

## CLIMATE CHANGE AND ITS PROJECTED IMPACT ON AGRICULTURE AND ALLIED SECTOR: THE FACTS WE SHOULD KNOW

SUKANYA BARUA<sup>1</sup>, RAJEEV KUMAR<sup>2</sup>, SATYAPRIYA<sup>3</sup>  
PREMLATA SINGH<sup>4</sup> & L. MURALIKRISHNAN<sup>5</sup>

<sup>1&5</sup>Scientist, Division of Agricultural Extension, Indian Council of Agricultural Research,  
Indian Agricultural Research Institute, New Delhi, India

<sup>2</sup>Scientist, Division of Agricultural Engineering Indian, Council of Agricultural Research,  
Indian Agricultural Research Institute, New Delhi, India

<sup>3</sup>Principal Scientist, Division of Agricultural Extension, Indian Council of Agricultural Research,  
Indian Agricultural Research Institute, New Delhi, India

<sup>4</sup>Principal Scientist and Head, Division of Agricultural Extension, Indian Council of Agricultural Research,  
Indian Agricultural Research Institute, New Delhi, India

### ABSTARCT

Global climate change is a shift in the long-term weather patterns that characterize the regions of whole world. In long term, the climatic change could affect agriculture in various ways such as quantity and quality of crops in terms of productivity, growth rates, moisture availability, transpiration rates and photosynthesis etc. Climate change is likely to directly affect food production across the world. Enhanced mean seasonal temperature can diminish the duration of crops and hence results in shrinking in yield. In regions where temperatures are nearly close to the physiological maxima for crops, warming will affect yields more instantly (IPCC, 2012). The main causes of climate change through modification in atmospheric composition can also influence food production directly by its impacts on crop physiology. The impact of agriculture's contribution to global climate change, and climate change's negative influence on agriculture, are severe which is projected to have a great influence on food production and may threaten the food security and thus require unique agricultural measures to combat with.

**KEYWORDS:** Climate Change, Food Security, Global Warming, Physiological Maxima