CLIMATE CHANGE AND INDIAN AGRICULTURE

✍ **Dr V. Basil Hans[1]**

[1]Associate Professor and Head, Department of Economics, St Aloysius Evening College, Mangaluru – 575 003, Karnataka State, India.

ABSTRACT

Climate change is, in theory, the perfect topic for global discussion. It is a growing global problem and concern, calling for concerted efforts by the developed as well as developing countries. The chief factor that is responsible for the climate change is the "greenhouse effect". India now ranks fourth in GHG emission. With USA and China now joining hands (November 2014) to reduce emissions significantly, it will be India's turn to make a commitment. We are responsible for the strongest threat namely the "global warming". Global warming is projected to have far-reaching and intense impacts on conditions affecting agriculture, including temperature, carbon dioxide, glacial run-off, precipitation, and the interaction of these elements. Already the effects are visible, making many people, especially those dependent on agriculture, vulnerable. Concerns about the impact of climate change on agriculture connected with environmental problems are among the major developmental issues in India today. The Gangotri glacier is already retreating at a rate of 30 metres a year. An increase in rainfall is simulated over the eastern region of India but the northwestern deserts may see a small decrease in the absolute amount of rainfall. Diseases for human, crops and animals are on the rise. There is risk of continuous fall in productivity and production. Climate change and vulnerability have physical, financial and ethical implications. Sustainable development needs climate stabilisation.

The objectives of this paper are – one to analyse the impact of climate change on Indian agriculture, and two, to suggest strategies and actions to mitigate the problem and the challenges ahead. Our emphasis is on civic response that combines international policy agreements with autonomous and local efforts in keeping with geo-political and economic conditions. It seeks to integrate knowledge (including research) and action for and by the people at the levels of farming as well as framing polices.

KEYWORDS: *Agriculture, civic response, global warming, India, vulnerability*

JEL CLASSIFICATION : *Q1, Q5, Q54*