

Evidence from Cambodian Rice Farmers on Willingness to Pay for Weather-Indexed Insurance

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Introduction

In order to mitigate the financial impact of changing monsoon rainfall patterns in Battambang Province in northwest Cambodia, weather-indexed insurance (WII) has been proposed. This study investigates the willingness of Cambodian rice farmers to pay for WII. The districts of Bavel and Thma Koul are the locations of thorough interviews. We begin by examining the socioeconomic and demographic traits of farmer respondents, their beliefs and experiences with climate change, their risk-taking behaviours, and their awareness of insurance. To determine the variables that have a substantial impact on farmers' willingness to pay (WTP) for WII, the binary logistic model is utilised. Our findings indicate that farmers as a whole were less aware of how to employ cutting-edge financial instruments to prepare for extreme weather. The findings also show that while the number of children in the home has a negative impact on farmers' WTP for WII, their marital status, the number of off-farm labourers, and the size of their farms all have favourable effects. Particularly, an increase of one hectare (ha) of farmland, one more off-farm worker, and marital status all raise the likelihood that WII will be demanded by 38.6%, 21.4%, and 5.1%, respectively. On the other hand, an extra child decreases the likelihood of WII demand by 9.7%. We also list obstacles that farmers in Cambodia must overcome in order to take part in the proposed WII scheme and offer pertinent suggestions for doing so [1-3].

Discussion

The foundation of the Cambodian economy is agriculture. According to figures from the World Bank, the sector contributed more than 20% of the nation's GDP in 2019 (<https://www.adb.org/sites/default/files/publication/718806/cambodia-agriculture-rural-development-road-map.pdf>), and it employed about 35% of the nation's workers (accessed on July 21, 2022). (accessed on 22 July 2022). Farmers are however susceptible to climate change. Cropping systems have been significantly impacted by the increasingly harsh weather, such as drought, strong monsoon rainfall, extreme temperatures, and floods. United Nations Development Programme (UNDP), 2014 Disaster loss and damage information system for Cambodia (CamDi), UNDP, Phnom Penh. According to the Cambodia Disaster Loss and Damage Analysis Report from 1996 to 2013 (<https://www.undp.org/cambodia/publications/cambodia-disaster-loss-and-damage-analysis-report-1996-2013>) (accessed on September 12, 2022), between 1996 and 2013, floods destroyed 67% of all rice paddy fields nationwide. Droughts caused 31% of crop losses during the same time period, endangering many people's livelihoods. For every

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1 degree Celsius increase in temperature, the production of rice may reduce by 10%, and the production of coffee and rubber may also decline significantly (Ministry of Economy and Finance and National Council for Sustainable Development, 2019). The purpose of this study is to ascertain whether or not rice farmers in Cambodia are eager to buy WII goods. We specifically conduct interview surveys in Battambang Province's districts in northwest Cambodia. The study gathers socioeconomic and demographic data about farmers as well as their experiences with extreme weather events [4-6].

Conclusion

The WTP plan typically has two stages. Farmers' readiness to join in the plan is the subject of the first stage, and their willingness to pay for insurance is the subject of the second stage. This study employs interview surveys to examine whether and to what degree Cambodian rice farmers are willing to participate in the WII scheme in order to adapt to the climate. It primarily focuses on the first stage of the WTP scheme. The results of the interviews show that the majority of farmers have little formal education and no prior insurance experience. Furthermore, because the WII programme is still in its infancy in Cambodia and because the idea behind it is new, farmers' comprehension of insurance products is severely limited. Our empirical findings demonstrate that in the study areas of Cambodia, factors such as farmer respondents' marital status, the number of children living in their household, the size of their farm, and the number of workers who work outside of their farm all have a significant impact on their decision to purchase WII.

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Conflict of Interest

None.

References

1. Ward, Cheryl and Chiara Zazzaro. "Evidence for pharaonic seagoing ships at Mersa/Wadi Gawasis, Egypt." *Int J Naut Archaeol* 39 (2010): 27-43.
2. Abdrabou, Ahmed, Gilan M. Sultan, Mohamed Abd Elkader and Hussein M. Kamal. "Non-invasive wood identification on parts of King Horemheb's ritual couches (New kingdom)." *Conservar Património* 36 (2021): 12-19.
3. Giachi, G., M. C. Guidotti, S. Lazzeri and L. Sozzi, et al. "Wood identification of the headrests from the collection of the Egyptian Museum in Florence." *J Archaeol Sci Rep* 9 (2016): 340-346.
4. Giachi, G., M. C. Guidotti, S. Lazzeri and N. Macchioni, et al. "Wood identification of some coffins from the necropolis of Thebes held in the collection of the Egyptian museum in Florence." *J Cult Herit* 47 (2021): 34-42.
5. Creasman, Pearce Paul. "A further investigation of the Cairo Dahshur boats." *J Egypt Archaeol* 96 (2010): 101-123.
6. He, Tuo, João Marco, Richard Soares, Yafang Yin, and Alex C. Wiedenhoef. "Machine learning models with quantitative wood anatomy data can discriminate between *Swietenia macrophylla* and *Swietenia mahagoni*." *Forests* 11 (2019): 36.

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