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COPING STRATEGIES DURING HAZARDOUS SITUATIONS USING INDIGENOUS KNOWLEDGE IN THE CHANGING AGRICULTURAL SYSTEM OF TEESTA RIVER BASIN

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ABSTRACT
The Teesta River basin, spanning across regions of India and Bangladesh, faces increasing environmental hazards due to climate change, different types of natural and man-made hazards. In this context, indigenous knowledge systems are vital in helping local agricultural communities cope with and adapt to these challenges. This paper explores the traditional coping strategies farmers employ in the basin to sustain agricultural livelihoods amidst natural and man-made hazardous situations. Methods such as the use of flood and drought-tolerant crops, soil conservation, water and fertilizer management, crop diversification, intercropping, mixed cropping, community support etc., strategies are examined. The research highlights how these practices are not only shaped by generations of lived experience but are also undergoing change due to modern agricultural interventions and environmental pressures. Despite challenges, indigenous knowledge remains crucial for resilience, offering cost-effective and culturally appropriate strategies. During the last 10 years, approximately 394 and 110 acres of arable land in the study area have been affected by different types of natural and man-made hazards. In the past decade, 122 farmers' communities have migrated owing to various hazards, while 51 farmers have abandoned their traditional occupation and taken up new livelihoods as a result of changes in the agricultural system.