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The Rise of Climate-Driven Security Threats in South Asia: A Case Study of Bangladesh

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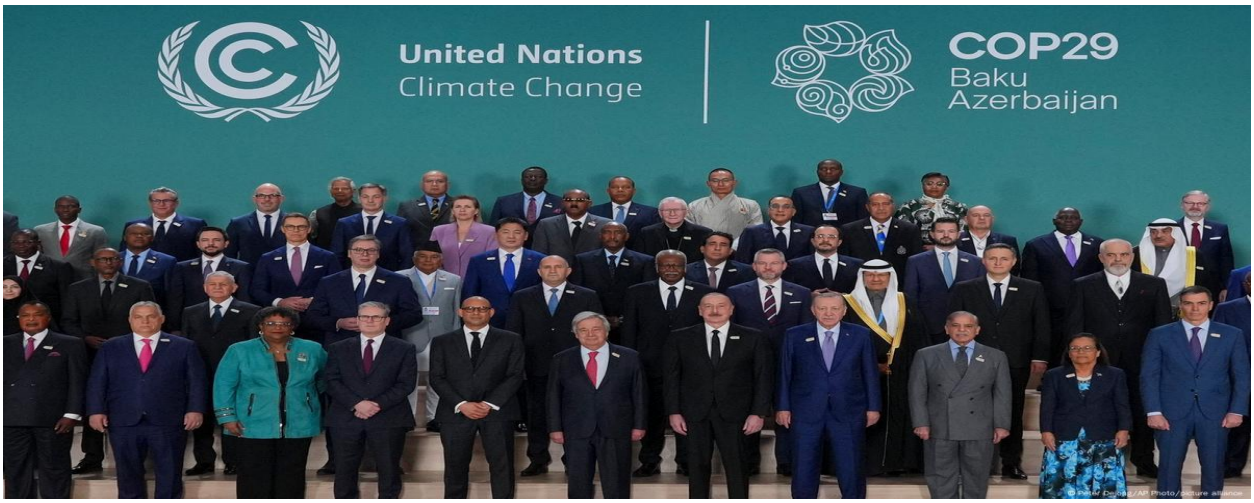

Source: Dhaka Tribune

Introduction:

Climate change is a complex and urgent issue with significant national and international security implications in the 21st century.Its wide-ranging impact disrupts ecosystems, economic stability, and social coalescence, as well as population displacement, resource depletion, sea-level rise, and

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extreme weather events.[2] Besides raising environmental issues, climate change creates new threats to communities and states as a "threat multiplier," increasing existing vulnerabilities. Climate-related challenges do not stop at national borders, and therefore require a multifaceted approach that encompasses mitigation, adaptation, and international cooperation. In order to emphasize the challenges encountered and potential solutions within the broader South Asian context, this commentary examines the confluence of climate change and security through the lens of Bangladesh as a case study.

Source: The Business Standard

Vulnerability of South Asia to Climate Change

The fact that South Asia is listed among the most climate sensitive and vulnerable regions in the world is due to a combination of reasons such as reliance on agriculture, high population density and a varied topography. [3]The region where many reside is questionable with weather, that has changed to a point that it brings about severe droughts, constant floods, and strong cyclones which worsen by the changes in the climate. The Himalayan area has the risk of having reduced glacial

[2] Cardarelli, Rose, and Harley Pomper. "Climate-Driven Migration–Asia (Case Studies of the Maldives and Bangladesh)." In *Children and the Climate Migration Crisis: A Casebook for Global Climate Action in Practice and Policy*, pp. 99-118. Emerald Publishing Limited, 2024.

[3] Sivakumar, Mannava VK, and Robert Stefanski. "Climate change in South Asia." *Climate change and food security in South Asia* (2011): 13-30.

runoff and water while the coastal areas especially in Bangladesh, India, and Sri Lanka are at risk of the effects of sea level rise. The socioeconomic challenges such as poverty and lack of infrastructure in South Asia further add up to the climate threats that the area faces, which explains as to why it is a hotstorm for climate-related security threats.

Bangladesh: Ground Zero for Climate Risks

Topography and geographic location make Bangladesh a high-profile example of climate vulnerability. The country is located in the Ganges-Brahmaputra Delta, where much of the land is barely above sea level. As a result, it is very vulnerable to floods, typhoon surges, and rising sea levels. Cyclones like Sidr (2007) and Amphan (2020) have caused huge economic losses and dislocation.

The salinity intrusion has also degraded the agricultural productivity of coastal areas, and thousands of families are displaced each year due to river erosion. Climate threats to Bangladesh aren't simply environmental threats; they're also social and security threats.[4] Forced displacement of vulnerable communities often leads to resource conflicts and pressures on urban infrastructure.

A Hotspot for Climate Change: Bangladesh

Environmental and Geographical Risks:

• With around 10% of its land less than 1 meter above sea level, Bangladesh, which is located in the largest delta in the world, is very vulnerable to flooding and storm surges.

• Ongoing exposure to salinization, riverbank erosion, and cyclones.

• Up to 900,000 people could be displaced by 2050 due to an anticipated sea-level rise of 0.30 meters and as many as 2.1 million people could be at risk by 2100.

• Devastating cyclones in 1970, 1991, and 2007 were among the past calamities that resulted in substantial economic damage and loss of life.

• The 2017 floods resulted in a 30% increase in maize prices, underscoring the risks of food insecurity.

[4] Yusuf, Arief Anshory, and Herminia Francisco. "Climate change vulnerability mapping for Southeast Asia." (2009).

• The historical dependence on international aid and the inadequate local disaster management infrastructure.

Source: Floodlist

Impact on Human Security

Climate change is threatening human security with scarcity of resources — food, water, healthcare. Permagardens not only provide food and nutrition but can also be useful in involving women in layer gardening so that they can sustain their families' economic needs. Health risks also rise, with water-borne diseases spreading after floods and cyclones.[5]

Furthermore, the displacement caused by the incursion of river erosion and rising sea levels puts more people in the context of poverty and destitution, making already marginalized societies even

[5] Jasparro, Christopher, and Jonathan Taylor. "Climate change and regional vulnerability to transnational security threats in Southeast Asia." *Geopolitics* 13, no. 2 (2008): 232-256.

less accessible. This disproportionate impact on women, children, and elderly populations emphasises the immediate need for inclusive climate resilience strategies.[6]

Agricultural Disruption and Food Insecurity:Unpredictable weather patterns lead to a reduction in crop yields and threaten food security by breaking traditional agricultural cycles.

- Economic instability brought on by higher salinity near coasts limits which kinds of goods are able to be farmed.
- The negative effects on fisheries and livestock also reinforce food insecurity.
- Changing rainfall patterns and water management in upstream countries exacerbate water availability.
- Reduction in supply and increase in demand leads to conflict over water resources especially in rural areas.
- Scarcity of water adversely affects public health and sanitation that amplifies the growth of diseases.
- The spread of vector-borne diseases, like malaria and dengue, is made easier by the rising temperatures.
- Increase in disasters leading to public health emergencies, overwhelming health systems.
- Mental health problems due to displacement, poverty and resource insecurity create an additional societal burden.

Climate-Induced Migration and Displacement

Millions of people in Bangladesh have been forced to their homes due to rising sea levels, riverbank erosion, and extreme weather events, leading to climate-induced displacement. Low-lying coastal areas, including Khulna and Satkhira, are particularly impacted, with strong migration trends to cities including Dhaka and Chittagong. A surge of migration to urban centres puts pressure on city infrastructure driving congestion, overworked public services and resource competition.[7] Moreover, the possibility of cross-border migration being a security threat can affect

[6] Khalid, Iram, and Tooba Ahmad. "Climate Change Vulnerabilities in South Asia: Prospects of Water and Food Security." *Journal of Development and Social Sciences* 2, no. 3 (2021): 451-463.
[7] Wilkinson, Emily, Amy Kirbyshire, Leigh Mayhew, Pandora Batra, and Andrea Milan. *Climate-induced migration and displacement: closing the policy gap*. ODI, 2022.

the bilateral relations with India. In order to sustainably manage population movements, it is necessary to implement both domestic resilience-building measures and regional cooperation to address climate-induced displacement.

Threats to National Security and Stability

The Security Consequences Of Climate Change: From Human Displacement To National Stability & Sovereignty "Climate-induced disasters are stretching government delivery of basic services in Bangladesh, which could widen rifts in public trust, governance and power." Limited freshwater availability in affected areas can already lead to localized conflicts and tensions and salinity intrusion may perpetuate this trend. Furthermore, border regions that are affected by climate change, such as the Sundarbans, are at risk of cross-border tensions with India and Myanmar regarding shared resources and migration. This emphasizes the necessity of climate-sensitive security strategies to prevent resource conflicts and foster national stability.

Role of Governance in Mitigating Climate Security Threats

Particularly in climate-vulnerable regions such as Bangladesh, effective governance is indispensable for mitigating climate security threats. By guaranteeing coordinated action across sectors and regions, robust governance frameworks can promote national stability, resource equity, and climate adaptation. [8]Key components of governance that contribute to the mitigation of climate threats include:

1. Strategic Planning and Policy Frameworks: o The development and implementation of comprehensive climate strategies, such as the Bangladesh Climate Change Strategy and Action Plan (BCCSAP).

o The establishment of climate funds that are specifically designed to support mitigation and adaptation initiatives, such as the Climate Change Trust Fund.

o The integration of climate security considerations into sectoral strategies and national development policies.

[8] Rothe, Delf. "Managing climate risks or risking a managerial climate: state, security and governance in the international climate regime." *International Relations* 25, no. 3 (2011): 330-345.

2. Institutional Capacity and Coordination: o Enhancing collaboration among government ministries, agencies, and local authorities to facilitate cohesive climate governance.

o Establishment of specialized climate divisions within ministries to enhance focus and expertise.

o Regional cooperation to address transboundary climate challenges through platforms such as SAARC and BIMSTEC.

3. Community-Based Adaptation and Inclusion: o Empowering vulnerable populations through decentralized, community-driven adaptation strategies.

o Providing marginalized populations with equitable access to climate resources and services.

o Initiatives to improve municipal governance and community participation in climate planning through capacity-building.

4. Transparency, Accountability, and Public Participation: o Encouraging the public disclosure of climate action progress and resource allocation and the open access to data.

o Establishing mechanisms for citizen engagement and feedback in the formulation of climate policy.

o Independent monitoring and evaluation of climate policies to guarantee their accountability and efficacy.

5. Disaster Preparedness and Climate Resilient Infrastructure: o Investing in climate-resilient infrastructure, including sustainable agriculture practices, embankments, and flood-resistant housing.

o. Improving early warning systems for climate-induced disasters, including floods and cyclones.

o Improving disaster preparedness by enhancing capacity and implementing emergency response planning.

6. Research, Innovation, and Knowledge Sharing: o Fostering climate research to inform policy decisions and develop context-specific adaptation measures.

o Fostering technological innovation to mitigate and manage climate risk.

o Encouraging the exchange of knowledge across borders regarding effective climate resilience strategies.

7. Climate Finance and Financial Resource Mobilization: o The expansion of climate financing mechanisms to support both long-term adaptation strategies and short-term responses.

o Collaborating with international climate finance platforms, such as the Green Climate Fund.

o Fostering public-private partnerships to foster climate-resilient development.

8. Legal and Regulatory Frameworks: o The development and enforcement of climate laws and regulations to promote sustainability and reduce emissions.

o Enforcing land-use policies that safeguard ecosystems and prevent deforestation.

o Establishing legal safeguards for displaced communities and climate migrants.

Regional Cooperation for Climate Resilience

Regional cooperation is indispensable for guaranteeing long-term climate security in a variety of regions, as climate hazards are transboundary. Collaborative strategies for effective mitigation and adaptation strategies are required due to the fact that climate challenges, including water scarcity, ecosystem degradation, extreme weather events, and rising sea levels, are not limited to national borders. The South Asian Association for Regional Cooperation (SAARC), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), the Association of Southeast Asian Nations (ASEAN), and the African Union (AU) are among the regional organizations and frameworks that can be instrumental in facilitating joint efforts for disaster response, water resource management, climate adaptation, and technology transfer. [9]

Nevertheless, effective climate diplomacy and cooperation have frequently been impeded by institutional limitations, policy asymmetries, and geopolitical tensions. The absence of binding agreements, historical disputes, and varying national priorities have further impeded the progress of collective climate resilience initiatives. Regional mechanisms for real-time data sharing, coordinated early warning systems, joint disaster response frameworks, and climate finance

[9] Tangney, Peter, Claire Nettle, Beverley Clarke, Joshua Newman, and Cassandra Star. "Climate security in the Indo-Pacific: A systematic review of governance challenges for enhancing regional climate resilience." *Climatic Change* 167, no. 3 (2021): 40.

mobilization must be strengthened in order to surmount these obstacles.

Fostering inclusive dialogues among policymakers, scientists, and civil society actors, harmonizing environmental policies, and promoting cross-border research collaborations can improve trust and cooperation. Furthermore, the integration of indigenous knowledge and community-driven solutions within regional frameworks can offer context-specific strategies for climate resilience.

Source: IOM Bangladesh

The Need for Climate-Responsive Defense Policies

Integrating climate considerations into national security frameworks will be vital for Bangladesh's long-term stability. Climate-induced crises run from management of displacement settlements to disaster response and prevention of conflict over resource scarcity and it is mandatory for the armed forces and law enforcement agencies to make preparations for these challenges. These strategies include climate risk assessments in national security planning, better coordination with civilian authorities, and capacity-building for humanitarian assistance.[10] Bangladesh would be more adequately equipped to address both imminent climate crises and long-term security risks associated with environmental degradation through the implementation of a climate-responsive defense policy.

[10] Rahman, Md Mafizur. "Governance constraints in building climate resilience: Evidence from coastal Bangladesh." *GeoJournal* 88, no. 6 (2023): 6189-6206.

Conclusion: Towards a Holistic Climate Security Strategy

The profound impact of climate change on security is underscored by Bangladesh's experience, which encompasses national stability, cross-border tensions, and human displacement and resource scarcity. A comprehensive climate security strategy that integrates environmental policies with national defense and human security frameworks is necessary to address these challenges. Incorporating climate considerations into defense strategies, fostering regional cooperation, and strengthening governance are essential measures toward long-term resilience. Bangladesh's proactive approach could serve as a model for other vulnerable states in South Asia, underscoring the necessity of both immediate action and sustained collaboration in the face of increasingly severe climate threats.