

SOUTH ASIA'S DUAL DILEMMA: CLIMATE IMPACTS HEIGHTEN CONFLICT VULNERABILITY

Laraib Farhat



Photo credit: Ashish Wassup / Shutterstock

South Asia has been confronted with a conflictual crisis for decades now. The arch of vulnerability that this region faces ascends from its long-rooted history of colonialism that left it with a traumatic past and is lingering to date. The conflicts created at that juncture and fortified over time have made this region vulnerable to any internal or external influence. The already declined state of South Asia's security landscape has been further compromised under the looming climate emergency. With rising temperatures, melting glaciers, and depleting natural resources compounded by South Asia's internal instability and external intimidations, the region is subject to a mounting dual dilemma. This issue brief looks into two areas of heightened vulnerability for the region—climate-induced migration coincided with conflict escalation and development-induced migration along with the rising energy crises that could become a potential hotspot for conflict in the region.

Introduction

The region of South Asia—characterized by conflicts and tensions between two nuclear powers and neighboring China—serves as a striking example of the profound perils associated with climate change. These perils have predominantly highlighted the dual dilemma in the region. This dual dilemma can be triggered by the existence of two layered risks, the first is the darkening security paradigm and the second is the decline in the environmental realm. Empirical evidence suggests that countries experiencing the greatest ecological disasters are more likely to be those with fragile peace and heightened vulnerability.¹

These countries often possess limited capacity for resilience and adaptation. It is noteworthy that these countries have contributed minimally to global carbon emissions,² yet they disproportionately bear the consequences of its effects. Remarkably, half of the ongoing United Nations peace operations are deployed in countries that face the highest levels of exposure to climate change impacts.³ These correlations, therefore, are not mere coincidences but indicative of a significant relationship between climate change, conflict, and vulnerability. As the impact of climate change and the broader environmental crisis extends beyond their direct consequences, it

contributes to increased climate insecurity. Evidence from the United Nations Framework Convention on Climate Change (UNFCCC) indicates that these phenomena often give rise to social and political instability in the conflicted zone, which, if left unresolved, can escalate into extreme violence.⁴ Furthermore, armed conflicts not only inflict harm upon the environment but also impede effective environmental governance, opening another Pandora's Box. In light of these interconnections, it is noted that to achieve a genuinely peaceful and secure world, it is crucial to consider both aspects of security that emanate from conflict and climate altogether. Thus, this research will deal with an inclusive perspective on environmental security by establishing a nexus between climate change in conflicted zones. In that regard, it will cover two areas: first, climate-induced migration, and second, energy insecurity as a potential conflict hotspot.

Threat Umbrella of Climate Change

The world today is dealing with climate crises that are unfolding at an unprecedented pace. Climate change has been a threat multiplier and is affecting every ecosystem on this planet. But since the global arena is a balance of stronger and weaker forces, there is always a disproportionate effect where one is affected more than the other. South Asia in this regard is at the forefront of the vulnerability. With a population of 2 billion people that accounts for 24.89 percent of the total world population, South Asia reckons 29 percent of people living in extreme poverty. With that extreme, there exists conflict and confrontation in the region with fatalities reaching 10,000 from 1970-2020 (see Figure 1).⁵ On the climate front, the World Bank has labeled South Asia as a region living through the 'New Climate Normal.' In the last two decades, 750 million people in Afghanistan, Nepal, Bangladesh, India, Maldives, Bhutan, Pakistan, and Sri Lanka have been affected by at least one or more disasters that were climate-induced.⁶

These figures show that the South Asian region is not just confronted with conflict per se but is also under the threat umbrella of climate change. This

South Asian region is not just confronted with conflict per se but is also under the threat umbrella of climate change. This dual dilemma is a menace that policymakers of South Asia should put forth in their priority list while addressing issues of national security.

dual dilemma—as this paper has categorized it—is a menace that policymakers of South Asia should put forth in their priority list while addressing issues of national security. Addressing vulnerabilities and bolstering resilience to climate shocks can also serve as a protective measure against these threats.

Such kind of threats emanating from climate-related events often force public financing towards the recovery efforts, leaving the already impoverished states in a pit of despair. For instance, as per the most recent South Asia Economic Focus report titled "Expanding Opportunities: Toward Inclusive Growth," the projected average regional growth for South Asia in 2023 is 5.6 percent, which reflects a slight adjustment downward from the forecast made in October 2022. Subsequently, growth is anticipated to continue at a moderate pace, reaching 5.9 percent in 2024, following the initial post-pandemic recovery that led to a growth rate of 8.2 percent in 2021.⁷ Similarly, inflation in South Asia is predicted to be around 8-9 percent in 2023 and in 2024, below 7 percent.⁸ This is affected by rising prices in global and domestic food prices; further impaired by the Russia-Ukraine war. South Asia, being a region where a large share of income is reliant on agriculture, is greatly affected by these circumstances. Such dire figures put South Asia on the forefront of vulnerabilities that need to be addressed at the earliest.

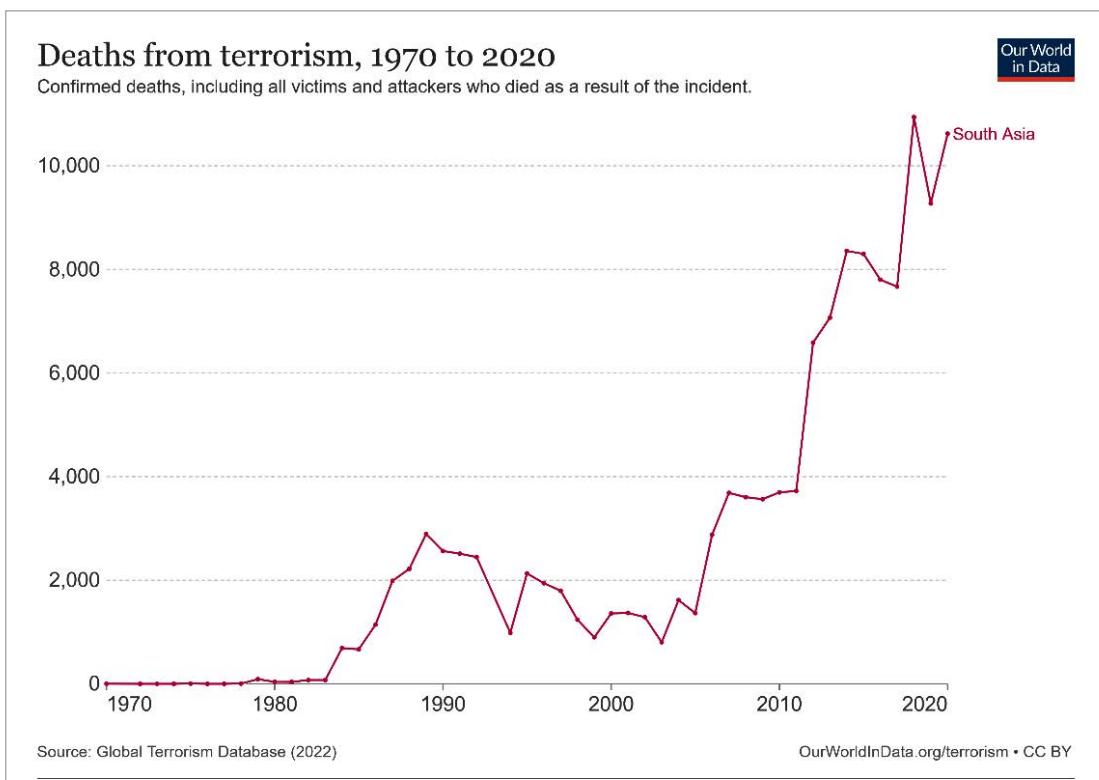


Figure 1: Deaths from Terrorism 1970-2020, South Asia⁹

Climate-induced Migration and Escalated Conflict

Climate-induced migration is sometimes considered a distant and ethereal worry when looking at the human security consequences of climate change. Despite universal agreement on “loss and damage fund” during the COP27 meeting in Egypt in November 2022, climate migration in underdeveloped nations received little attention though it is already taking place on an unprecedented scale.¹⁰ Because of its effects on people’s livelihoods and loss of livability in highly exposed areas, climate change is a significant motivator of internal migration. The concept was introduced in the AR5 report of the Intergovernmental Panel on Climate Change (IPCC) that mentioned mobility and migration in response to the impacts of climate change. It also debriefed on armed conflicts arising from accelerating climate change. The AR5 report mentioned three types of human mobility:¹¹ Displacement, migration, and planned relocation.

When considering the climate vulnerability in South Asia and resultant migration, many observers tend to focus primarily on Bangladesh due to its susceptibility to destructive floods as a low-lying, lower riparian nation. However, it is essential to recognize that the entire region faces significant risks. The coastal states of India, Pakistan, and Sri Lanka are all threatened by rising sea levels and flooding. The situation is further compounded by the large and densely populated urban coastal areas in these countries, which intensify the impact of climate change on the residents. Conversely, landlocked countries like Afghanistan, Bhutan, and Nepal encounter challenges such as rising temperatures, drought, and glacial melt. The tiny but densely populated Maldives, being the world’s lowest-lying country, confronts the alarming possibility of complete submersion in the near future, becoming the first country to be engulfed by rising sea levels.¹² It comes as no surprise that nearly 700 million people in the region, accounting for almost half of

the population, have been affected by at least one climate-related disaster over the past decade.¹³ To sum up, the World Bank report in 2020 predicted that South Asia is likely to see 40 million persons migrate by 2050.¹⁴

In recent years, the Global Climate Risk Index published by the think tank Germanwatch has identified India and Pakistan as among the top 10 countries most vulnerable to climate change.¹⁵ Furthermore, a concerning study conducted by India's Ministry of Earth Sciences in June 2020, utilizing extensive climate modeling, predicts that India, the most populous country in South Asia, will experience significantly drier and hotter conditions in the coming decades. Average temperatures are projected to rise by approximately 4 (RCP 8.5) degrees Celsius by the end of the century, accompanied by longer monsoon periods, increased glacial melt, warming temperatures in the Indian Ocean, and potential sea level rises of nearly a foot.¹⁶

The escalating phenomenon of climate migration in South Asia poses not only a significant humanitarian crisis but also a potential threat to regional stability. The increasing migration of people from rural to urban areas will impose additional strains on already overcrowded cities, particularly in terms of providing essential resources like food, shelter, and employment. Inadequate provision of these resources may intensify the risk of radicalization, considering that major cities in Bangladesh, India, and Pakistan are often under a terrorist threat. Moreover, the mass displacement of vulnerable and persecuted groups, such as ethnic Pashtuns fleeing floods in northern Pakistan, Muslims forced to leave drought-affected rural regions of India, and Rohingya refugees escaping flooded cities in Bangladesh has the potential to ignite communal tensions and violence within their new communities.

It is crucial to note that the construction of a barrier by India in the 2000s aimed at preventing refugee inflows from Bangladesh has already resulted

“Many tend to focus primarily on Bangladesh due to its susceptibility to destructive floods. However, it is essential to recognize that the entire region faces significant risks. The coastal states of India, Pakistan, and Sri Lanka are all threatened by rising sea levels and flooding.

in violence, with border authorities resorting to gunfire against migrants attempting to cross it.¹⁷ In the future, the influx of climate migrants from Bangladesh could further exacerbate these episodes of violence and deepen societal tensions, especially in the Indian border state of Assam, where previous waves of migrants have been met with resentment by the local population.

Conflict escalation

Climate-induced migration opens the borders for diverse populations who are compromised by lesser employment opportunities and are suffering more. During the initial decade of the twenty-first century, South Asia experienced a recurring and pervasive occurrence of anti-state rebellions, which became a prominent characteristic of the region's political landscape. These rebellions comprised both the separatist movements aiming for self-determination and, revolutionary insurgencies challenging existing power structures. India faced significant challenges as it grappled with various separatist and revolutionary movements. In Pakistan, the Tehrik-e-Taliban Pakistan (TTP), commonly known as the Pakistani Taliban, rapidly emerged as a formidable force, posing a significant threat to the complacent security establishment. In Nepal, Maoist insurgents mobilized against the government, while the Liberation Tigers of Tamil Eelam (LTTE), also known as the Tamil Tigers, established a de

facto state in the northern regions of Sri Lanka. Furthermore, there were concerns regarding the rise of violent Islamist extremism in Bangladesh, prompting apprehensions of a potential upsurge in societal unrest. In the most extreme scenarios, fears emerged from either partial or total failure of the state apparatus. A notable development has been the resurgence of state power, resulting in the elimination or containment of various insurgencies. This shift holds immense significance for the region. However, it is crucial to exercise caution when extrapolating from this trend, as the political dynamics in South Asia exhibit a high degree of fluidity and change. While the current trend of increasing state dominance might establish a new and enduring status quo, analysts should remain vigilant and closely monitor potential catalysts that could give rise to fresh or re-emerging forms of revolt. The dynamic nature of politics in the region necessitates careful observation and analysis to understand the evolving trajectory of South Asia's political landscape.

Development-induced migration

When talking about climate-induced migration—also sometimes called development-induced displacement—it is important to accentuate the migration which is actually induced by developmental projects. Around 80 million people, for instance,

“Development-induced migrations are usually the result of projects like construction of hydroelectric dams, mining, industrialization and other large-scale initiatives. Such projects can contribute to existing inequalities and can exacerbate the burden on underdeveloped communities.

have been displaced globally due to the construction of dams. Among them, the most displacements have been recorded in developing nations whose economic conditions and poverty rate are already questionable, further leaving people marginalized and improvised.¹⁸ These development-induced migrations are usually carried out with projects like construction of hydroelectric dams, mining, industrialization and other large-scale initiatives. Such projects can contribute to existing inequalities and can exacerbate the burden on underdeveloped communities. Firstly, loss of land leads people lose their livelihoods, losing both natural and human-created capital. Secondly, unemployment, leading to misplaced opportunities and jobs. This is seen in both urban and rural displacements as creating new jobs requires sizeable investments. Thirdly, loss of shelter heightens marginalization; displaced people faces lingering consequences of homelessness, and can lead to loss of sense of cultural and family space. Fourthly, declining health, leading to different complications arising from living in miserable conditions that could further exacerbate social stress and psychological trauma. Lastly but not the least, violation of human rights, in addition to the above-mentioned economic and social rights, arbitrary relocation can result in violations of civil and political rights, such as arbitrary detention, humiliating treatment or punishment, temporary or permanent disenfranchisement, and loss of political voice. Finally, relocation involves the potential of not only human rights breaches at the hands of state authorities and security forces, but also of community violence when new settlers come in among existing communities.¹⁹

With regards to South Asia, there is no integrated data available as to how much the region suffers in terms of development-induced migration annually. But this research uses several examples to show projects that have led to displacement of people in the region.

In the case of Pakistan, one such example is the Ravi Urban Development Authority (RUDA)

project to create a city on the banks of River Ravi. As per the report released by Human Rights Watch, colonial-era legislations are being enforced that are contrary to the Constitution of Pakistan as well as the standards of international law to forcibly evict farmers from their agricultural lands. The report was prepared by interviewing 14 farmers who had been evicted or threatened with eviction in Lahore since August 2020, as well as attorneys, environmental rights activists, and journalists.²⁰ The Ravi Riverfront Urban Development Project was launched in August 2020 by then-Prime Minister Imran Khan, who said it would handle Lahore's numerous issues, including pollution, sewage, water, housing, and jobs, while also restoring the city's "lost glory." The 5-trillion Pakistani Rupee government project, which spans more over 100,000 acres along the Ravi in Punjab province, is one of the country's major infrastructure projects. Proposed designs call for the construction of the "world's largest riverfront city," with a population of 12 million people.²¹ According to Human Rights Watch, to move the Ravi River project forward, the government has acquired the requisite property on behalf of private developers, 85 percent of which is agricultural land occupied by roughly one million farmers, laborers, and business owners. Since 2020, the authorities have accused over 100 farmers of obstructing or refusing to surrender land they occupy. Farms' accounts, as well as supporting images and video, indicate evidence of intimidation, harassment, and the use of force to evict farmers.²²

Another example is the Sardar Sarovar Dam in India that has displaced around 3,000,000 people through adverse ecological implications caused via construction. Before the construction, there existed some resentment which was overshadowed by a gross miscalculation, claiming for the displacement of only 70,000 people.²³ Sardar Sarovar is a prime example of a development project judged "in the national interest." The justification for this dam project is that it will help millions of people, will provide drinking water to about 40 million people in Gujarat's drought-prone districts and will also

The projected increase in temperatures is expected to surpass the global average. Moreover, intra-seasonal fluctuations in mean temperatures notably affect the hydropower resources available in the region. As a result, South Asia could witness a potential conflict with shortages in energy resources.

offer irrigation to a large region of Gujarat and two districts in Rajasthan, doubling the estimated net value of their area's agricultural production—in addition, to offering much-needed hydroelectric electricity.²⁴ In 2019, around 1500 people displaced by the backwaters of Sardar Sarovar dam, sat on a protest in Bhopal.²⁵ A similar example is seen in the case of Kaptai Dam and Chittagong hill tracks in Bangladesh.

Future Hotspot: Energy Insecurity

Energy security, as defined by the International Energy Agency (IEA), pertains to the consistent availability of energy resources at an affordable cost.²⁶ On the other hand, sustainable energy security encompasses the uninterrupted provision of energy services in a manner that is affordable, equitable, efficient, and environmentally sustainable.²⁷ Over the course of the last two decades, there has been a notable escalation in energy consumption within South Asia, with an increment of over 50 percent since the year 2000. This surge in demand can be attributed to various factors, including population growth and the expansion of the manufacturing sector. Notably, countries such as Bangladesh, Bhutan, India, Nepal, and Sri Lanka have experienced a consistent yearly increase in electricity demand of more than 5 percent on average during this period. Projections indicate that by the year

2050, the electricity demand in these countries will more than double. The South Asian region is experiencing the distressing effects of climate change, resulting in severe weather conditions that have adversely affected millions of people. However, despite these challenges, the energy mix in the region continues to heavily rely on fossil fuels.

With a population of 1.9 billion in 2019,²⁸ South Asia confronts a significant hurdle in promoting economic growth and poverty reduction while contending with heightened climate risks. In this region, the projected increase in temperatures is expected to surpass the global average. Moreover, intra-seasonal fluctuations in mean temperatures notably affect the hydropower resources available in the region. As a result, South Asia could witness a compounding effect on its energy resources leading to a potential conflict with shortages in energy resources. From a climatic point of view, the energy requirements for accessing irrigation water are anticipated to increase in South Asia due to various factors such as rising temperatures, prolonged droughts, and depletion of water tables. Pakistan's ongoing electricity challenges have compounded

the nation's already delicate financial predicament.²⁹ Widespread power outages have resulted in an approximate loss of \$70 million for the country's textile industry, which stands as its largest export sector by a significant margin. In Bangladesh, projected climatic changes have the potential to impact both energy supply and demand, particularly during peak hours in hot summer seasons. The region is prone to regular cyclones and floods, leading to power supply disruptions and infrastructure damage. These factors exacerbate energy demand challenges, which are already strained by load shedding of 600-1,200 megawatts (MW).³⁰ Bhutan, heavily reliant on hydropower resources for 99 percent of its electricity supply and 31 percent of national revenue, faces significant vulnerability to climate change, including glacier melting and disruptions in natural water resources.³¹ The Maldives, faced with limited access to grid connection and dependence on imported fossil fuels for its tourism industry, considers the development of renewable energy sources, particularly solar and wind energy, as crucial for its sustainability and growth.³²

These figures indicate that South Asia clearly needs to move towards "decarbonization" and end its reliance on fossil fuels. To effectively address the interrelated challenges of energy security and conflict in South Asia, it is crucial to maintain control over energy competition through regional cooperation as trade increases dependency. Currently, efforts in this regard are insufficient. Consequently, there is an urgent need to explore energy security measures in South Asia such as investing in accelerating renewable power generation and switching to fuels with lower emissions. Attaining energy security and self-sustainability in the region can be accomplished through the optimal and efficient utilization of available energy resources. While some countries in the region have strategies in place to secure the necessary energy supplies for long-term socio-economic objectives, there exist constraints such as inadequate investment and limited capacity building in renewable energy technologies, insufficient private sector involvement, and the prevailing

To fully capitalize on the region's vast untapped hydropower potential and expedite the implementation of solar and wind resources, it is crucial to achieve a more profound integration of South Asia's power systems. However, without solid peacebuilding measures among South Asian nations, the creation of a regional energy security ring is close to impossible.

distrust between India and Pakistan, hindering the expansion of existing bilateral energy trade. These constraints necessitate resolution through regional cooperation.

In such a context, platforms like SAARC (South Asian Association for Regional Cooperation) can play a significant role by creating an energy ring for the region. In recent years, there has been a significant improvement in the cross-border trade of electricity within the region. With the assistance of the World Bank since 2015, South Asian countries have experienced a substantial increase in the transmission of power across borders, rising from 2.1 gigawatts (GW) to 6.4 GW. This growth has been primarily driven by projects that have connected India with Nepal, Bhutan, and Bangladesh.³³ However, the scope of cross-border power trade has mainly been confined to bilateral agreements, such as the arrangement that facilitates the export of hydropower from Bhutan to India. To fully capitalize on the region's vast untapped hydropower potential and expedite the implementation of solar and wind resources, it is crucial to achieve a more profound integration of South Asia's power systems. However, without solid peacebuilding measures among South Asian nations, the creation of a regional energy security ring is close to impossible. Thus, to mitigate the energy shortage and its related problems that add to the viscosity of conflictual episodes, South Asian countries need to work on their regional energy cooperation ring and create a state of tranquility in order to avoid escalating any conflict over energy resources.

Yet another critical concern is the region's energy infrastructure. Both the Trans-Adriatic Pipeline and the Central Asia South Asia Electricity Transmission and Trade Project (CASA-1000) will add high-voltage direct current lines, which will necessitate the replacement of transformers and energy management systems. Both are now ineffective in Central and South Asian countries. Even if the projects are finished, there is concern that local communities will not benefit. Climate change is

South Asia should also expand on current institutional frameworks like SAARC, SCO, and ASEAN to build up on its energy requirements by creating an energy ring to avoid being trapped in an energy insecurity conflict catalyzed by climate insecurities.

also to blame for the TUTAP interconnection's failure to meet the region's demands. In Tajikistan and Kyrgyzstan, water stress on the Naryn and Amu Darya rivers decreases the power production of the hydroelectric power plant adjacent to them.³⁴ The TUTAP project, financed by the Asian Development Bank (ADB), is designed to deliver electricity from Turkmenistan and Tajikistan to Afghanistan and Pakistan (the acronym comes from the names of the countries involved).

Policy Recommendations

Based on the available evidence, addressing insecurity and conflict in the current era of heightened risks demands a fundamental shift in how we perceive peace. Recognizing the intricate connection between environmental degradation and security issues, it is essential to incorporate the restoration of environmental integrity as a vital component of any security solution. This requires improved collaboration among governments at all levels, encompassing both conceptual frameworks and operational strategies. It is crucial to acknowledge that climate change and environmental degradation affect all nations, making approaches centered on militarization and unilateral actions insufficient. In the long run, cooperation becomes imperative and aligns with the self-interest of countries.

- A comprehensive regional approach, bolstering institutional involvement, and, most

importantly, emphasizing determination and visionary leadership to achieve results in regard to solving the dual dilemma of South Asia, the climate-conflict nexus.

- In order to meet energy needs, South Asia needs to move towards renewable energy. This could be achieved by sharing regional data sets (energy availability and consumption) and using the best available practices that could be effective for just energy transition.
- South Asia should also expand on current institutional frameworks like SAARC, Shanghai Cooperation Organisation (SCO), and ASEAN to build up on its energy requirements by creating an energy ring to avoid being trapped in an energy insecurity conflict catalyzed by climate insecurities.
- South Asia should incorporate considerations of out-migration into long-term, environmentally sustainable, resilient, and inclusive development plans. A shift in the narrative is required, from perceiving migration solely as a last resort to recognizing it as a reality check that necessitates acclimatization.
- It is imperative to prioritize the enhancement of systemic resilience in rural landscapes, focusing on food, freshwater, and ecological systems. This will bolster the adaptation capacity, livelihoods, and food security of communities. Furthermore, given the rapid urbanization in South Asia, equal attention should be given to constructing climate-resilient cities and infrastructure to ensure long-term sustainability.
- Allocate resources towards gaining a deeper comprehension of the factors driving internal climate migration in order to shape well-designed policies that address these dynamics effectively.
- A thorough reassessment of the TUTAP project is vital for advancing interregional energy security. By incorporating renewable energy sources like solar and wind power, exploring the potential of green hydrogen production, and implementing desalination projects, the project can overcome the limitations associated with seasonal hydropower and enable India and Pakistan to play active roles as guarantors of reliable and sustainable interregional energy supply.
- Dealing with the climate-conflict nexus under the umbrella of national security and understanding the gravity of this phenomenon as a threat multiplier and amplifier, there is a need to devise policies accordingly and work towards implementation within a strategic framework and effective monitoring and evaluation processes.

Author –

Laraib Farhat is an M.Phil. Scholar, currently working as a Policy and Advocacy Researcher at the Institute of Regional Studies, Islamabad. Her area of focus is climate change dovetailed with strengthening climate resilience for the region. She can be reached at laraibfarhat6@gmail.com

The opinions expressed in this Issue Brief are of the author and do not necessarily reflect the views of the Institute for Security and Development Policy.

© The Institute for Security and Development Policy, 2023.
This Issue Brief can be freely reproduced provided that ISDP is informed.

ABOUT ISDP

The Institute for Security and Development Policy is a Stockholm-based independent and non-profit research and policy institute. The Institute is dedicated to expanding understanding of international affairs, particularly the interrelationship between the issue areas of conflict, security and development. The Institute's primary areas of geographic focus are Asia and Europe's neighborhood.

www.isdp.eu

Endnotes

- 1 Noah Bell, Claire McAllister, Hafsa Maalim, et al., "Environment of Peace: Security in a new era of risk," SIPRI, Stockholm, May 2022, <https://doi.org/10.55163/LCLS7037>.
- 2 "Pakistan Over-Punished for Climate Change: Joudat Ayaz," *Pakistan Today*, August 29, 2022, <https://www.pakistantoday.com.pk/2022/08/29/pakistan-over-punished-for-climate-change-joudat-ayaz/>.
- 3 World Food Program USA, "The 8 Countries Most Affected by Climate Change," <https://www.wfpusa.org/articles/countries-most-affected-by-climate-change/> (accessed June 1, 2023).
- 4 UNFCCC, "Conflict and Climate," <https://unfccc.int/blog/conflict-and-climate> (accessed June 8, 2023).
- 5 Hannah Ritchie, et al., "Terrorism," Our World in Data, July 28, 2013, <https://ourworldindata.org/terrorism>.
- 6 World Bank, "Climate and Development in South Asia," <https://www.worldbank.org/en/region/sar/brief/integrating-climate-and-development-in-south-asia/integrating-climate-and-development-in-south-asia-region> (accessed June 8, 2023).
- 7 World Bank, *Expanding Opportunities: Toward Inclusive Growth* (The World Bank, 2023), <https://doi.org/10.1596/978-1-4648-1980-3>.
- 8 World Bank, "Overview," <https://www.worldbank.org/en/region/sar/overview> (accessed June 8, 2023).
- 9 Hannah Ritchie, Joe Hasell, Edouard Mathieu, Cameron Appel and Max Roser (2013) - "Terrorism". Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/terrorism>
- 10 "Why South Asia Should Embrace Climate Migration," *The Diplomat*, February 7, 2023, <https://thediplomat.com/2023/02/why-south-asia-should-embrace-climate-migration/> (accessed June 2, 2023).
- 11 IPCC, "Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change," Cambridge University Press, https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-PartA_FINAL.pdf
- 12 "The Maldives Is Being Swallowed by the Sea. Can It Adapt?" *National Geographic*, January 20, 2022, <https://www.nationalgeographic.com/environment/article/the-maldives-is-being-swallowed-by-the-sea-can-it-adapt>.
- 13 Ditte Fallesen, Haris Khan, Ahsan Tehsin, and Atishay Abbhi "South Asia Needs to Act as One to Fight Climate Change," World Bank Blogs, November 11, 2019, <https://blogs.worldbank.org/endpovertyinsouthasia/south-asia-needs-act-one-fight-climate-change>.
- 14 World Bank, "Climate Change Could Force 216 Million People to Migrate Within Their Own Countries by 2050," Press Release, September 13, 2021, <https://www.worldbank.org/en/news/press-release/2021/09/13/climate-change-could-force-216-million-people-to-migrate-within-their-own-countries-by-2050> (accessed June 2, 2023).
- 15 David Eckstein, et al., "Global Climate Risk Index 2020," Germanwatch, 2020.
- 16 M. K. Roxy, et al., "Indian Ocean Warming," in *Assessment of Climate Change over the Indian Region: A Report of the Ministry of Earth Sciences (MoES), Government of India*, ed. R. Krishnan, et al. (Singapore: Springer, 2020), 191-206, https://doi.org/10.1007/978-981-15-4327-2_10.
- 17 Sudha Ramachandran, "The India-Bangladesh Wall: Lessons for Trump," *The Diplomat*, February 15, 2017, <https://thediplomat.com/2017/02/the-india-bangladesh-wall-lessons-for-trump/> (accessed June 2, 2023).
- 18 "Dams and Internal Displacement," iDMC, April 2017, <https://www.internal-displacement.org/sites/default/files/inline-files/20170411-idmc-intro-dam-case-study.pdf>.
- 19 W. Courtland Robinson, "Risks and Rights: The Causes, Consequences, and Challenges of Development-Induced Displacement," Brookings Institution, May 2003, <https://www.brookings.edu/wp-content/uploads/2016/06/didreport.pdf>.
- 20 Muhammad Shahzad, "RUDA Using Colonial-Era Law to Evict Farmers," *The Express Tribune*, April 14, 2023, <https://tribune.com.pk/story/2411852/ruda-using-colonial-era-law-to-evict-farmers>.
- 21 Ravi Urban Development Authority, "The Ravi Riverfront Urban Development Project (RUDP) Manages to Attract Foreign Investment Worth \$8 Billion," <https://ruda.gov.pk/node/76> (accessed June 8, 2023).
- 22 "Pakistan: Farmers Forcibly Evicted for Urban Project," Human Rights Watch (blog), April 11, 2023, <https://www.hrw.org/news/2023/04/11/pakistan-farmers-forcibly-evicted-urban-project>.
- 23 "Sardar Sarovar Dam: A Spectre of Displacement and Human Rights Violation," Video Volunteers, November 8, 2018, <https://www.videovolunteers.org/sardar-sarovar-dam-a-spectre-of-displacement-and-human-rights-violation/> (accessed June 8, 2023).
- 24 Laurie Utterlinde Flood, "Sardar Sarovar Dam: A Case Study of Development-Induced Environmental Displacement," *Refuge Journal* 16, no. 3 (August 1997): <https://shorturl.at/ioEZ1>.
- 25 "People Displaced by Sardar Sarovar Dam Begin New Satyagraha," *The Wire*, November 16, 2019, <https://thewire.in/environment/people-displaced-by-sardar-sarovar-dam-begin-new-satyagraha> (accessed June 8, 2023).
- 26 IEA, "Energy Technology Perspectives 2014," June 2014, <https://www.iea.org/reports/energy-technology-perspectives-2014> (accessed June 2, 2023).
- 27 K. Narula, "Is sustainable energy security of India increasing or decreasing?" *International Journal of Sustainable Energy* 33 (2014): 1054-1075.

-
- 28 World Bank, “Population, Total - South Asia,” <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=8S> (accessed June 2, 2023).
- 29 Observatory of Economic Complexity, “Pakistan (PAK) Exports, Imports, and Trade Partners,” [https://oec.world/en/profile/country/pak#:~:text=Exports%20The%20top%20exports%20of,Arab%20Emirates%20\(%241.09B\)](https://oec.world/en/profile/country/pak#:~:text=Exports%20The%20top%20exports%20of,Arab%20Emirates%20(%241.09B)) (accessed June 2, 2023).
- 30 REIN, *Study on the Present Power Supply Situation and its Impacts on the Readymade Garment Sector in Bangladesh* (Bangladesh: Renewable Energy Information Network and France: United Nations Environment Programme, 2009).
- 31 Royal Government of Bhutan, “National Revenue Report 2011–2012,” Department of Revenue and Customs, and Ministry of Finance, 2011.
- 32 United States Energy Association, “South Asian Energy Market: Advancing Low Carbon Growth Through Regional Cooperation and Cross-Border Energy Trade,” August 17, 2012, <https://usea.org/event/south-asian-energy-market-advancing-low-carbon-growth-through-regional-cooperation-and-cross>.
- 33 Guangzhe Chen, “An Integrated Electricity Market in South Asia Is Key to Energy Security,” World Bank Blogs, July 19, 2022, <https://blogs.worldbank.org/endpovertyinsouthasia/integrated-electricity-market-south-asia-key-energy-security>.
- 34 Dimitris Symeonidis, “Obstacles to Energy Security in Central and South Asia | East Asia Forum,” East Asia Forum, March 19, 2022, <https://www.eastasiaforum.org/2022/03/19/obstacles-to-energy-security-in-central-and-south-asia/> (accessed June 8, 2023).