Assessment of Climate-Induced Disaster Risks in Coastal Bangladesh: A Case Study of Galachipa Upazila, Patuakhali District, Bangladesh

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Abstract: **The coastal area of Bangladesh is highly vulnerable to climate change and climate-induced natural hazards. The coastal community is suffering from different forms of natural hazards such as floods, tropical cyclones, tornadoes, tidal surges, droughts, and river erosion almost annually. The main aim of the study was to identify, analyze, and prioritize the dominating climate-induced hazards of the study area. The research was carried out in Galachipa Upazila of Patuakhali District of the southern coastal region of Bangladesh. Data were collected through direct observations, key informant interviews, focus group discussions, and literature review.**

The research establishes the hazards' ranking according to their level of impact and severity as perceived. Storm surge is ranked number one, reflecting high risk and destruction. Close behind are cyclones, riverbank erosion, and floods, which are ranked two, three, and four, respectively.

Storm winds and high tides are ranked moderate at five and six, respectively, in light of their possibilities to inflict damage but to a lesser degree. Pest attacks, abnormal rainfall, and hailstorms are ranked middle level of severity and positioned at seven, eight, and nine, respectively. At the rear is the salinity at ten.

The research recommends that the same disaster risks be taken into account in planning decision- making for any development project for disaster risk reduction. In addition, research can be used as a guideline for prioritizing mitigation and preparedness measures and resource allocation to address ranked higher hazards of greater consequence to the community or environment.

Keywords: ***Coastal area, Disaster risk, Risk analysis, Risk reduction.***