

Title: Highland communities' climate change perceptions, climatic shocks and livelihood practices during COVID-19 pandemic

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Abstract: Highland areas are more susceptible to climate change impacts. This study investigates the highland communities' climate change perceptions, climatic hazards, and livelihood practices during the COVID-19 pandemic. Using a multi-stage random sampling technique, survey data were gathered from 425 respondents living in highland areas of Panchagarh district, a drought-prone region in Bangladesh. Perception analysis indicates that most respondents (77%) believe their area's climate has significantly changed over the past 10 years. The bivariate and multivariate regression model results reveal that age, education, income, occupation, land ownership, and socioeconomic status substantially impact local community perceptions of climate change and climatic shocks during the COVID-19 pandemic. Besides, land ownership, socioeconomic level, and crop sowing are also important determinants of erratic rainfall that impacts climate change and shocks during COVID-19. This study suggests the local government get involved and enhance the highland community's ability to adapt to climatic shocks.

Keywords: Climate change perception, Vulnerability, Resilience, Climatic risk, Natural hazards, COVID-19 pandemic

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