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Emission reduction as a way to save society



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The Government has shown a high level of ambition by taking on and declaring its intention to bring about an early and rapid transformation of its energy policy to benefit Indian society, and for the protection of this planet

India's Intended Nationally Determined Contribution has received favourable comments from other countries, but perhaps inadequate dissemination of its contents domestically has resulted in limited attention and debate within the country. As conveyed in the first article in this three-part series, the biggest value of the INDC would be derived, firstly, from initiating a debate on how the goals inherent in this plan can be achieved, and secondly, from defining the type of development that India should pursue if we have to become a society that lives in harmony with nature and if growth has to be sustainable, equitable and inclusive.

The INDC document at the very outset puts across "projected key macro-indicators as a reflection of India's future needs as the economy grows in the coming years". The projected values for 2030 include a population of 1.5 billion in 2030, an urban population of 609 million and per capita GDP of \$4,205 in nominal terms. Ever since the strong arm tactics imposed in the mid-1970s by the late Sanjay Gandhi to control the country's population, any serious debate on the subject of population has become almost unpatronised. Yet, our burgeoning population remains a major challenge. Political leaders glibly refer to India's demographic dividend as the large proportion of youth in the population and how we are better off in this respect in contrast to many other countries in the world.

But we seldom focus on the need to educate and train the growing population of youth, the wherewithal by which they would get employment and the goods and services that would need to be produced to feed the growing consumerist tendencies of those born today and to be born in the coming years. And, do we really want over 600 million living in our towns and cities? In this age of sophisticated information and communications technology, do we not have unprecedented opportunities for developing our villages as transformed entities, so that growth and employment opportunities can be created in rural areas themselves, thereby stemming the massive tide of migration into urban locations? The INDC document rightly highlights rapid urbanisation in the country as one of the most dominant trends in the coming years. What should we do to ensure that this trend does not



carry with it some of the negative effects of urbanisation, or how should we implement certain interventions and policies so that this trend can be moderated through personal choices that both urban and rural society are able to make?

One of the most profound lessons that we have learned in recent decades is the powerful effect of educating the girl child on the fertility behaviour of women as they grow into the age of reproduction. Those regions and States in India where women grow up with an education, have seen a dramatic drop in fertility rates. For this and many other benefits to society, it is essential for us to revamp the entire education system in the country, particularly in rural areas, a large part of which has no school buildings or teachers as well as badly implemented mid-day meal schemes. Population growth will impose increasing demand for housing, energy, transport, water, and waste disposal, as the INDC rightly identifies. Do we remain passive and continue with a 'do nothing' approach in this regard, or do we wake up and put in place actions and policies by which the collective aggregate

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of personal choices will give us the future we want? A visionary approach combined with commensurate policies will ensure that we address "the key concerns of sustainability" and do not any longer ignore the economic as well as the environmental threat that a "fast-deteriorating ecosystem poses to our fragile planet". The emphasis on enhancing energy efficiency in the INDC is particularly noteworthy. Reference is made to several programmes that the Government has implemented and currently has in hand. These include efficient lighting, based on expanded use of compact fluorescent lamps and light-emitting diode devices, all of which would reduce the energy consumed per unit of lighting in various sectors of the economy. Various other schemes and programmes are also highlighted, including the Standards and Labelling Programme launched by the Government of India, which enables consumers to make informed decisions on the basis of information about energy consumption of appliances that they acquire and use. Reference is also made to the fact that to recognise energy-efficient buildings as well as to stimulate their large scale

replication, India has developed its own building energy rating system GRHA (Green Rating for Integrated Habitat Assessment). Actually, GRHA targets not only energy efficiency as a criterion, but a large range of other metrics which define efficiency of use of resources of various kinds. Focus on the resource use efficiency of buildings is of crucial importance globally, but particularly for India, because as the INDC reminds us more than half the buildings that would stand in 2030 in this country are yet to be built. If these are going to be energy-guzzlers and resource-inefficient, the implication for overall resource demand and use in the country could be a serious source of concern.

India has to move quickly to transform its energy supply and use. The structure of the entire economy has to reflect this goal, and a new paradigm needs to be adopted and pursued through the length and breadth of the country. In the next article attention would be provided to choices on supply of energy, but as a philosophy it should be highlighted that a resource- and energy-efficient system in India would have major benefits, which go far beyond quantitative estimates. Also, if India has to be part of the global effort to deal with the challenge of climate change, then the sooner change is implemented the easier it would be for India to adopt a sustainable path of development both for domestic as well as global benefits. The Fifth Assessment Report of the Intergovernmental Panel on Climate Change brought out the fact that "delaying additional mitigation to 2030 will substantially increase the challenges associated with limiting warming over the 21st century to below two degrees Celsius relative to pre-industrial levels. It will require substantially higher rates of emissions reductions from 2030 to 2050, a much more rapid scale-up of low-carbon energy over this period; a larger reliance on carbon dioxide removal in the long term; and higher transitional and long-term economic impacts". For these and other reasons, it is good that the Government has shown a high level of ambition by taking on and declaring its intention to bring about an early and rapid transformation of its energy policy for the benefit of Indian society and the protection of this planet.

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