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Behavioural traits and resilience to droughts among farming households in Thailand

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Abstract

Climate change, in the form of intensified environmental shocks, adds significantly to existing challenges of small-scale farming households, especially in developing countries. Depending on the resilience capacity, households can adopt various response strategies, influencing their ability to maintain assets and how they are converted into income and broader development. Therefore, determinants pertaining the household's choice of response strategies demand attention. Literature identifies household financial and social capital as important determinants. However, evidence on the role of human capital, especially behavioural traits, is scarce. These have shown to influence behaviours and attitudes, affecting socio-economic life. Most findings on behavioural traits and resilience are based on data from developed countries and may not hold in the context of emerging economies. Therefore, the aim of this paper is to investigate the role of behavioural traits in the household's choice of response strategies to droughts in rural Thailand. In particular, we examine (i) how behavioural traits influence the decision of households to adopt absorptive, adaptive or transformative strategies and (ii) how they act as mediators. We use primary household level data on approximately 2,000 households from the Thailand Vietnam socio-economic panel project from 2017 and 2019, in combination with spatial precipitation data to also obtain causal effects. We consider a set of nine response strategies, three for each resilience capacity, together with seven measures of behavioural traits. A generalized structural equation model is executed in order to estimate direct and mediating effects. Our results show that while behavioural traits play a minor role in the uptake of absorptive strategies, they significantly influence the household's decision in regard to adaptive and transformative strategies. As mediators, risk preference is negatively influenced by droughts and household income is positively related to the trait openness and negatively to neuroticism. We can also confirm income as a consistent predictor for response strategies. As a result, the role of behavioural traits should be acknowledged in policy and intervention designs together with increased human capital investments. Potentials resulting from long-term responses, especially following severe droughts, should be fostered, in order to enhance resilience of small-scale farming households in developing countries.

Keywords: Behavioural traits, environmental shocks, farming households, household decision-making, resilience