

## NOT RESOURCE-INTENSIVE, BUT RESOURCE-EFFICIENT

Friday, 23 October 2015 | RK Pachauri

The Intended Nationally Determined Contribution, crafted by India, should be used as the foundation for a dialogue to define a more sustainable pattern of economic growth. We mustn't follow the Western model

India adopted a forward-looking policy in the field of climate change over seven years ago, by formulating its National Action Plan on Climate Change. On October 1, 2015, India announced and released its Intended Nationally Determined Contribution, which is an essential input for the forthcoming Conference of the Parties under the United Nations Framework Convention on Climate Change, due to be held in Paris from November 30 to December 11. There have been high expectations over the outcome of the Paris CoP, and the eyes of the world have been fixed almost disproportionately on the emerging economies of the world, such as China, India and Brazil.

The concern among policymakers and the public, particularly in the developed countries, is that the largest increase in emissions of greenhouse gases which are responsible for causing human-induced climate change, will take place essentially in these countries. Such a limited view ignores the fact that the high concentration of GHGs in the atmosphere has been caused predominantly by the developed countries, which since the beginning of industrialisation embarked on large-scale use of fossil fuels, including coal, to begin with, and then oil and gas subsequently. As the Intergovernmental Panel on Climate Change has brought out in its Fifth Assessment Report (AR5), the share of GHG emissions by economic sectors globally in 2010 was as follows: Electricity and heat production, 25 per cent; agriculture, forestry and land use, 24 per cent; buildings, 6.4 per cent; transport, 14 per cent; industry, 21 per cent; and other forms of energy, 9.6per cent. The total annual emissions of GHGs were at a level of 39 giga tonnes in the year 2000, but reached 49 giga tonnes in 2010.

This trend goes counter to the very intent and purpose of the UNFCCC, which was agreed on in 1992. At the same time, the impacts of climate change are now becoming increasingly serious. Scientific evidence shows overwhelmingly that human beings are largely responsible for the change that is taking place and the impacts that are thus being caused are attributable to human actions. The AR5 clearly stated that "anthropogenic drivers have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century". The term 'extremely likely' denotes a probability of over 95 per cent associated with this statement. In other words, there is now scientific certainty at a very high level that human actions are changing the climate of this planet. There are several reasons why India has to take the scientific realities of climate change seriously. First, India is very vulnerable to the impacts of climate change, which have major implications for those living in poverty.

For instance, climate change is projected to increase displacement of people. Populations that lack the resources for planned migration experience higher exposure to extreme weather events, particularly in developing countries with low income. Climate change can indirectly increase the risks of violent conflicts by amplifying well documented drivers of these conflicts such as poverty and economic shocks.

India's INDC has not only been carefully designed by various branches of the Government which have a direct bearing on actions that need to be taken, but it also involved institutions and organisations outside the Government, such as The Energy and Resources Institute, which carried out extensive modelling of scenarios outlining specific options that India has in reducing its intensity of emissions of GHGs, their technical and institutional feasibility and costs and economics associated with them.

Therefore, the INDC submitted by India represents a very rigorously developed position which, while on the one hand emphasizes the principle of common but differentiated responsibility enshrined in the UNFCCC, and at the same time also establishes India's commitment to be a part of the solution, even though with its low cumulative and annual emissions of GHGs, it can hardly be identified as being a part of the problem.

While the INDC is essentially a statement which responds to a global challenge, it has major opportunities and implications for domestic policy. For a country like India, where reduction of poverty is by far the most important objective of growth and development, what is essential is to define a path of growth which meets the objectives of resource use efficiency, energy security and equity. Mahatma Gandhi was once asked whether he would not want India to become as prosperous as Britain. His response was that it took Britain to use half the resources of this planet to reach its level of prosperity, and, therefore, "How many planets India would require?" In essence, for India to adopt and pursue a path of development which emulates the resource-intensive pattern established by most countries in the developed world, would be ruinous, and would also be economically unviable.

A case in point can be seen from past fluctuations in the global price of oil. With the revival of the global economy, it is entirely possible that demand for oil will grow rapidly, leading to a major increase in prices. That would have extremely harmful impacts on the country's economy. A shift to renewable energy sources, which are available in abundance, would be in India's own interest.

With a growing population and rising incomes, if the intensity of use of various resources deployed for various sectors of the economy are to grow to a level that increases our import dependence and raises questions of security of supply, India would not be well served by such a strategy.

One important aspect of a strategy that reduces the intensity of emissions of GHGs is that there would be a range of significant co-benefits from such an approach. This would be in the nature of higher energy security, lower levels of pollution at the local level, possibilities of higher employment (such as with decentralised supply of energy from renewable sources), afforestation and reduced deforestation and attaining the objectives of sustainable development.

As brought out in India's INDC, addressing climate change is an important element of attaining sustainable development. The UN General Assembly had, on September 25, adopted 17 Sustainable Development Goals, meeting of all which would be in our national interest. The INDC crafted by India should, therefore, be used as the foundation for a dialogue to define a more resource-efficient, climate-resilient, equitable and sustainable pattern of growth.

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