

Modelling the Effect of Psychological Capital on Climate Change Adaptation among Smallholders from South Africa

Authors : Unity Chipfupa, Aluwani Tagwi, Edilegnaw Wale

Abstract : Climate change adaptation studies are challenged by a limited understanding of how non-cognitive factors such as psychological capital affect adaptation decisions of smallholder farmers. The concept of psychological capital has not been fully applied in the empirical literature on climate change adaptation strategies. Hence, the study was meant to assess how psychological capital endowment affects climate change adaptation among smallholder farmers. A multivariate probit regression model was estimated using data collected from 328 smallholder farmers in KwaZulu-Natal, South Africa. The findings indicate that, among other factors, self-confidence and hope or aspirations in farming influence climate change adaptation decisions of smallholders. The psychological capital theory proved to be comprehensive in identifying specific psychological dimensions associated with adaptation decisions. However, the non-alignment of approaches for measuring non-cognitive factors made it difficult to compare results among different studies. In conclusion, the study recommends the need for practical ways for enhancing smallholders' endowment with key non-cognitive abilities. Researchers should develop and agree on a comprehensive framework for assessing non-cognitive factors critical for climate change adaptation. This will improve the use of positive psychology theories to advance the literature on climate change adaptation. Other key recommendations include targeted support for communities facing higher risks of climate change, improving smallholders' ability to adapt, promotion of social networks and the inclusion of farming objectives as an important indicator in climate change adaptation research.

Keywords : adaptive capacity, climate change adaptation, psychological capital, multivariate probit, non-cognitive factors.

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