Tropentag, September 15-17, 2021, hybrid conference

"Towards shifting paradigms in agriculture
for a healthy and sustainable future"

Making Smart Choices – Behavioural Traits and Resilience to Environmental Shocks among Farming Households in Thailand

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Abstract

Climate change, in the form of intensified environmental shocks, adds significantly to the existing challenges of small-scale farming households in emerging economies. Households can adopt various response strategies, based on their resilience capacity, to mitigate the impact of shocks on their overall welfare. These can be categorised as absorptive, adaptive or transformative, depending on the intensity of change that they entail. Furthermore, the chosen strategies cannot always be considered as positive as they could negatively impact the household's welfare outcomes in the future. Therefore, understanding the decisions pertaining the household's choice of response strategies demands more attention. Literature identifies household financial capital as an important determinant of its resilience capacity. However, evidence on the role of human capital, especially behavioural traits, is scarce. Additionally, 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 environmental shocks in rural Thailand. In particular, we examine how behavioural traits influence the decision of households to adopt (i) absorptive, adaptive or transformative and (ii) positive or negative response strategies.

We use primary household level data on around 2000 households from the Thailand Vietnam Socio Economic Panel from 2017 and 2019, in combination with spatial data on rainfall to obtain causal effects. A set of response strategies such as diversification of crop patterns, use of child labour, migration, and selling of productive assets is considered to capture the diverse nature of household responses. After categorising these strategies, behavioural traits measures of openness, conscientiousness, extraversion, agreeableness, and neuroticism (Big Five Model) as well as risk preference and patience are included in the analysis. Seemingly Unrelated Probit regressions are used to estimate both research questions. We expect our results to show a greater role for behavioural traits, especially openness, risk and patience. A better understanding of this decision-making process can aid in designing policies and developing programmes that encourage the choice of smart response strategies among households and promote agricultural resilience.

Keywords: Behavioural traits , Environmental shocks, Household decision-making, resilience

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