PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
JOURNAL OF HUMAN ECOLOGY
International Interdisciplinary Journal of Man-Environment Relationship

PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
J Hum Ecol, 48(3): 347-356 (2014)
DOI: 10.31901/24566608.2014/48.03.01

Some Aspects of Agricultural Vulnerability to Climate Change in the KwaZulu-Natal Midlands, South Africa: A Systematic Review

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KEYWORDS Exposure to Climate Change. Farming Systems' Sensitivity. Adaptive Capacity. Indicator Approach. Kwazulu-Natal Midlands. South Africa

ABSTRACT The present study uses a systematic review method to document the extent of agricultural vulnerability to climate change (CC) in the midlands region of KwaZulu-Natal, South Africa. With regard to exposure, the CC detection literature suggests that the region is a hotspot of CC, and most climate model projections show warming and wetting trends towards the end of the 21st century. The sensitivity of farming systems is high due to high population density, large share of small-scale farmers, low rate of irrigation, and susceptibility to land degradation. The highly diversified cropping portfolios in the region are the major sources of resilience. The adaptive capacity is compromised by lack of access to public infrastructure, lower liquidity and income prospects, rural exodus, skills shortage, and limited inter-household cooperation. Policymakers should, therefore, devise a regional CC communication strategy, promote crop diversification and irrigation water governance, and mainstream CC adaptation in the rural development objectives.