CSDR
COUNCIL FOR STRATEGIC AND DEFENSE RESEARCH

SOUTH ASIAN FUTURES FELLOWSHIP

FRIEDRICH EBERT STIFTUNG

COMMENTARY

INTERLINKED INSECURITIES: CLIMATE STRESSORS AND PERCEPTION OF THREATS IN SOUTH ASIA

SHWETA KARKI

SOUTH ASIAN FUTURES FELLOWSHIP

THE SOUTH ASIAN FUTURES FELLOWSHIP ANNUALLY SUPPORTS EARLY CAREER RESEARCHERS BASED IN THE SOUTH ASIAN REGION, INTERESTED IN EXPLORING THE IMPACT OF GEOPOLITICS ON REGIONAL COOPERATION. FELLOWS ARE AT DIFFERENT STAGES OF THEIR CAREERS WITH EXPERTISE ON NON-TRADITIONAL SECURITY ISSUES; THEY PARTICIPATE IN WORKSHOPS, PRODUCE POLICY PIECES, AND ARE PROVIDED THE OPPORTUNITY OF A 1-MONTH RESEARCH RESIDENCY IN A SOUTH ASIAN CITY. DURING THIS RESIDENCY THEY WORK AT A PARTNER THINK TANK, ENGAGE WITH EXPERTS, AND CONDUCT FIELD STUDY ON A TOPIC OF THEIR INTEREST. THE FELLOWSHIP PRODUCES, AND ENGAGES WITH, REGIONAL NARRATIVES AND FACILITATES KNOWLEDGE EXCHANGE ON SHARED CHALLENGES IN AN EVOLVING GEOPOLITICAL CONTEXT IN THE SOUTH ASIAN REGION.

ABOUT THE AUTHOR

SHWETA KARKI IS AN ACADEMIC WITH AN INTEREST IN GAINING A DEEPER UNDERSTANDING OF CLIMATE CHANGE, REGIONALISM, AND HUMAN SECURITY. SHE GRADUATED WITH AN M.A. IN 2018 FROM THE DEPARTMENT OF INTERNATIONAL RELATIONS AND DIPLOMACY (DIRD), TRIBHUVAN UNIVERSITY WITH THE GOLD MEDAL. SHE BEGAN AS A TEACHING ASSISTANT AND RESEARCH ASSOCIATE AT PRESIDENTIAL BUSINESS SCHOOL, AND HAS BEEN A REGULAR TEACHING FACULTY AT DIRD SINCE FEBRUARY 2019. HAVING BEEN APPOINTED AS A SUBJECT COMMITTEE MEMBER BY THE DEPARTMENT SINCE DECEMBER 2022, SHWETA TEACHES SELECT COURSES UNDER POLITICS OF CLIMATE CHANGE AND SECURITY, INTERNATIONAL HUMAN RIGHTS, SMALL STATES AND THEORIES OF INTERNATIONAL RELATIONS. SHE IS ALSO CURRENTLY WORKING WITH THE ASIAN INSTITUTE OF DIPLOMACY AND INTERNATIONAL AFFAIRS AS A RESEARCH AND IS AN INDEPENDENT CONSULTANT FOR A JOINT PROJECT WITH THE NEPAL-INDIA CHAMBER OF COMMERCE AND INDUSTRY.

Interlinked Insecurities: Climate Stressors and Perception of Threats in South Asia

Climate-Security Nexus: Visible Strains

South Asia is inherently vulnerable to the impacts of climate change and concerns surrounding water, food, and displacement have hinted towards possibilities of internal as well as inter-state conflict.[1] The assumption that climate change intensifies existing threats and heightens anxieties within the ever-changing global and regional security frameworks shapes the direction of security analysis. Therefore, it is noted that climate change acts as a "threat multiplier" within existing situations of geopolitical competition and conflict.

Within a span of two decades, 750 million people—about half of South Asia's population—were impacted by climate-induced disasters[2], with 12.5 million internally displaced in 2022, where floods and increasing food insecurity accounted for most of the movements.[3] The region contains several climate-sensitive hotspots, with receding glaciers, rising sea levels, increasing incidents of floods and droughts, and the looming migration crisis–all of which impact livelihoods and hinder development prospects for the population. Transboundary in nature, threats from environmental distress extend beyond the sovereign jurisdiction of states, often spilling over into traditional security concerns and impacting prospects of a consolidated regional response.

Understanding the Landscape

Cradled between the Hindu Kush Himalaya (HKH) range and the low-lying deltas surrounded by the vast Indian Ocean, South Asia's unique geography requires cross-border cooperation in resource management, disaster risk reduction, and resilience building to effectively address the growing challenges of climate vulnerabilities. The general idea of conflict, whether political or territorial, often stems from the belief that entrenched patterns of disruption may obstruct cooperation, allowing climate-induced pressures to intensify existing tensions. In this context, essentials like water and food have attracted significant attention from many observers.

Transnational river systems, primarily the Indus, Ganges, and Brahmaputra originating from the Tibetan plateau, link and cut through the borders of South Asian nations, and are considered vital for the surrounding ecosystems. Projections indicate that glacier melt will initially increase river flows until the mid-century, followed by a significant decline due to thinning glaciers.[4] This change is expected to further impact agricultural needs during dry seasons and threaten food security across the Indo-Gangetic plains.[5]

Water becomes an important subject within this background for symbiotic reasons concerning developmental aims, resource scarcity, and disaster reduction and management. Within conflict hotspots, this reality coupled with diverse interests presents unique sets of challenges. The strain has been visible in the sharing of transboundary watersheds. Reports of discontent have emerged in the past regarding the Teesta River, shared between India and Bangladesh due to matters pertaining to water availability and development projects.[6] On the other side, along the Brahmaputra River, which flows from China to India and Bangladesh, there is a focus on competition over water infrastructure, with dam construction viewed as a measure to enhance regional clout.[7] With no formal water-sharing mechanisms in place, in 2017, during the Doklam crisis, hydrological information from Beijing to New Delhi was halted resuming only after relations stabilized in 2018, even though Beijing denied any correlation between the events.[8] The border situation in the region is tense and largely dictates state and public perceptions.

A 2023 study highlighted the growing downstream population and receding glaciers, suggesting that these factors could “affect water availability and may lead to conflict over resources.”[9] Afghanistan, which relies on glacier meltwater for agriculture and irrigation, presents an example where resource constraints have hindered efforts to achieve peace. As the planet warms, these tensions are likely to intensify, with increased risks of natural disasters and displacement.[10] It has also been involved in struggles with both Iran and Pakistan, on issues concerning water rights and resource sharing, respectively.[11] Even in countries like Nepal and Bhutan, which are considered rich in water resources, the economy is fragile and serves to further the scope of the nation’s vulnerabilities to climate change.[12] The region holds only "4 percent of the world’s renewable water," and inadequate water management has led to severe drought incidents in various areas, even as demand for this resource continues to rise.[13]

Studies examining the connection between climate change and extremism have shown that when the state fails, non-state actors often take advantage. Radicalization, stemming from scarcity and natural calamities, amongst other factors, has been a problem in the sub-continent.[14] This was evident in the aftermath of the 2010 Pakistan floods, when Lashkar-e-Taiba used relief programs to bolster its legitimacy,[15] and in India, where the Naxalites escalated violence during draughts to address their own food insecurities.[16]

This section looks into these dynamics on two fronts: primarily, focusing on the Indus, looking into the Indo-Pak border space fraught with military and political tensions, and a brief analysis of the supposed integrated, open framework of the Nepal-India border. A concluding sub-section will touch upon the migration-conflict debate when defining the evolving security architecture of the region.

Conflict-prone Spaces – The Indus

The Indus passes through one of the most sensitive spaces in the sub-continent, Kashmir, presenting an interesting illustration where despite acknowledging risks constituted by climate change, years of mistrust and suspicion have halted sustainable cooperation between the nations.[17] The Indus basin—shared by India, China, Pakistan, and Afghanistan—feeds almost 16 million hectares of land for agriculture, and could face water scarcity owing to climate change-related stressors.[18] As per the 1960 Indus Water Treaty (IWT), the water is distributed across six tributaries amongst which, the Ravi, Beas, and Sutlej are the Eastern rivers allocated to India and the Western, i.e., Indus, Jhelum, and Chenab, to Pakistan.[19] The document is a crucial understanding between the nations, both in terms of national security and livelihood requirements, since the resource has been heavily politicized.[20]

Volatile situations in Kashmir have previously resulted in numerous warnings issued by some Indian leaders of damming the flow as retaliation for assaults on Indian bases.[21] As an upper-riparian state, it is presumed that India is in an advantageous position, and a related intrinsic fear grips Pakistan about the possibility that India may control river flows for its own cause.[22] Though the likelihood of India actually doing so has been disproved citing the impossibility of river diversion,[23] narratives hold weight in international relations. There have

been incidents where right-wing and extremist leaders in Pakistan have used hostile rhetoric to falsely accuse India of releasing floodwaters. They have referred to this as a "water bomb," suggesting that India manipulates water flows to retaliate against Pakistan during flood seasons.[24]

Historically, tensions between Pakistan and India over water rights have been evident in relation to the Indus Waters Treaty (IWT). This issue has resurfaced in a recent international arbitration case regarding Pakistan's claims that India's hydro projects are affecting river flows crucial for its agriculture. In response, India has rejected the verdict, stating it is “in contravention” of the treaty.[25] As such, there have been discourses highlighting the necessity of the treaty provisions being reviewed, assessing the climate induced impacts.[26] While the document has largely been touted as a success, some have pointed towards its dated approach to the evolving problem, underlining that its effectiveness has been on the decline.[27] Though the treaty has somewhat been upheld throughout several territorial tensions, resource constraints due to climate stressors raise risks of conflict.[28] The Indus is considered significant in terms of human dependence, and changing precipitation patterns could bring “flash floods in the north and increased droughts in the southern plains.”[29] As it stands, mentions of snowfall decrease in 2024, within overall trends of glacier recession, carry potential risks for the communities relying on the basins.[30]

As it stands**,** state relations between the two are perilous, and divided on ideological, religious, and political grounds. Food and economic insecurity devolving from climate-induced disasters can very well add to prevalent suspicions, leading to non-kinetic and kinetic scuffles.[31] The strain of both imagined and prevailing conflicts limit prospects for cooperation in these cases owing to ingrained wariness and territorial sensitivities. The flash floods that devastated Pakistan in 2022, labeled “climate carnage” by the UNSG Guterres, for example, had the country sounding out alarms, and even then, it ignored New Delhi’s offer for humanitarian aid and assistance, conditional on Islamabad’s request for the same.[32] While a water war may not be a definite possibility, any unresolved disputes along these points have a chance of escalating the brewing conflict paradigms.

Integrated Borders

Unlike the India-Pakistan border, the Nepal-India border has generally been viewed as an exception in global state relations, characterized by openness. However, climate change has rarely been addressed in high-level policy discussions between India and Nepal. Even during recent bilateral talks on hydropower, the issue was conspicuously avoided.[33] The impact of climate-related pressures along the open Nepal-India border provides multiple perspectives that highlight existing sensitivities in their bilateral relations.

Koshi (Kosi), the "sorrow of Bihar", flows through Nepal from the Tibetan plateau, across an open border into eastern India, and acutely affects communities on both sides through repeated flooding – gravely affecting lives and livelihoods during the monsoons. While local communities have developed early warning systems, state-level processes are wanting.[34] With changed precipitation patterns, growing risks of Glacier Lake Outburst Floods (GLOFs), in part due to climate change, coupled with general grievances between the bordering states, have led to escalating crises[35] in infrastructural development and flood prevention.

Also, a commonly raised issue is the flood management system of the Koshi, and the concept of India's "hydro-hegemony", which negatively impacts Nepali sentiments towards India.[36] The perception in Nepal of an "unequal treaty", referring to the Koshi Agreement of 1948[37], is widespread.[38] However, discontent exists on both sides, with some emphasizing the political unwillingness to revise agreements and the tendency of high-level officials to engage in blame games.[39]

Emerging Climate Migration-Conflict Links

The climate-migration-conflict intersection is an emerging narrative within the region, gaining significant traction, as island states like Maldives and Sri Lanka face a crisis almost existential in nature. Likewise, low-lying river deltas in Bangladesh and India encounter difficulties from rising sea levels, where saline waters would also affect arable lands and the supply of drinking water.[40] A 2018 World Bank document predicted almost 35.7 million migrants, mostly internal by 2050, emerging from South Asia, mainly from around the broader Gangetic plains, Bangladesh, Delhi-Lahore corridor and Mumbai, and in-migration expected around the "southern Indian

highlands … parts of Nepal, as well as northwestern India".[41] The report further noted that in the most optimistic, inclusive, scenario the number fell down to 21.1 million.[42]

A study by the International Centre for Integrated Mountain Development (ICIMOD) in 2022 within Bangladesh, India, Nepal, and Pakistan, stated that in climate-sensitive areas, migration has mostly been gendered, and taken as a way to expand opportunities, managing disasters and risks – an adaptation strategy.[43] However, when taken in the context of climate migration spiking within the next few decades, tracking beyond nations' capacities and policy formulations[44] the issue gains a sense of urgency. The concept of "migration with dignity" regarding climate-induced displacement had been propagated by some small island nations on international platforms. How such trends develop within scholarly and policy contemplations in the region will be interesting to observe, since climate migrants or climate refugees are not recognized in global and regional mechanisms yet, but may soon be a category of migrants requiring specific policy attention and regional collaboration.

Perceptions of Threat: Interests and Insecurities.

South Asia is a complex region, and even when historical ties have been flaunted, it has rarely functioned as a cohesive entity in modern times, even without factoring in the interests of external actors. Climate change acts as a catalyst in this context, influencing security concerns, while regional geopolitics serves as the overarching reality. Insecurities in the region are interconnected, but threats are shaped by shifting agendas, which is reflected in policies. While states' varying abilities to handle climate challenges and negotiate interests play a role, political intent remains a key factor in driving integrated climate action, especially amid existing tensions in bilateral relationships.

As Jayaram notes, "local and national interests" gain over "mutual trust and interest," although certain states like Maldives and Bangladesh regard climate-induced risks as existential threats and have stronger national policies.[45] Such instances notwithstanding, there have been marked tendencies to politicize resources in other cases. Furthermore, there is a distinct trust deficit, especially within bilateral interactions in the region, and flaring tensions around conventional

fault lines, together with narratives surrounding the "hegemonic" status of India, add fuel to the fire of bilateral threat perception.

The concept of the Global South often applies to South Asian states on global platforms, particularly when discussing responsibility and climate justice, as seen during the Conference of Parties. The focus on climate finance has become prominent in recent years, with special attention given to the vulnerability of the Himalayas. However, when examining regional trends, the finer details matter. Concerns have been raised that the climate crisis has not been fully integrated into the development discourse, which has been securitized, leading to transboundary rivers being viewed primarily through a state-centric lens.[46]

So, perceptions that define and disseminate the degree of threats appear fragmented, and long-term regional integration remains a hefty goal. Unless active discussions prioritize the collective risks of climate change and resource management in bilateral and regional relations—while also addressing longstanding grievances and mitigating their negative effects—regional dynamics will likely continue to reflect constructed threat perceptions driven by shifting interests rather than urgent issues.

Endnotes

1) Pandey, Chandra. "Environmental Security in South Asia." *Journal of International Affairs*, vol. 1, no. 1, 2016, pp. 19-28. (p. 27)
2) World Bank. "Resilient Together: Managing Disaster and Climate Risks in South Asia." October 31, 2022 https://www.worldbank.org/en/events/2022/10/19/resilient-together-managing-disasters-and-climate-risks-in-south-asia#2.
3) The Internal Displacement Monitoring Centre. "2023 Global Report on Internal Displacement." *https://www.internal-displacement.org/*, 11 May 2023, api.internal-displacement.org/sites/default/files/publications/documents/IDMC_GRID_2023_Global_Report_on_Internal_Displacement_LR.pdf#page=5.

4) Hussain, Kashif. “Climate Change and Conflict Resolution in South Asia’s Highlands.” *The Stimson Center*, May 19, 2022 https://www.stimson.org/2022/climate-change-and-conflict-resolution-in-south-asias-highlands/.
5) Molden, David J., et al. “The Great Glacier and Snow-Dependent Rivers of Asia and Climate Change: Heading for Troubled Waters.” *Water Security Under Climate Change*, edited by Asit K. Biswas and Cecilia Tortajada, Springer, pp. 223-250. https://link.springer.com/chapter/10.1007/978-981-16-5493-0_12.
6) Gambhir, Mohak. “Teesta Dispute and India-Bangladesh Relations.” *Centre for Land Welfare Studies,* May 31, 2021, https://www.claws.in/teesta-dispute-and-india-bangladesh-relations/.
7) Giordano, Mike and Anya Wahal. “The Water Wars Myth: India, China and the Brahmaputra.” *United States Institution of Peace,* December 8, 2022, https://www.usip.org/publications/2022/12/water-wars-myth-india-china-and-brahmaputra.
8) Manhas, Neeraj Singh. “A fragile lifeline: India and China must collaborate on water.” *The Interpreter*, November 21, 2023, https://www.lowyinstitute.org/the-interpreter/fragile-lifeline-india-china-must-collaborate-water;
9) Future Earth, The Earth League, WCRP. “10 New Insights in Climate Science 2023/2024.” *Future Earth, The Earth League and the World Climate Research Programme, 2023*. https://doi.org/10.5281/zenodo.10034364.
10) Jones, Sophia. “In Afghanistan, climate change complicates future prospects for peace.” *National Geographic*, 2020.
11) Bhattacharya, Snigdhendu. “Multiple Climate Reports Warn of Water Conflict in South Asia.” *The Diplomat*, December 11, 2023, https://thediplomat.com/2023/12/multiple-climate-reports-warn-of-water-conflict-in-south-asia/.

12) Hirji, Rafik, et al. “South Asia Climate Change Risks in Water Management.” *World Bank and International Water Management Institute* (IWMI), 2017. https://documents1.worldbank.org/curated/en/847951522835210828/pdf/124894-WP-P153431-PUBLIC-Climate-Change-and-WRM-Summary-Report-FINAL-web-version.pdf. (p. 9).

13) Sidhu, Sabrina. “South Asia has highest number of children exposed to severe water scarcity.” *UNICEF*, November 13, 2023, https://www.unicef.org/rosa/press-releases/south-asia-has-highest-number-children-exposed-severe-water-scarcity-unicef#:~:text=Although%20South%20Asia%20is%20home,change%20and%20increased%20water%20demand.

14) Wells, David. “Climate Change, Terrorism and Potential Implications for P/CVE.” *Vision of Humanity*, 2023, https://www.visionofhumanity.org/climate-change-terrorism-and-potential-implications-for-p-cve/#:~:text=However%2C%20governments%20and%20civil%20society,in%20recruitment%20by%20terrorist%20groups.

15) Jayaram, Dhanashree. “Climate-Fragility Risk Brief: South Asia.” *Adelphi Research*, 2019. (p. 10).

16) Nordqvist, Pernilla, and Florian Krampe. “Climate Change and Violent Conflict: Sparse Evidence from South Asia and South East Asia.” *Stockholm International Peace Research Institute* (SIPRI), 2018. https://www.sipri.org/sites/default/files/2018-09/sipriinsight1804.pdf (p. 6).

17) Joles, Betsy. “Can India and Pakistan’s Historic Water Pact Endure?” *Foreign Policy*, September 21, 2023 https://foreignpolicy.com/2023/09/21/india-pakistan-indus-waters-treaty-dispute-climate-change-flood-drought/#cookie_message_anchor.

18) ICIMOD. UBIN: About.

19) World Bank Group. “Fact Sheet: The Indus Waters Treaty 1960 and the Role of the World Bank.” June 11, 2018,

https://www.worldbank.org/en/region/sar/brief/fact-sheet-the-indus-waters-treaty-1960-and-the-world-bank.

20) Banerjee, Anuttama. “A Shared Interest: Why India and Pakistan Should Strengthen the Indus Waters Treaty.” *The Third Pole*, June 27, 2024, https://www.stimson.org/2024/a-shared-interest-why-india-and-pakistan-should-strengthen-the-indus-waters-treaty/.

21) Klare, Michael T. “Climate Change, Water Scarcity, and the Potential for Interstate Conflict in South Asia.” *Journal of Strategic Security*, vol. 13, no. 4, 2020, pp. 109-122. https://digitalcommons.usf.edu/jss/vol13/iss4/8. (pp. 114, 116)

22) Jayaram, Dhanasree, and Sethi, Gaurica. “Geopolitics of Climate Change and Water Security in South Asia: Conflict and Cooperation.” *Science, Policies and Conflicts of Climate Change: An Indian Perspective*, edited by Neloy Khare, Springer, 2022, pp. 77-88. (p. 83).

23) The Third Pole. “Pakistan floods not worsened by action in India.” September 16, 2014, https://www.thethirdpole.net/en/energy/pakistan-floods-india/.

24) Mustafa, Daanish. et.al. “Contested Waters: Subnational Scale Water Conflict in Pakistan.” *United States Institute of Peace*, 2017. (p. 25)

25) Reuters. “Hague court rejects India's objections over water treaty arbitration.” July 7, 2023, https://www.reuters.com/world/asia-pacific/court-rejects-indias-objections-over-water-treaty-arbitration-2023-07-06/

26) Prakash, Anjal. “Revisiting the Indus Water Treaty: A path to sustainability and stability in the face of climate change.” *Forbes India*, March 2, 2023, https://www.forbesindia.com/article/isbinsight/revisiting-the-indus-water-treaty-a-path-to-sustainability-and-stability-in-the-face-of-climate-change/83523/1#:~:text=Under%20the%20terms%20of%20the,unrestricted%20use%2C%20with%20some%20exceptions. ; Sharma, Bhumika. “India, Pakistan and the Indus: Climate change means the revision of a treaty”, *The Indian Express*, July 10, 2024,

https://indianexpress.com/article/opinion/columns/india-pakistan-and-the-indus-climate-change-means-the-revision-of-a-treaty-9438969/

27) Vishwanath, Ambika and Sanya Saroha. “Complexities of Transboundary Water Conflict in South Asia.” (p. 55).

28) Banerjee, A. loc. cit.

29) International Centre for Integrated Mountain Development (ICIMOD). “Implications of Climate Change for Water Resources and Policies in the Indus Basin: Key Findings from The Himalayan Climate and Water Atlas.” *ICIMOD*, 2015. https://lib.icimod.org/record/31180#:~:text=Extreme%20rainfall%20events%20are%20becoming,most%20vulnerable%20to%20glacial%20changes (p. 5).

30) Ghosh, Tirthankar. “Low snow levels in the Himalaya are putting lives at risk.” *Nature India*, July 29, 2024, https://www.nature.com/articles/d44151-024-00118-3.

31) Shidore, Sarang. “Climate Change and the India-Pakistan Rivalry.” *The Council on Strategic Risks*, January 23, 2020, https://councilonstrategicrisks.org/wp-content/uploads/2020/02/ShidoreJan23ClimatePakistan.pdf. (pp. 9, 15).

32) Verma, Anshali. “Pakistan drowning under floods but aid from India restricted.” *The Times of India*, September 7, 2022, https://timesofindia.indiatimes.com/blogs/no-free-lunch/pakistan-drowning-under-floods-but-aid-from-india-restricted/

33) Bhushal, Ramesh. “Analysis: India and Nepal Overlooking Environmental Issues While Signing Hydropower Deals.” *The Third Pole*, August 16, 2023, https://www.thethirdpole.net/en/regional-cooperation/analysis-india-and-nepal-overlooking-environmental-issues-while-signing-hydropower-deals/

34) Pyakurel, Diwakar. “Community Cooperation Across Nepal-India Border Saves Lives During Floods.” *The Third Pole*, February 27, 2023, https://www.thethirdpole.net/en/regional-cooperation/community-cooperation-across-nepal-india-border-saves-lives-during-floods/.

35) Jha, Hari Bansh. "Prioritising the Issue of Floods in Nepal–India Dynamic." *Observer Research Foundation*, August 17, 2020, https://www.orfonline.org/expert-speak/prioritizing-issue-floods-nepal-india-dynamic/

36) Bagale, Dharma Raj. "Nepal–India Water Cooperation: Consequences of Mutuality or Hegemony?" *Water Policy*, vol. 22, no. 6, 2020, pp. 1098–1108. https://doi.org/10.2166/wp.2020.135 ; Tandan, Pramod. "Challenging hydro-hegemony of India: resistance of Nepal in the Upper Karnali and Saptakoshi dam project." *Sustainable Water Resources Management*, vol. 7, no. 106, pp. 1-19. https://doi.org/10.1007/s40899-021-00580-2. (p. 17).

37) Adhikari, Deepak. "Protests Scupper India-Nepal Dam." *The Third Pole*, June 2, 2015, https://www.thethirdpole.net/en/energy/protests-scupper-india-nepal-dam/.

38) Regarding the construction of the Koshi barrage by India where benefits were unequally distributed, failure to maintain embankments, and the signing of the document just after the oligarchic Rana regime fell in Nepal.

39) Pyakurel, Diwakar, and Birat Anupam. Along the Koshi, flooded in Nepal, ignored by India. *The Third Pole*, August 13, 2020. https://www.thethirdpole.net/en/regional-cooperation/along-the-koshi-flooded-in-nepal-ignored-by-india/ ;Maharjan, Kiran. "Transboundary river governance and climate vulnerability: Community perspectives in Nepal's Koshi river basin," *Geographical Research*, vol. 61, no. 4, November 2023, pp. 407-540. https://doi.org/10.1111/1745-5871.12598. (p. 520)

40) Asian Development Bank. "Economic Costs of Rising Sea Levels in Asia and the Pacific." January 3, 2014, https://www.adb.org/features/economic-costs-rising-sea-levels-asia-and-pacific ; Pasricha, Anjana. "In South Asia, Rising Ocean Pushes Out Those Living at the Shore." *Voice of America,* September 5, 2021, https://www.voanews.com/a/south-central-asia_south-asia-rising-ocean-pushes-out-those-living-shore/6219259.html

41) Rigaud, Kanta K., et al. “Groundswell: Preparing for Internal Climate Migration.” *The World Bank*. 2018, https://openknowledge.worldbank.org/entities/publication/2be91c76-d023-5809-9c94-d41b71c25635 Accessed October 14, 2023. (pp. 87, 93).

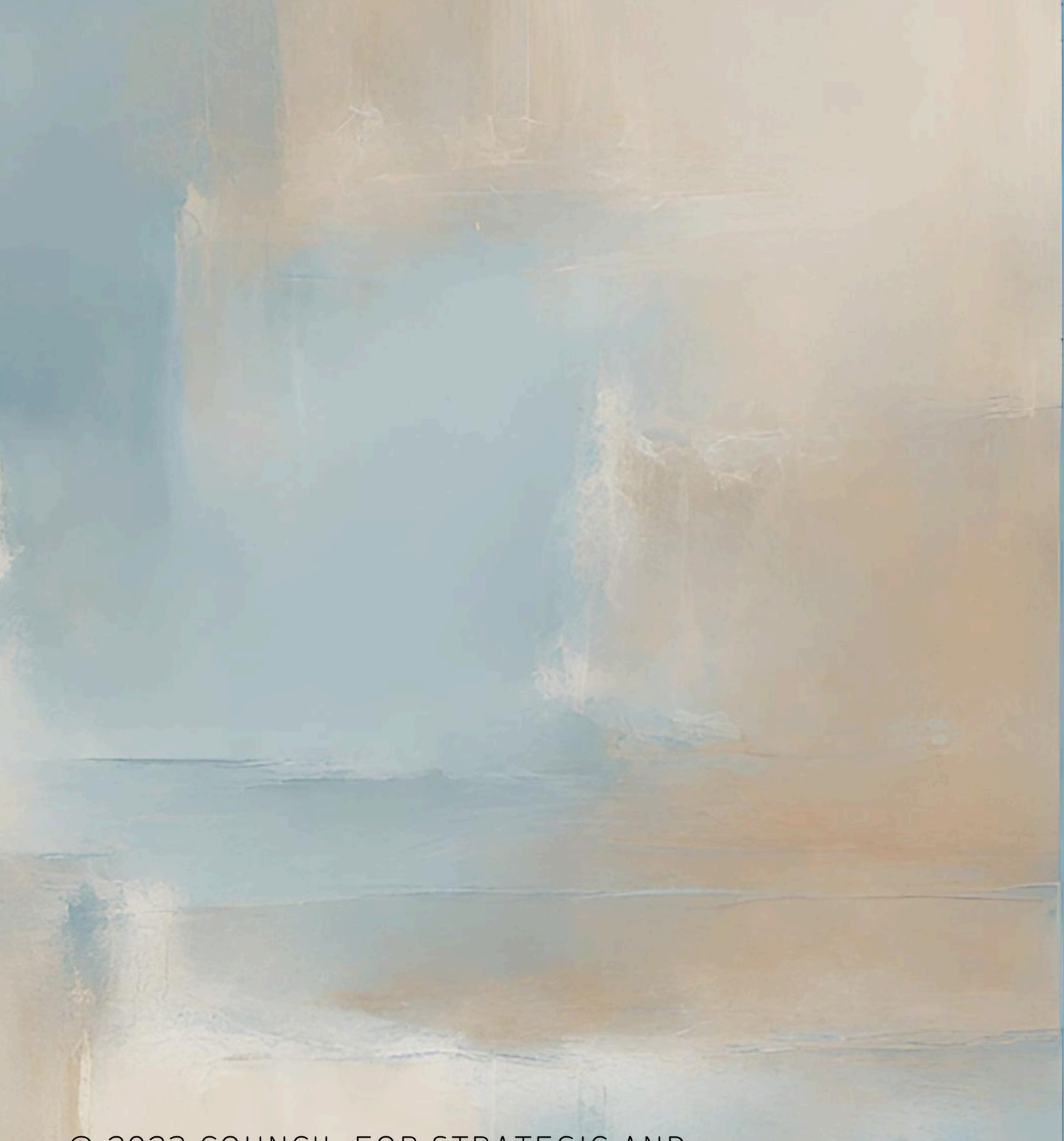
42) Ibid.

43) Maharjan, Amina, et al. “Migration and Climate Change in South Asia: What Happens When Spatial Diversification of Livelihoods is Not an Option Anymore?” *The International Centre for Integrated Mountain Development (ICIMOD)*, August 12, 2020, https://www.icimod.org/article/migration-and-climate-change-in-south-asia-what-happens-when-spatial-diversification-of-livelihoods-is-not-an-option-anymore/.

44) Kugelman, Michael. “Climate Induced Displacement: South Asia’s Clear and Present Danger.” *Wilson Center*. September 30, 2020, https://www.wilsoncenter.org/article/climate-induced-displacement-south-asias-clear-and-present-danger.

45) Jayaram, Dhanasree. “The Politics of Climate Change in South Asia.” *Routledge Handbook of the International Relations of South Asia*, edited by Šumit Ganguly and Frank O’Donnell, Routledge, 2023, pp. 411-424. (p. 413, 418)

46) Nepali Times. “A new Cold War in the Himalaya.” November 3, 2020, https://nepalitimes.com/here-now/a-new-cold-war-in-the-himalaya.



21, BLOCK C, QUTAB INSTITUTIONAL AREA, NEW DELHI, DELHI 110016

PHONE: 011-43104566
EMAIL: OFFICE@CSDRONLINE.ORG
WEB: WWW.CSDRONLINE.ORG TWITTER: @CSDR_INDIA