## Adapting and Living Below 1.5 Degrees Why does it Matter for India?

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In the last few decades, the world has seen increasing trend of global temperature rise which has become a major concern for many countries. In order to ensure the survival of the human race from the projected long term changes in weather patterns and disasters driven by temperature rise, the world's big economies came together and formed the United Nations Framework Convention on Climate Change (UNFCCC), for decision making on a global scale, to tackle global warming and climate change generated problems. The recent UN Conference in Paris (COP 21) realized the need to prepare nations to meet new climate challenges. The Paris agreement called for holding the ongoing rise in global average temperature to "well below 2 degrees above pre-industrial levels", while pursuing efforts to limit the temperature increase to 1.5 degrees. With 17 percent of the world's population, the role that India has to play in combating climate change and limiting the temperature rise below 1.5 degrees cannot be overlooked.

India is one of the fastest growing economies of the world confronted with the challenge of sustaining rapid economic growth amidst the increasing global threat of climate change. India's climate is both diverse and varying. The south experiences tropical climes, whereas elevated areas of the north receive sustained winter snowfall. The Himalayas in the north and north-east provide a barrier to the cold winds of Asia and help in the development of the monsoons (June-September). This results in an overall warm climate across most of India throughout the year. It is predicted that India and other South-Asian countries will experience warming above the global mean throughout 21<sup>st</sup> century. Global temperature has already increased by 0.7 degrees over the past century and as a result India is already experiencing a shift in its weather patterns like delays of the monsoons, untimely rainfalls, shrinking of winters and frequent occurrence of catastrophes such as floods (in Assam), droughts (Maharashtra), cloud bursts (Uttarakhand) and cyclones (Orissa). Evidence has shown that climate change will affect the distribution and quality of India's natural resources, which will ultimately threaten the livelihoods of the poor and marginalized communities dependent on India's natural resource base.

Scientific studies make it clear that a jump from 1.5 to 2 degrees will make the condition much worse in India. With an increase in the global temperature above 1.5 degrees, India will experience greater seasonal variation in temperatures, more warming in winter, warmer temperatures at night and increasing hotter days. It will ultimately affect agriculture and pisciculture creating issues of food scarcity as well as threaten the livelihoods of associated people.

Realizing the need of having an effective defense mechanism against global temperature rise and climate change, the National Action Plan on Climate Change (NAPCC) was launched by the Government of India in 2008. The NAPCC pulled together the existing national plans on renewable energy, agriculture etc. into a set of 8 National missions- National Solar mission, National mission for enhanced energy efficiency, National mission on sustainable habitat, National water mission, National mission for sustaining the Himalayan ecosystem, National mission for a "Green India", National mission for sustainable agriculture, and National mission on strategic knowledge for climate change. The Ministry of Environment, Forest and Climate Change (MoEFCC) has been formed by the Government of India to support and finance climate change adaptation and awareness programs. Besides government efforts, Non-Government Organizations are also playing key roles in climate adaptation in India at the grass root as well as at the advocacy level.

While there are existing efforts to assist people in India to adapt to the impacts of climate change, it is important to completely understand the risks that these people face in order to support them effectively. Geographic diversity in India makes it difficult to develop an adaptation strategy. Broad generalizations on ways to promote adaptation to climate change will be misleading and imperative. In order to make it successful, adaptation strategies must be integrated into planning at the national, state, regional and local level.

Apart from that, success could only be achieved if the nation as a whole develops sensitivity towards the environment. After all, it's not only the responsibility of the government to play a role in climate change abatement programs but it is the moral duty of all of us to support and contribute to fight against climate change.... for a better future.....for a better tomorrow!!