

Non-structural flood risk mitigation under developing country conditions: an analysis on the determinants of willingness to pay for flood insurance in rural Pakistan

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Abstract The present study aims at unraveling the acceptability and potential of flood insurance as a viable mechanism to cope the financial risk associated with flood events in rural Pakistan. Moreover, the factors influencing rural households' willingness to pay for flood insurance are also analyzed. Currently, the country faces an increasing rate of flooding due to climate change phenomenon resulting in abnormal monsoonal cycles and the melting of Himalayan glaciers in the region. The current flood management strategy of the country mainly involves ex-post relief and rehabilitation programs along with financial transfers to the flood victims from public funds without the involvement of private insurance companies. This puts enormous pressure on the public exchequer, leading to budgetary adjustments and tax escalation. Under such a scenario, flood insurance is thought to be a viable alternative to mitigate the financial risk associated with the catastrophic events like the flood that occurred in 2010. The study utilized primary level data from five districts in Pakistan to evaluate the willingness to pay for flood insurance as well as the factors affecting that willingness by using contingent valuation methodology. The results show that the acceptability of this intervention among flood victims depends on a multitude of factors such as the age of the household head, landownership, off-farm income sources and a preconception concerning the effectiveness of flood insurance. Moreover, rural families' readiness to pay an insurance premium is not significantly influenced by perceived risk of flooding but by their financial position.

Keywords Flooding · WTP · Global warming · Instrument · Risk

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