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## Impact of Climate Change on Indian Agriculture: Some Recent Evidence

Pawan Mishra\*

\*Doctoral Fellow,

Department of Economics,

Dr. Harisingh Gour Vishwavidyalaya.

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### Abstract

Climate change and other environmental hazards pose severe threat to agricultural production across the world. The developing countries like India are more vulnerable to climate change. This study aims to examine the impact of climate change on major crop yields in India using time series data over a period of 1980-2017. The estimated empirical outcomes show that climatic variables have substantial effect on major crop yields in general. An increase in rainfall has an adverse effect on rice and pulses. However, it has a positive relationship with wheat, cotton, groundnut and sugarcane crops during the study period. Further, except groundnut, the average maximum temperature has a positive influence on all crops. The average minimum temperature has an adverse impact on wheat and cotton crops but it has a positive association with rice, pulses, groundnut and sugarcane. Conclusively, this found that crop yields are impacted differently with different climatic variables in India. This study recommends taking adaptation activities to cope with the adverse impacts of climate change.

**Keywords:** Climate change, Precipitation, Temperature, Crop growing, Yield, India.

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