Neha:

Thank you, Ajay, and also for framing this as a lesson that might be relevant to beyond India, to other developing countries and developed countries as well. Mike, I wanted to ask you if there are other lessons from your work in India that you think are applicable beyond India to other developing countries, as they look at planning for just transitions and implementing just transition investments in projects.

Mike:

There definitely are, and I think that what we're learning through these case studies, the case studies that we've set out to do within the Climate Investment Funds and working across the project of the Multilateral Development Banks, are specifically there to develop the kinds of local insights that are so necessary given the contextual differences between countries and between even districts within countries around these just transition processes. And so that contextual work is important. I think that one of the things that is coming through really clearly is the need for very careful, long-term planning around the transition processes. It's too late when we kind of get caught up against the wall without having done the planning. And so what the case studies, what the insights being developed in the India work, and particularly the work with TERI on the kind of case study in India, is this need for identifying particular areas, priority areas, putting in place budgets, plans, skills development, in those areas to ensure just transitions.

Mike:

And then of course, the ability of the Climate Investment Funds through these case studies to look across different countries and to see as you're asking, you know, what are the learning possibilities here, and things like the District Mineral Foundation. I think our key insights, the kind of long-term modeling processes that South Africa did in its initial planning, again are kind of insights that we can share back and forward across the different areas in the Climate Investment Funds, creates a kind of common space, as it were a knowledge commons, and a kind of shared practice area that we can work with. So, yeah, certainly lots and lots of value in this kind of more granular case study work.

Neha:

Thank you, Mike, and for our listeners, I want to mention that the case studies and the book and other links associated with things that have been brought up will be linked to this podcast so you can find them below the link to the actual recording. So we are a bit out of time so we'll have to wrap up, but I thought we'll do one last round with our esteemed speakers here and ask them, maybe there's a question I didn't ask, but there's a thought you really think you must share when you think about just transitions and the energy transition in India. Maybe Srestha, we'll start with you this time.

Srestha:

So Neha, I personally believe that just transition is an opportunity. And instead of looking at it any other way, I would like to keep it that way very much, because there have been things which have not been the right way, but today we are looking forward and we have very fortunately the strides in energy transition behind which we have a lot of momentum. And all we need to do is now make the energy transition successful. We need to start talking of just transition, start planning for it, start developing policy mechanisms for it and putting in place the governance mechanisms that can take it forward. So here is where it is, and as they identified, some of the opportunities are already there. We do not have to wait for the time when we have a national level law for just transition or a policy, we can start with what is very much available at the local level.

Srestha:

And actually there's, the just transition is happening. All the experiences around the world, the studies have shown that it cannot be a top down approach. It has to be a bottom up approach and wherever it has happened as the bottom-up approach, it has succeeded very heavily. It has gone through a top-down approach, it has not succeeded.

Neha:

Thank you, Srestha, and you're suggesting that we need to have more discussions and conversations about this, and I just want to commend your work at iFOREST because you've really been at the helm of doing that in India, so kudos to you and your team on really moving the conversation forward. Maybe Ajay we'll go to you next, any last thoughts?

Ajay:

Neha, think of it this way. There is a very good possibility that if we plan well, the last coal power station will close on the day the last coal mine close is when the last coal miner retires. Wouldn't that be lovely. And in the process, if we have created the opportunities for people to have found alternate jobs, alternate to coal, that is what we'll buy the social contract to make this planning happen.

Neha:

Mike, it seems you're going to have the last word. And what are your thoughts? Any question maybe I didn't ask, but you really wanted to share your thoughts on?

Mike:

Not so much a question, but I think so many insights coming out of the many inputs from both Srestha and Ajay. And I do think that there is an opportunity here. The opportunity though, is going to require some quite serious commitment to acknowledging people's voices in very many different areas and building capacity for people at all levels to understand what a just transition means, what it will require, and what kinds of practices, structures we need to put in place. You know, that will work from local communities that have often been marginalized from decision-making processes to enable them to have a voice, to have an influence on outcomes that affect their lives, but also state government officials who are needing to make some very tough decisions around how best to manage these transitions, national government to kind of negotiate many different, competing in many times, competing interests are around energy, both looking into their country and looking out as India plays a significant role globally in the energy transition and in the just transition. I think in that sense to Ajay as he moves into his new role in bringing together many developing countries to work together around the renewable energy sector all strength to him, and we look forward to keeping this conversation going into the future.

Ajay:

Many thanks.

Neha:

Thank you, Mike. Thank you very much to all of you. It's been such a privilege to be able to have this conversation with you. We're really wishing you the best of luck in all the different endeavors related to energy and justice that you are embarking on. Thank you very much for this conversation.