

Climate Change Vulnerability and Agrarian Communities: Insights from the Composite Vulnerability Index of Indian States of Andhra Pradesh and Karnataka

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Abstract : Climate change is a main challenge for agriculture, food security and rural livelihoods for millions of people in India. Agriculture is the sector most vulnerable to climate change due to its high dependence on climate and weather conditions. Among India's population of more than one billion people, about 68% are directly or indirectly involved in the agricultural sector. This sector is particularly vulnerable to present-day climate variability. In this contest this paper examines the Socio-economic and climate analytical study of the vulnerability index in Indian states of Andhra Pradesh and Karnataka. Using secondary data; it examines the vulnerability through five different sub-indicator of socio-demographic, agriculture, occupational, common property resource (CPR), and climate in respective states among different districts. Data used in this paper has taken from different sources, like census in India 2011, Directorate of Economics and Statistics of respective states governments. Rainfall data was collected from the India Meteorological Department (IMD). In order to capture the vulnerability from two different states the composite vulnerability index (CVI) was developed and used. This indicates the vulnerability situation of different districts under two states. The study finds that Adilabad district in Andhra Pradesh and Chamarajanagar in Karnataka had highest level of vulnerability while Hyderabad and Bangalore in respective states have least level of vulnerability.

Keywords : vulnerability, agriculture, climate change, global warming

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