

<b>Paper ID</b>	031
<b>Author(s)</b>	Md Ayatullah Khan
<b>Title</b>	Disaster risks among climate-affected communities: A case on coastal Bangladesh
<b>Abstract</b>	
<p>This investigation analyzes disaster risks and explores the risk factors affecting loss and damage among coastal households in southwestern Bangladesh. We surveyed 400 household heads from the Dacope sub-division of Khulna district, a region vulnerable to climate change in Bangladesh. We utilized the aggregated disaster risks index (DRI) and binary logistic regression to identify the risk factors influencing loss and damage. The findings indicated an overall aggregated DRI of 0.034, with the hazard index being the predominant contributor, followed by vulnerability and exposure. The regression analysis findings suggested that the number of disasters experienced, increased disaster frequency, absence of early warning systems, and lack of mobile access among households were significant positive factors contributing to their losses and damages. The analysis reveals particular suggestions based on the investigation's findings, encompassing funding for improved forecasting, prompt dissemination of early warnings, and execution of resilience initiatives. This study provides critical insights into the consequences of exposure, vulnerability, and hazards in developing remedies to mitigate disaster risks and enhance resilience in climate-vulnerable areas. The outcomes of this investigation can aid policymakers and institutions in strengthening their strategies to address disaster risks, along with the damages and losses incurred by climate-affected communities.</p>	
<b>Keywords</b>	Climate change, Disaster risks, Loss and damage, Coastal region, Bangladesh

<b>Paper ID</b>	272
<b>Author(s)</b>	Jemima Jahan Meem and Nazmul Huda
<b>Title</b>	Women's Household Resilience to Environmental Shocks
<b>Abstract</b>	
<p>This study examines the growing vulnerability of rural coastal (Charland) households to environmental shocks and emphasizes the critical role of women in building resilience. Climate change exacerbates disasters in coastal regions, undermining the ability of communities to mitigate risks and recover. Employing qualitative methods, this research includes interviews with 75 female household heads and seven in-depth case studies from two disaster-prone Charland regions. The findings highlight that women are central to disaster preparedness and adaptation by utilizing their local knowledge, resources, and skills. Their contributions extend across household management, economic activities, and promoting community well-being. Despite facing systemic challenges such as limited resources and sociocultural constraints, women demonstrate remarkable innovation in addressing environmental shocks. This study emphasizes the need to integrate women's empowerment programs, financial support mechanisms, and participatory disaster planning into policy frameworks. Such initiatives would acknowledge women's roles as key agents in resilience-building, enhancing household and community capacities to withstand and adapt to environmental stressors. By investing in women's capacities and fostering inclusive policies, Charland communities can transform into adaptive, sustainable systems capable of mitigating climate vulnerabilities. The research provides actionable insights for policymakers and development practitioners aiming to strengthen resilience and promote sustainable development in climate-sensitive regions.</p>	
<b>Keywords</b>	Women, Resilience, Environmental shocks, Vulnerability

<b>Paper ID</b>	174
<b>Author(s)</b>	Nazmul Huda and Joydeb Garai
<b>Title</b>	The Attitudes of Fishermen towards Modern Climate-Resilient Technology: A Sociological Inquiry in Chattogram Coastal Belt Area
<b>Abstract</b>	
<p>Global environmental and climatic changes have become an ever-increasing trepidation across the world due to the unprecedented changes in temperatures, precipitation, weathers, and ecosystems in the global, regional, and local level. This study is an attempt to find out the impacts and vulnerabilities of climate-induced hazards on indigenous people in CHT. It also explores the adaptation strategies of indigenous people in adverse situation in CHT. For conducting this study, a critical ethnographic approach is adopted, together with participant observation, in-depth interview (N=55), and focus group discussions (FGDs) (N=5, 48 participants) over a one-year period (October 2019 to October 2020). The findings of the study indicate that climate induced hazards bring unrepresented sufferings to the life and livelihoods of indigenous people. Climate change variability together with anthropogenic causes contributing to create environmental crisis that threat food security, create water scarcity, disrupt agricultural activities, and household properties in indigenous community. The findings also indicate that indigenous people are bound to change their traditional jhum cultivation and adjust their traditional housing structure apart from searching alternative livelihoods due to climatic events. However, indigenous people try to adapt to this adverse situation following their life-long experiences and local knowledge. This study helps policy maker as well as government to understand the major drivers of climatic events in indigenous community, together with finding out the solutions and recuperating the living condition of the marginalized group in Bangladesh and beyond.</p>	
<b>Keywords</b>	Climatic events, environmental crisis, impacts and vulnerability, natural resources, coping strategies, and indigenous people.

<b>Paper ID</b>	141
<b>Author(s)</b>	Toukir Ahamed and Nazmul Huda
<b>Title</b>	South Asian Disaster Dynamics: A Data-Driven Analysis of Natural Calamities Unraveling Patterns, Impacts, and Resilience across South Asia's Seven Nations Using a Machine Learning Approach
<b>Abstract</b>	
<p>Natural disasters are among the most serious challenges towards economic and social stability in the ecosystem and resilience of a nation; South Asia is one of the most diversified and vulnerable regions. The study undertakes an in-depth look at the historical disaster data of the following eight South Asian countries: Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka. It looks to unmask complex patterns and relations of various disaster events using advanced methods in machine learning-for instance, showing the effects on human life and economic systems. The paper analysed several disasters that occurred within a decade to identify critical determinants of natural disaster frequency and intensity, focusing on geographic and socio-economic aspects of the environment. These findings highlight tangible evidence of the socio-economic effects of disasters, such as loss of life, injuries, displacement, and economic loss. The report also reviews disaster management mechanisms currently in place and the degree to which international assistance has reduced the adverse impacts of disasters. This present work contributes to the State of the Art regarding disaster dynamics in South Asia, with practical recommendations for policymakers aiming at strengthening resilience and thus</p>	

enhancing preparedness against an increasingly unpredictable climate. This work tries to foster a data-driven dialogue in order to improve disaster risk reduction practices, building resilience and protecting vulnerable communities across South Asia. This would, therefore, be consistent with a forward-looking approach to disaster management, taking into consideration steps that would ensure safety and well-being among the most vulnerable people.

**Keywords**

Disaster Dynamics, Water, Humans, Socio-Economic Impact, Natural Disasters, Machine Learning, Predictive Analytics, Data science, Socio-Economic Impact, Economic Stability, Disaster Risk Reduction, Data-Driven Analysis, Disaster Preparedness