

IMPACT OF DROUGHT ON MAJOR CROP YIELDS IN INDIA

Ipsita Pathak

ABSTRACT

Climate change is known to increase the frequency of extreme weather conditions such as droughts, floods, heatwaves, etc. Droughts notably can cause widespread and severe impacts, especially in a country like India, where the majority of the population is dependent on agriculture, and most of them still rely on rainfall for cultivation. This would also have a severe impact on India's food security as major staple crops are vulnerable to drought. The present study attempts to provide a perspective on the frequency, spread, and severity of droughts in India. It assesses the vulnerability of rice, maize, and barley to drought using a district-level dataset for the period 1966-2015. The findings suggest that rice, maize, and barley have become resilient to drought conditions in India. The study also assesses the role of irrigation in achieving resilience to drought.

Keywords: Drought, Severity, Rice, Maize, Barley, Yield, Irrigation, Climate Change

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