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Research Paper

Analyses of community willingness-to-pay and the influencing factors towards restoration of River Malaba floodplains

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Highlights

- The study quantified willingness-to-pay for River Malaba floodplain restoration.
- 498 respondents out the targeted 550 were used in the study.
- 55% of the households expressed WTP towards the restoration program.
- Households were WTP a monthly average of UGX 97,080 (US$ 26.24).
- Several demographic, socio-economic and institutional factors influenced WTP.

Abstract

The high productivity of soils along River Malaba floodplains and various functions (like, transport and recreation) increase the desire for humankind settlement adjacent to floodplain corridors. However, human life and property have unceasingly been destroyed by floods. Strategies have been established to deal with floods but the problem still exists. This study employed the double-bound dichotomous choice contingent valuation method to quantify the community willingness-to-pay (WTP) and associated influencing factors for restoration of River Malaba floodplains. Reconnaissance surveys, focus group discussions, key informant interviews, observations study, and household questionnaires from 498 out of the targeted 550 respondents were employed in data collection. Amongst the adaptation strategies at household and community level, the post-flood strategies were more efficient than those practiced before- and during-floods. Amongst the suggested structural and non-structural strategies, “embankment/river training structures” and “flood forecasting and early warning” were highly preferred, respectively. The results revealed that 55% of the households expressed WTP an individual amount between Uganda shillings (UGX) 5,000 (United States Dollar, US$ 1.35) to UGX 500,000 (US$ 135.14), with a monthly average of UGX 97,080 (US$ 26.24). Total monthly amount would be UGX 38,249,500 (US$ 10,333.70) considering the 498 households. Amongst the factors analysed, age, gender, marital status, education level, occupation, household income, business affected, lost property due to floods, flooding a major problem had significant ($p<0.01$) positive impact on WTP. This study findings are pertinent in supporting stakeholders’ decision regarding predictive planning of flood adaptation strategies in the study area.

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