Chapter 28 Indian National Strategy for Climate Change Adaptation and Mitigation

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ABSTRACT

India is a growing economy and has to sustain its economic growth, despite challenges of climate change. India's vision is to create a prosperous, self-sustaining economy, mindful of responsibilities to both present and future generations. It is committed to engage in multilateral negotiations in the UN Framework Convention on Climate Change (UNFCCC) in a positive, constructive and forward looking manner. India needed to formulate a national strategy to adapt to climate change and to further enhance the ecological sustainability of its development path based on its unique resource endowments, overriding priority of economic and social development and poverty eradication. This chapter explains the principles on which the National Action Plan on Climate Change is based, the approach adopted and provides details of eight missions, which form the core of the National Action Plan. The status of actions taken on each of the eight missions and other initiatives and the way forward has also been elaborated.

The earth has got enough resources to meet people's need but will never be enough to satisfy people's greed - Mahatma Gandhi

INTRODUCTION

Rising levels of greenhouse gases together with sulphur dioxide (SO_2) and suspended particulate matters such as dust and so forth, in the environment of our living planet, that is earth, are contributing to climate change. By absorbing infrared radiation, these gases control the flow of natural energy through climate system. Among the greenhouse gases, carbon dioxide (CO_2) is currently the main contributor to enhanced 'Greenhouse Effect', which has been attributed to be responsible for climate change. This gas

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is not only present in the atmosphere, but is also produced from anthropogenic sources. These include human activities, for example, deforestation or depletion of land resources which are adding much more CO_2 into atmosphere. Current emissions amount to over 7 billion tons of carbon or almost 1% of the total mass of carbon dioxide in the atmosphere (Sharma, 2007; IPCC, 2007). Carbon dioxide produced by human activities enters the natural carbon cycle. Many billions of tonnes of carbon are exchanged naturally each year between the atmosphere, oceans and land vegetation.

Global warming is caused by an increase in the temperature of earth's lower atmosphere and may lead to climate changes. Resulting climate induced natural disasters (CINDs) (for example drought, floods, cyclones, forest fires) and man-made disasters (for example ozone depletion, environmental acidification) become serious problems to countries, especially in coastal areas. The Intergovernmental Panel on Climate Change (IPCC) of United Nations in its report of 2001 has confirmed the global warming trend and projected that globally, the average temperature of air above earth's surface would rise by 1.4° to 5.8° C over the next 100 years. In short, the impact of climate change is real and grows from accumulated greenhouse gas emissions in the atmosphere and intensive industrial growth. Developed countries have exploited natural resources in their development process and are now trying to prohibit developing countries such as India, Brazil, China and South Africa from doing the same. India is one of the most disaster prone countries in the world. Climate change has heightened its vulnerability as its economy is heavily reliant on climate sensitive sectors such as agriculture and forestry (Ray, Mruthyunjaya & Selvarajan, 2002; Watson, Zinyowere, & Moss, 1998). Additionally its low-lying densely populated coastline is threatened by a potential rise in sea levels. India is also an emerging economy and aspires to sustain its economic growth, despite challenges of climate change and other frequently recurring disasters. While recognizing that climate change is a global challenge, it has voluntarily taken action to restrict greenhouse emissions. On the other hand, India has decided to engage actively in multilateral negotiations in the UN framework convention on climate change in a positive, constructive and forward looking manner. In view of multiple vulnerabilities, India needed to formulate a national strategy to adapt to climate change and to further enhance ecological sustainability of its development path. This is necessary since climate change is likely to alter the distribution and quality of its natural resources and may adversely affect people's livelihood. India's development path is based on its unique resource endowments, overriding priorities of economic and social development and poverty eradication and its adherence to its civilization legacy all of which place high value on environment and maintenance of ecological balance. India had a wider spectrum of choices precisely because it is at the early stage of development. The national plan formulated on 30 June 2008, is based on the objective to establish an effective, cooperative and equitable global approach enshrined in UN Framework Convention on Climate Change (UNFCCC).

The National Plan is based on eight clearly defined missions (Government of India, 2008),

BACKGROUND

India's national vision is to create a prosperous, but not wasteful society, an economy that is self- sustaining in terms of its ability to unleash the creative energies of Indian people and is mindful of its responsibilities to both present and future generations. 30 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/indian-national-strategy-for-climate-changeadaptation-and-mitigation/201722

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