

Impact of Flood on Livelihood Resilience

Abstract

Flood is a perennial problem in the state of Bihar, India with devastating impact on the livelihood of people. In spite of the government's measures of flood mitigation, households continue to live with sufferings on account of severe damage to their material and non-material assets. In this background, the objectives of the study are (1) to explore differential role of the community and government support in livelihood resilience; (2) to found out the mediating role of risk perception, and flood preparedness between place attachment and livelihood resilience; (3) to assess the mediating role of risk perception, and flood preparedness between flood experience and livelihood resilience; (4) to assess the mediating role of risk perception, and flood preparedness between flood education and livelihood resilience; and (5) to develop Livelihood Vulnerability Index (LVI) of households to identify their vulnerability and explore the relation between vulnerability of households and livelihood resilience. The primary data were collected from 472 households by using multi-stage random sampling technique from seven blocks in river basins of Ganga and Kosi in the district of Bhagalpur, Bihar. To analyze the data descriptive statistics, structural equation modeling, and Livelihood Vulnerability Index methods were used. The findings of the study show that community support is comparatively significant for its prompt and spontaneous actions in comparison to the government, which is invariably late in action. The results further reveal that risk perception and flood preparedness partially mediates between place attachment and livelihood resilience. However, risk perception is not found to mediate between flood experiences, flood education, and livelihood resilience. Households adapt the strategy of 'wait-watch-act'. Households do not perceive flood as a threat but they have learnt to 'live with flood' as a 'way of life'. The study also reveals that due to differences in sensitivity, exposure, and adaptive strategies of households, their vulnerability differs across different blocks of the district. The finding of the study negates the notion of 'resilience' as the flip side, or opposite of vulnerability and vice versa. The study recommends that the 'red alert' approach with excessive 'politico-administrative' concerns of the government be replaced by the 'people-centric' approach, and their active involvement be made mandatory with due consideration to their indigenous knowledge, flood experience, and flood education in order to make flood measures effective and successful.

Keywords: Flood, vulnerability, resilience, livelihood, household