EPRA WISDOM Express your Thoughts & Research

Print ISSN: 2277 – 3142

International Journal of Indian Economic Light

SJIF Impact Factor (2015): 4.324 Volume: 5 | Issue: 1 | September | 2016

RESEARCH METHODS TO ANALYZE THE IMPACT OF CLIMATE CHANGE ON AGRICULTURE

Dr.I.Sundar[1]

[1]Associate Professor and Economics Wing Head, Directorate of Distance Education, Annamalai University, Annamalai Nagar, Tamil Nadu, India.

ABSTRACT

World food production varies by several percent from year to year, largely as a result of weather conditions such as the El Niño phenomenon and inter-annual climatic variability in many regions. But agriculture in some regions is more sensitive to weather than in others. Typically, sensitivity to weather is greatest firstly in developing countries, where technological buffering to droughts and floods is less advanced, and secondly in those regions where the main physical factors affecting production are less suited to farming. This paper deals with required research methods to overcome the negative impact of climate change on agriculture. It outlines the research process relating to climate change impact on agriculture. This paper portrays the picture on application of biophysical tools, agro-climatic indices, statistical models, processed-based models, temporal analogues, spatial analogues, economic tools, economic regression models, microeconomic models, macroeconomic models and scales of analysis towards researching the impact of climate change on agriculture. Further this paper examines the application of assessment of farm and village effects, farm models and household and village models towards researching the impact of climate change on agriculture. This paper concludes with some interesting findings along with some policy suggestions.

KEYWORDS: agriculture, food production, climate change, farm output, climate variables