|  |  |  |  |
| --- | --- | --- | --- |
| Title | **Climate Change, Natural Disasters, and Vulnerability in Bangladesh: A Complex Nexus** | | |
| Author(s) Name | ***K. M. Tahsin Kabir, Mst. Nadiya Noor, Md. Mortuza Ahmmed*** | | |
| Contact Email(s) | mortuza@aiub.edu | | |
| Published Journal Name | ICCESD 2024 Proceedings | | |
| Type of Publication | Conference Paper | | |
| Volume | NA | Issue | NA |
| Publisher | Dept. of Civil Engineering, KUET | | |
| Publication Date | February 2024 | | |
| ISSN | **978-984-35-5704-9 (ISBN)** | | |
| DOI | NA | | |
| URL | http://www.iccesd.com/proc\_2024/Papers/1044.pdf | | |
| Other Related Info. | NA | | |
|  | | | |
|  | | | |

|  |  |
| --- | --- |
| Abstract |  |
| Bangladesh, located in a low-lying delta, confronts a multifaceted challenge arising from the convergence of climate change, natural disasters, and vulnerability. This abstract offers a concise overview of the intricate relationships at play in this intricate nexus. With the escalating impacts of climate change, Bangladesh is witnessing rising sea levels, elevated temperatures, shifting precipitation patterns, and an uptick in extreme weather events, which further amplify preexisting vulnerabilities. This study thoroughly explores the interplay between climate-induced changes and natural disasters, examining their effects on socio-economic, environmental, and infrastructural vulnerabilities in Bangladesh. It delves into the compounded consequences of these factors on the livelihoods, health, and general well-being of the population. Employing a multidisciplinary approach, the research integrates data from meteorological, geological, and socio-economic sources to gain a comprehensive understanding of the dynamics within this complex nexus. Key findings highlight that climate change-induced events, such as sea-level rise and cyclones, disproportionately impact the coastal regions of Bangladesh, resulting in population displacement, loss of life, and significant damage to critical infrastructure. Additionally, the paper explores the adaptive and mitigative strategies implemented by both the government and local communities in response to these challenges. Furthermore, this study examines the implications of this intricate nexus for policy development and international cooperation aimed at addressing climate change and reducing disaster risks in Bangladesh. It emphasizes the imperative need for holistic, sustainable solutions that acknowledge the interdependence of climate change, natural disasters, and vulnerability. In conclusion, the nexus of climate change, natural disasters, and vulnerability in Bangladesh presents a substantial challenge that demands comprehensive and innovative strategies. This research aims to enhance comprehension of this issue, fostering meaningful discourse and decisive action to build a more resilient and sustainable future for Bangladesh and its populace. | |