"The Long-Term Strategy is designed around the big transitions India is going to face"



Interview with Navroz Dubash, Professor at the Centre for Policy Research (CPR), New Delhi, on India's long awaited Long-Term Low-Emissions Development Strategy. He was part of the group working with the Ministry of Environment, Forests and Climate Change to develop the LTS. Along with IIT Delhi, the CPR was the anchor institution to design the framework. (Interview: Karin Deckenbach, GIZ, IKI India Interface Project)

At COP 27 India released its long-awaited long-term low carbon development strategy. How will it help India achieve its net zero target by 2070, despite no concrete targets or timelines are mentioned?

My feeling is that the way in which low carbon development is going to proceed in India most effectively is actually by mainstreaming climate change into the decisions of ministries. And beyond that, into the decisions of states and cities and so on. So, while targets have their role in very precise ways, what you want

to do is to induce ministries to think about how climate change is seen from their outcomes. If you look at adaptation, for example, the future of Indian agriculture is not really about setting targets, but it is about thinking how you understand district by district, state by state, what future climate impacts are going to be like, and how that might affect things like cropping choice, how you develop more resilient crops that are suitable for climatic shifts. These are all things to be figured out, but it's not on the radar of ministries yet. So, this kind of process helps internalise climate as a low carbon opportunity as well as an adaptation impact constraint into ministries. Now, on the mitigation side, in terms of concrete targets, yes, I think there's a role for that. I think it would be useful over time for India to develop LTS that includes some of these things. But that target setting is much harder to do in a country where energy needs and emissions are still growing. So, figuring out how to meet energy needs in a lower carbon way in the future is often tied to your infrastructure investments. And we are a rapidly transitioning society, not just in climate terms, but in terms of job creation, infrastructure and urbanisation. For each of these major transitions India needs to think about how we can negotiate that transition in the most low-carbon climate resilient way possible.

For that reason, we suggested to the Ministry the design of the LTS around the big transitions India is going to face. There is an electricity and energy transition, an urbanisation transition, an industrial development transition and so on. And in each of those areas there are five or six big things that need to be done or at least need to be thought about. And in each of those areas it is useful to think about where the climate co-benefits are and where the trade-offs are in order to maximize the co-benefits and minimise the trade-offs.

My point is that even without targets per se, once you identify buckets of actions, the way in which bureaucracies work is, they know that in the future those buckets will become the basis of actions, they will be measured and benchmarked. So, it shows a way for bureaucracies to mobilise internally and provide incentive structures. It provides a framing for the conversation. Is that sufficient? No, I certainly don't think so. But creating these buckets of actions is actually really important.

So, there are two things the LTS did. One, it broke the problem down into five propositions, and within each of those, the big components. The second thing is that it kind of forced the process to look at all aspects of the transition. So, instead of just talking about EVs, you need to talk about the transport sector: public transport, urban planning, EVs, freight etc., a comprehensive view on the buckets the LTS created. We now have a structure within the government of India and at the state level to say, here's the set of questions one needs to ask. And the report made a first step. If we think about this as an ongoing process, it's really important that you first lay out a comprehensive and logical way of thinking. And that's what we really tried to do working with the Ministry. And I think that's the way to view the success of the report.



Sure, I know, some people may say: Look, this is just a bunch of words and just a bunch of categories and where is the target? One person told me, this is what a grad student of mine could have come up with! Well, in essence that is true. But the fact that this is said by the government of India makes it a guide. So, it's not about the intellectual content being particularly new, but the fact that the government of India has said: we agree that all these areas are important and that we are committed to bringing about a transition in these five areas through these various steps. That signal effect is what I think is the main accomplishment.

Indeed, there is some heavy lifting in the LTS talking about promoting economy wide decoupling of growth from emissions, especially in the hard to abate sector. What are your ideas how international cooperation could support India for decarbonising the energy intensive industries?

On what international cooperation can do, I probably have a less convincing answer. First, I should be clear: It is not just a low carbon transition, it's a low carbon development transition.

So, for each of these transition areas the question is: what do you want to achieve in terms of mitigation, for adaptation, and in terms of your development targets? Do you want to have a certain level of job creation? Do you want to minimise air pollution? In each of those transitions you have multiple objectives. The industrial hard to abate sector is substantially about technology, new technology development and adoption, but it also got to be about job creation. So how can India foster jobs while transitioning?

To answer your question: Looking at industrial decarbonisation in particular, the key space for cooperation is joint technology development.

And possibly also technology transfer, for example, green hydrogen?

Absolutely. It's basically facilitating the adoption of technology, whether that is through joint development or for existing technology through transfer. In the industry sector, it is clearly going to be a big part of the story. But in other areas, for example a public transport transition, it is not a technology story. It is really more of an urban planning, development, and urban governance story.

With an overall perspective: Where do you see concrete entry points for Indo-German cooperation to support the long-term strategy, also with short term action to accelerate India's climate action? We shall not wait till 2070, right?

No. In fact I think, it's a strength of this report that it doesn't focus very much on the 2050 to 2070 time period. It actually says the short run is up to 2030, the medium run till 2050, the long run to 2070. And the focus has to be on getting India ready this decade for the post 2030 period.

This decade is really critical because the key goal is to avoid locking into high carbon infrastructure.

With freight corridors, with the design of cities, with building construction, we have to avoid locking in. I do think that transition is going to be challenging. I do think in the next decade, India faces the challenge of meeting rising energy demand, while also decarbonising. And to do that, we probably do need to keep using fossil fuels for a while longer. And I think there's a global conversation now, including in the IPCC 1.5 scenarios, where there is often an unrealistic expectation that in the short run demand growth will be limited in the developing world. And I don't think that would be okay. I don't think we can decarbonise or address climate change on the back of stagnant energy demand in the developing world. And this is something that I think our European friends have to face up to as well, that the models often assume that energy demand will be stagnant for a decade or so until renewable energy picks up. And that flat energy demand will also be true in Africa and Asia. And I don't think that's a realistic assumption.

I feel that in India we should move as far as we can with defining for ourselves what low carbon development transitions look like in each of these areas, and then go to partners that have the best expertise in those particular areas. Let's take one issue that is on the table right now, which is the JET-P discussion about coal. I think India needs to be thinking about what does that just energy transition look like? I personally feel, realistically, given that India does not know exactly what our future energy needs are going to be, we are going to keep open the option of coal while maximizing renewable energy development. But we could also potentially rationalise the use of some of that coal. Right now, we have quite irrational systems. We've been running old plants for quite a

long period. We are not operating plants near pitheads and therefore we are transporting coal long distances. So, there's a scope for rationalising coal. But in the short run, the just part of preparing this transition has to be not just dealing with the workers, but also about regional development in all the coal bearing states. This has to happen at the level of India's federal system because those states need to be supported with new livelihood possibilities for people who are dependent on coal labour, as well as the communities that service those coal labouring families.

So, India has to figure out what our needs are. And to some extent there is a limit to which international cooperation can help. I think we have to really lay out the agenda clearly on what our needs are and then go to partners appropriately. Clearly, part of the support is going to be finance because many of these transitions are high capital cost transitions whether it's a renewable energy transition and storage, or new transport equipment, new infrastructure.

Talking about high capital transition, there is some irritation about the LTS mentioning India to go nuclear with lots of small nuclear power plants. Is that realistic?

I don't know enough about nuclear technology and rely on a couple of colleagues. But my own sense is that the uncertainties of the world's nuclear power plants that require an incredibly complex technology and also institutional structure to deal with safety issues, with waste disposal and so on, are huge. There always seems to be the promise of new technologies right around the corner. They often failed to materialise with nuclear. I feel that we have pretty good track records and technologies on the table with renewable energy. We have an enormous potential with energy efficiency and demand side measures in India, so I personally do not see the scope for nuclear power to play a very big role. But there are others in India who disagree with me. And I should be humble about this, I don't know enough about the latest debates on nuclear power. But based on what I know, I feel it to be somewhat unnecessary given that we have other technologies and energy efficiency on hand with which to squeeze more useful work out of every unit of energy.

What is your view on the newest kid on the block - India as well as Germany have a national green hydrogen mission and sealed a joint declaration of intent. How do you see this perspective?

Again, I have to plead some ignorance. I honestly have not looked into the technology as much as I should have. It's come up with remarkable speed and in India's budget, we just heard, there is a fair bit of money that's been set aside, 2244 million Euros crores is the expected outlay, not all of which would come from the budget. I don't know enough to know whether we are being overoptimistic.

Clearly, the fact that we are banking on a lot of relatively cheap renewable energy is the backbone of producing that green hydrogen.

And then making that kind of a competitive edge is the narrative. Now, what I do support is that we are thinking about the early stages of a new technology in a way that we probably didn't with renewable energy. With solar power our approach was to ramp up deployment but not manufacturing. And I think China did it smarter than India because they really focused on manufacturing and job creation and not just on a device we used, the auction system which discovered the lowest price and definitely had cheap and rapid deployment, but did not incentivize manufacturing.

So, I think for India, if we are going this road of a low carbon transition as a competitive opportunity, we have to think about it in terms of more industrial policy approaches. And I see that Europe has just jumped on that bus. That is the new challenge that we all face: can every country successfully do green industrial policy or are there invariably going to be some winners and losers? Is that the magic ticket for everyone? Or does it become a question of which country is better at doing it, which country is more strategic in the way in which they work with their industry? Certainly, industrial policy is a very different phrasing of the climate problem than we have experienced so far.



Now, I would like forward a question being asked by German ministries: What to make out of the Lifestyles for Environment LIFE mission that is part of the LTS as well as India's updated NDC? As such LIFE is largely designed as a people driven initiative, encouraging responsible consumption patterns. How do you see this mission translating into concrete reduction of carbon emissions, for example in circular economy or nature-based solutions?

My take on the LIFE mission is that it is being framed predominantly around individual behavioural change and that is a powerful idea. The political idea underneath is that we need to be much more reflective and mindful of our lifestyle and the consumption that's associated with it. And I think that's important idea to put out. When you want to convert it into an action agenda, in my view, the means to do that requires some supplementary ideas and that is to embed the behavioural change within the larger construct of thinking about demand. The recent IPCC Working Group 3 report had a chapter just on energy demand. The modelling studies show that the cheapest way of achieving 1.5°C is by putting a lot of emphasis on the demand side, by being very deliberate about squeezing out all the individual gains, which is switching the lights off, changing the design of your building, take a bus or walk – but, indeed, for this you need to have well-functioning buses that run on time backed by IT enabled scheduling systems, you need to have roads with bus lanes, and you probably need to have incentive structures for people to take buses. Like in Delhi, we have free buses for women, which is a wonderful idea also from a public safety point of view. So, that nudge needs to be surrounded by infrastructure improvements designed to enable behavioural change and by policy incentives.

For example, what about a tax on petrol which is administered at the pump, with revenues used for public transport? So, the more you drive, the more tax you pay, the more inefficient your car the more tax you pay. And this money gets redeployed to subsidise public transport. That would make your behavioural nudges much more likely to happen. Or buy clean, air conditioned, better functioning electric buses.

When you bring behaviour together with policy and with infrastructure

it is a much more powerful construct.

I think that European cities have done a pretty good job of promoting public transport. There's also a new thinking, like walking blocks in Barcelona, where urban design can complement technology adoption behaviour. But the first thing is to get the construct right, and I think the LIFE mission opens the conversation.

