

Climate change and its impact on agriculture & allied sectors in India

Bibhu Santosh Behera
College of Agriculture, India

This cited paper attempts to take an over view of the impacts of climate change on Agricultural sector in Indian condition. Climate change is a change in the statistical distribution of weather over periods of time that range from decades to millions of years. It can be change in the average weather or a change in the distribution of weather or a change in the distribution of weather events around an average. (For example, greater or fewer extreme weather events). Climate change may be limited to a specific region, or may occur across the whole earth. It explores how the agricultural growth and environmental sustainability has to be achieved, while coping with the climate change phenomenon. Agriculture sector reveals high sensitivity and resilience to climate change. Agriculture is an important driver of wheels of Indian economy and also treated as back bone of the country. Thus, Agricultural sector needs to be improved steadily on sustainable, viable and in ecofriendly way. Hence as per the recommendation of the Expert committee on climate change, ICAR, Govt of India ordered each state department of Agriculture to develop a compressive climate specific Agricultural action plan in order to face various challenges driven by climatological and meteorological changes in day to day life. Here the researcher wants to study the co-relation of impact of climate change on Agricultural sector (Like Agriculture, Animal husbandry, Fishery, Forestry and hydro geological sector) and how the green house gases (GHG), Carbon dioxide, Temperature and all meteorological phenomena affect the agricultural production, it is mentioned in a analytical mode. As India is a developing and growing country here Agriculture and allied activity constitute the single largest component of gross domestic product (GDP) contributing nearly 25% of the total. The tremendous importance of the sector to the Indian economy can be ganged by the fact that it provides ample employment opportunity to two-thirds of the total work force. The share of Agricultural products in exports is also substantial, with agriculture accounting for 15% of export earnings. Agriculture growth also has a direct impact on poverty alleviation and important factor for employment generation. Further Indian agriculture is fundamentally dependant on "Asmani" (weather) and in political context "Sultani" (Administration). For higher productivity the proof of this has been the increasing in agricultural production, Owing to good monsoons over the last few years. Finally the author wants to address the relationship of climate change on agriculture by relating with the crop, soil, rainfall, green house gas, temperature and how the threatening of Agriculture can be mitigate in a sustainable and viable way by adopting suggested agricultural measures like crop diversification, adoption of new crop varieties, drought and flood management, restoration of waste and degraded lands.

One of animal agriculture's greatest environmental impacts is its contribution to global warming and climate change. According to the Food and Agriculture Organization (FAO) of the United Nations (UN), the animal agriculture sector is responsible for approximately 18%, or nearly one-fifth, of human-induced greenhouse gas (GHG) emissions. In nearly every step of meat, egg, and milk production, climate-changing gases are released into the atmosphere, potentially disrupting weather, temperature, and ecosystem health. Mitigating this serious problem requires immediate and far-reaching changes in current animal agriculture practices and consumption patterns.

Biography

Bibhu Santosh Behera is presently acting as Post Graduate Scholar, Dept. of Extension Education, Odisha University of Agriculture & Technology, Bhubaneswar of State Odisha in India.

b.behera88@gmail.com