

Climate Change, Insecurity and Migration: A Closer Look at India



India's population is on the front lines of the climate crisis, facing threats to their fresh water, food availability, security, economy, and more. Absent aggressive emissions reductions and robust adaptation investments, extreme weather events and other climate impacts are expected to increase in India¹ over the next several decades.² Despite this, in India's political spheres, climate action has often been overshadowed by other policy priorities. Though India's top voices, including Prime Minister Modi, have taken on a leadership role for the Global South in climate negotiations, and begun working towards India's energy transition, these efforts are often stymied by a lack of coordination, perceived concerns about climate action hindering economic development, and the need to accommodate the country's rapid population growth. Given these factors, leaders have prioritized development and electrification to end energy poverty, frequently through coal.³

India presents a key case of the interplay between geopolitics and challenges at the climateinsecurity-migration nexus. As the world's most populous nation⁴ grapples with a complex political environment, its urgent struggle to balance economic development and poverty reduction with climate action has implications for both its 1.4+ billion population and the broader South Asian region.

This brief analyzes nexus challenges in India, identifies critical policy gaps in both domestic and foreign policy, and makes recommendations for improving multilateral governance throughout the South and Southeast Asian region.⁵ These areas of opportunity include:

- leveraging political willpower to strengthen domestic architecture;
- developing regional and transnational policy making platforms to effectively address the climate-migration-insecurity nexus;
- building institutional capacity with adequate coordination mechanisms; and
- ensuring adequate climate finance.

The status quo: Nexus dynamics in India

Geopolitics: India is a key international player due to its strategic location, large economy, and growing population. Geographically, India occupies a critical position straddling the axis of South and Southeast Asia, and alongside Bangladesh and Myanmar, offers access to the Bay of Bengal and the Indian Ocean. Since the end of the Cold War, US and EU bilateral relationships with India have strengthened, making India a key strategic partner for the West. At the same time, India has actively engaged in the revival of the BRICS,⁶ supporting the

¹ Joint Global Change Research Institute and Battelle Memorial Institute, *India: The Impact of Climate Change to 2030*, Washington, National Intelligence Council, April 2009, https://www.dni.gov/files/documents/climate2030_india.pdf.

² Murali Krishnan, "Climate Change in India: A Growing Environmental Crisis", in *Deutsche Welle*, 11 July 2023, https://www.dw.com/en/a-66190451.

³ International Energy Agency (IEA), "Energy in India Today", in *India Energy Outlook 2021*, Paris, IEA, February 2021, https://www.iea.org/reports/india-energy-outlook-2021/energy-in-india-today.

⁴ Sara Hertog, Patrick Gerland and John Wilmoth, "India Overtakes China as the World's Most Populous Country", in *UNDESA Policy Briefs*, No. 153 (24 April 2023), http://www.un.org/development/desa/dpad/ publication/un-desa-policy-brief-no-153-india-overtakes-china-as-the-worlds-most-populous-country.

⁵ This brief is informed by a series of interviews with academics, experts, and policymakers in South Asia. Interviewees were granted anonymity to candidly discuss regional challenges, and all quotes below are attributed anonymously unless noted otherwise.

⁶ BRICS is an intergovernmental grouping consisting of the governments of Brazil, Russia, India, China,

development of new regional power equations and stepping in as a leader for developing and middle-income countries. India's foreign policy has become more assertive as well, with the government leveraging its economic strength, large and often politically-powerful diaspora, and strategic position between the United States and China to elevate its national interests. However, continued democratic backsliding and human rights violations,⁷ combined with recent aggression against Sikh separatists in Canada and the United States, has the potential to dramatically shift the country's multilateral standing.

Concerningly, India's regional tensions have also intensified. While China has historically tried to partner with India to counter the influence of the West, a 2020 skirmish alongside their shared border in the Himalayas⁸ has led to a diplomatic stalemate and chilly bilateral relationship. This dynamic is unlikely to change in the short term, and experts have warned that the two risk falling into a security dilemma.⁹ Climate change may be making matters worse.¹⁰ On India's other borders, longstanding tensions with neighboring (and nuclear) Pakistan regularly devolve into skirmishes along the Line of Control, drawing attention and concern from global powers. As with the India-China relationship, climate change-related impacts are exacerbating tensions between these two nuclear powers as well.¹¹

All of these dynamics lend India both a geopolitically important and fragile role. In this context, nexus challenges in the country, such as food security and migration, are of particular importance to both India and the broader international community.

Food: As India's population and economy continue to expand, food security will remain a top priority for the government. However, as climatic stressors increase, India's farmers are expected to be disproportionately affected, raising the possibility of greater food insecurity, migration, and domestic instability. India is one of the largest producers of critical crops such as rice, wheat, sugarcane, vegetables, and more.¹² Agriculture remains the largest source of livelihood in India, with an FAO-estimated 70 per cent of rural households dependent on the sector.¹³ More than 60 per cent of agriculture is rain-fed, straining the country's groundwater resources.¹⁴ Millions of families are highly vulnerable to food insecurity arising from climate change-induced erratic and extreme weather, and already, one in six people in India struggle to feed themselves.¹⁵

South Africa, Egypt, Ethiopia, Iran, and the United Arab Emirates.

⁸ International Crisis Group, "Thin Ice in the Himalayas: Handling the India-China Border Dispute", in *Crisis Group Asia Reports*, No. 334 (14 November 2023), https://www.crisisgroup.org/node/21897.

¹¹ Andrea Rezzonico and Erin Sikorsky, "The Security Implications of the Pakistan Floods", in *Council on Strategic Risks Briefers*, No. 35 (19 September 2022), https://wp.me/p8RhMM-2jB.

¹² Food and Agriculture Organization (FAO) website: *India at a Glance*, https://www.fao.org/india/fao-in-india/india-at-a-glance/en.

¹³ Ibid.

¹⁵ FAO et al., *The State of Food Security and Nutrition in the World 2023*, Rome, FAO, July 2023, https://doi.org/10.4060/cc3017en.

⁷ Human Rights Watch, "India: Events of 2022", in *World Report 2023*, January 2023, p. 291-299, https://www.hrw.org/node/383699.

⁹ Daniel Markey and Andrew Scobell, "Three Things to Know about China-India Tensions", in *USIP Analyses*, 19 October 2023, https://www.usip.org/node/157291.

¹⁰ Francesco Femia et al. (eds), *Melting Mountains, Mounting Tensions. Climate Change and the India-China Rivalry*, Falmouth/Washington, Woodwell Climate Research Center/Converging Risks Lab, May 2021, https://wp.me/p1t6fZ-7py.

¹⁴ World Bank, *India: Climate Change Impacts*, 19 June 2013, https://www.worldbank.org/en/news/ feature/2013/06/19/india-climate-change-impacts.

Fluctuations in the monsoon season are particular risks to the country's food security. As the world's second-largest sugar producer and the largest consumer, fluctuations could reduce production and push future prices even further upward.¹⁶ The crop relies heavily on the monsoon rainfall, and low accumulated precipitation in areas such as Karnataka and Maharashtra could damage the crop in the long-term. India's soybean crops are equally vulnerable. Below-average precipitation in the summer of 2023 damaged crops and slashed yields. In Madhya Pradesh and Maharashtra states, which account for nearly 85 per cent of total soybean production, rainfall was less than half the historical average.¹⁷ Given India's status as a top vegetable oil exporter, this could cause prices to fluctuate or push consumers to other products such as palm oil.¹⁸ These risks, when combined with other nexus challenges, could pose risks to India's development.

Migration: Changes in weather patterns and the local economy are expected to prompt both internal and external migration as well, as large portions of the population relocate to seek greater economic and physical security.¹⁹ While climate-induced internal displacement is certainly more common, cross-border displacement has also been highlighted as a challenge, and will likely be an increasing concern as climate change accelerates. For example, flooding in Nepal's Terai Plains bordering India could lead to upticks in the already regular movement of the population across the border.²⁰ Notably, climate-induced mobility has not been recognized as an issue of major concern in India's domestic or foreign policy domains, despite the millions expected to migrate to India's urban centers within the next four decades from within and beyond India's borders.²¹ Instead, India's policy response on migration has been limited. It has primarily opted to deal with these issues bilaterally with neighboring partners. Beyond state capacity challenges, this is also due to political sensitivities around migration (both internal and cross-border) in India.²² For example, while India's borders with Nepal are relatively porous and open to migratory workers, migration to India from Bangladesh is tightly controlled (including a barbed wire fence spanning almost the entire border), and often unsanctioned.²³

The historical gap between rhetoric and policy implementation is increasingly urgent given the growing pressures from India's neighbors. As a regional leader and strong economic power, climate-driven instability in the South and South East Asian region could impact India's bilateral relationships, supply chains, migration flows, and more.

¹⁶ Gro Intelligence, "India's Troubled Sugar Crop Could Further Boost Global Prices", in *Gro Insights*, 21 August 2023, https://www.gro-intelligence.com/insights/india-s-troubled-sugar-crop-could-further-boost-global-prices.

¹⁷ Gro Intelligence, "India's Erratic Monsoon Could Hurt Soybean Crop and Drive up Edible Oil Imports", in *Gro Insights*, 6 September 2023, https://www.gro-intelligence.com/insights/india-s-erratic-monsooncould-hurt-soybean-crop-and-drive-up-edible-oil-imports.

¹⁸ Ibid.

¹⁹ Murali Krishnan, "Climate Change in India: A Growing Environmental Crisis", cit.

Bhumika Sharma, "Climate Displacement in South Asia and India's Imperative to Act", in *9DashLine*,
June 2023, https://www.9dashline.com/article/climate-displacement-in-south-asia-and-indiasimperative-to-act.

²¹ David Dennis, "Southeast Asia's Coming Climate Crisis", in *CSIS Blog*, 22 May 2020, https://www.csis. org/node/56767.

²² Rameez Abbas, "Internal Migration and Citizenship in India", in *Journal of Ethnic and Migration Studies*, Vol. 42, No. 1 (2016), p. 150-168, DOI 10.1080/1369183x.2015.1100067.

²³ Vartika Sharma et al., *Migration in South Asia: A Review*, New Delhi, Population Council, June 2015, https://www.gov.uk/research-for-development-outputs/migration-in-south-asia-a-review.

Two particularly vulnerable neighbors are Bangladesh and Myanmar. Climate change is anticipated to be a key driver of migration in Bangladesh, with an estimated 13.3 million people expected to move internally because of impacts on agriculture, water scarcity, and rising sea levels before 2050.²⁴ However, similar to many developing countries, Bangladesh's climate change strategy and action plan face significant financial and implementation challenges, increasing the risks of additional unsanctioned migration into India.²⁵ Along these lines, Bangladesh has become one of the most prominent multilateral voices on adaptation finance, but hasn't yet received the billions noted in their 2023-2050 National Adaptation Plan.²⁶

Meanwhile, Myanmar is already grappling with a major humanitarian and human rights crisis triggered by the military coup in February 2021, which has pushed tens of thousands of people across its western border to India. As of February 2024, UNHCR was tracking nearly 80,000 official refugees and asylum seekers from Myanmar in India.²⁷ The complex political situation has left nearly one in three people in need of humanitarian assistance,²⁸ hindered international efforts to tackle climate change, and exacerbated related human development concerns such as food security and access to resources.²⁹ With Myanmar's long western coastline highly vulnerable to storm surges and saltwater intrusion, climate-induced migration could push tens of thousands across the border to Bangladesh and on to India in the coming decades?

Amidst these political dynamics, climate change is serving as a "threat multiplier",³⁰ ratcheting up tensions or driving conflict in the region.³¹ As an interviewee noted, "transboundary cooperation on preservation and conservation is palatable to India. However, when it comes to climate change and nexus related concerns [...] it turns highly contentious."³² Given the dynamics outlined above, India's policy response will have wide ranging domestic and global implications - and should be closely watched by multilateral actors.

The way forward: Existing policy frameworks and recommendations

While policy frameworks exist to support the green transition for India and its neighbors, critical gaps remain. As a regional leader, India's development, migration, and governance challenges have serious implications for the future of climate action – and geopolitics – in South

²⁴ World Bank, *Key Highlights: Country Climate and Development Report for Bangladesh*, 31 October 2022, https://www.worldbank.org/en/news/feature/2022/10/31/key-highlights-country-climate-and-development-report-for-bangladesh.

²⁵ Ibid.

²⁶ Bangladesh Ministry of Environment, Forest and Climate Change, *National Adaptation Plan of Bangladesh (2023-2050)*, October 2022, https://www.undp.org/node/368861.

²⁷ UNHCR Operational Data Portal, Myanmar Situation, accessed on 5 March 2024, https://data.unhcr. org/en/situations/myanmar.

²⁸ United Nations, *People in Need of Humanitarian Assistance at Record Levels, Secretary-General Tells Economic and Social Council, Urging More Aid Funding, Efforts to Resolve Conflict,* 21 June 2023, https://press.un.org/en/2023/sgsm21852.doc.htm.

²⁹ Thin Lei Win and Michael Werz, "And Then Things Got Complicated: Addressing the Security-Climate-Migration Nexus in South Asia", in *Nexus*²⁵ *Papers*, February 2022, https://www.nexus25.org/publication/ and-then-things-got-complicated-addressing-the-security-climate-migration-nexus-in-south-asia.

³⁰ Sherri Goodman and Pauline Baudu, "Climate Change as a 'Threat Multiplier': History, Uses and Future of the Concept", in *Center for Climate and Security Briefers*, No. 38 (3 January 2023), https://wp.me/p1t6fZ-8k2.

³¹ Francesco Femia et al. (eds), *Melting Mountains, Mounting Tensions*, cit.

³² Excerpt from author's phone interview with a climate policy expert, New Delhi, 2023.

and South East Asia.

Domestically, India has taken critical steps to institutionalize climate resilience. This includes an overarching national framework, the National Action Plan for Climate Change (NAPCC), which is explicitly aimed at advancing its development and climate change-related goals.³³ This is supplemented by India's Nationally Determined Contributions (NDC), which provide a framework to reduce CO₂ emissions,³⁴ as well as department-level policy such as the Joint Doctrine of the Indian Armed Forces,³⁵ which regards climate change as a threat to national security. Other related programs have included initiatives to protect glaciers, produce cleaner cooking fuel and reduce single-use plastic, as well as efforts to decouple growth and emissions. India has also invested in development-centered initiatives such as the 2005 Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)³⁶ and the 2005 Jawaharlal Nehru Urban Renewal Mission (JNNURM),³⁷ which both work to manage the impacts of climate change by reducing rural poverty and modernizing infrastructure in major cities. However, these sustainability and development measures are complicated by the critical need to develop and end energy poverty as the population continues to expand. Given that unsustainable sources are the easiest and cheapest to access, the carbon intensity of India's power sector remains well over the global average, and coal remains the largest fuel in their energy mix.³⁸

Similarly, despite disparate efforts to build resilience and manage the domestic impacts of climate change, India has hesitated to prioritize the linkages among climate change, migration, and insecurity in its foreign policy. Its posture on the multilateral stage – despite playing a leading role amongst emerging markets – is consistently complicated by its domestic development and economic interests. In direct contrast to the climate and national security linkages made by the United States and the European Union, India has been particularly hesitant to connect climate and security, voting against a 2021 UN Security Council resolution to integrate climate into conflict prevention strategies co-sponsored by Niger and Ireland.³⁹ On the one hand, India has rightfully been a strong advocate for developed countries bearing the most responsibility for climate finance, in line with the principle of Common but Differentiated Responsibilities. On the other hand, noted above, it has faced criticism for its slow transition away from coal and its pushback against regulations that might hamper its economic prospects, as demonstrated by the government's reluctance to commit to regulating the production and consumption of ozone-depleting chemicals and hydrofluorocarbons as required by the Montreal Protocol.⁴⁰ India has also shied away from key multilateral efforts, including COP28's

³³ Harshal T. Pandve, "India's National Action Plan on Climate Change", in *Indian Journal of Occupational and Environmental Medicine*, Vol. 13, No. 1 (April 2009), p. 17-19, https://doi.org/10.4103/0019-5278.50718.

³⁴ India Government, *India's Updated First Nationally Determined Contribution under Paris Agreement (2021-2030)*, August 2022, https://unfccc.int/sites/default/files/NDC/2022-08/India%20Updated%20 First%20Nationally%20Determined%20Contrib.pdf.

³⁵ India Ministry of Defence, *Joint Doctrine Indian Armed Forces*, April 2017, https://bharatshakti.in/wp-content/uploads/2015/09/Joint_Doctrine_Indian_Armed_Forces.pdf.

³⁶ India Ministry of Rural Development, *The Mahatma Gandhi National Rural Employment Guarantee Act 2005*, https://nrega.nic.in.

³⁷ India Government, *Jawaharlal Nehru National Urban Renewal Mission*, December 2005, https://mohua.gov.in/upload/uploadfiles/files/1Mission%20Overview%20English(1).pdf.

³⁸ IEA, "Energy in India Today", cit.

³⁹ United Nations, *Security Council Fails to Adopt Resolution Integrating Climate-Related Security Risk into Conflict-Prevention Strategies*, 13 December 2021, https://press.un.org/en/2021/sc14732.doc.htm.

⁴⁰ UNEP OzonAction website: *About Montreal Protocol*, https://www.unep.org/ozonaction/who-we-are/ about-montreal-protocol.

Declaration on Climate, Relief, Recovery and Peace, an international commitment to build resilience in vulnerable states and drive financial support to climate-affected regions. The Declaration was supported by 74 countries, including many of India's neighbors such as China, Bangladesh, Nepal, and Myanmar.

India's position on the multilateral stage is increasingly misaligned with the long-term nexus challenges highlighted above, and puts it at odds with climate leaders in the United States and the European Union. Moving forward, the government's domestic efforts must be paired with ambitious action at the multilateral level. India has the opportunity to play a leading role in a tailored and localized approach to the climate change-insecurity-migration nexus, as long as its leaders place a renewed emphasis on collective action. This is in line with both India's long-term economic interests and their shorter-term national interests at the geopolitical level. Recognizing the limits of existing international efforts, India's leaders must therefore simultaneously focus on improving regional and domestic institutions that can support adaptation and build climate resilience. This includes an injection of financing – either from India's private sector or government bodies – to support adaptation and resilience-focused initiatives, as well as a renovated domestic and multilateral architecture.

Key areas of opportunity include:

Leveraging political willpower to strengthen domestic architecture: At the national level, it is vital to ensure that ambitious rhetoric does not come at the cost of attainable green transition goals and action plans. Climate policy in India lacks the capacity and financing at the scale needed to tackle the problem. India's clean energy transition is an area of opportunity, with renewables and low-carbon technology estimated to generate a market worth up to 30 billion US dollars by 2030.⁴¹ Investing in clean energy is a key step in ensuring that short-term economic development does not come at the cost of long-term climate resilience. To achieve these goals, national policy must be implemented with more active support to local governance bodies and frontline communities, particularly given some of the implementation and capacity challenges at that level. The government must also invest in better early warning systems and regular climate risk assessments. This will enable India to better serve as a regional leader, document effective policy interventions and learn lessons from the wider South and Southeast Asia region.⁴²

Developing regional and transnational policy making platforms to effectively address the climate-migration-insecurity nexus: Recognizing the gridlock in major multilateral bodies like the UN, the importance of regional and transnational cooperation on climate challenges cannot be overstated. Concerningly, South Asia still lacks a coherent mechanism or platform to tackle nexus challenges. South Asian neighbors and regional bodies like the Association of Southeast Asian Nations (ASEAN) and the South Asian Association for Regional Cooperation (SAARC) have been largely unable to find regional solutions given longstanding territorial disputes and competing spheres of influence between China and India.⁴³ However, bilateral and smaller multilateral organizations whose mandates already touch upon nexus issues with implications for climate, migration, governance, and sustainable security as areas of cooperation could be expanded to cover newer threats as well as issue areas that have been at the heart of historical

⁴¹ Fatih Birol and Amitabh Kant, "India's Clean Energy Transition Is Rapidly Underway, Benefiting the Entire World", in *IEA Commentaries*, 10 January 2022, https://www.iea.org/commentaries/india-s-clean-energy-transition-is-rapidly-underway-benefiting-the-entire-world.

⁴² Interview, Dr. Dhanasree Jayaram, 2022.

⁴³ Ibid.

disputes such as inter-state water sharing in the sub-continent region. One way to overcome the stalemate would be a revision of bilateral agreements or smaller multilateral projects, such as the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). India has already bolstered BIMSTEC, pushing it to transform from a relatively inactive group to a body with organized activities.⁴⁴ And, BIMSTEC already includes climate change through the lens of peace and stability in its charter, making it a clear area of opportunity – if partners can overcome regional divides and financial constraints within the organization.⁴⁵

Building institutional capacity with adequate coordination mechanisms: As noted above, the institutional architecture in many Southeast Asian countries has repeatedly failed to capture and respond to nexus challenges, but coordination can help to close these gaps. First and foremost, institutions need to recognize and center nexus challenges in their policymaking and build climate capacity within their areas of work. At the same time, work towards breaking down silos should be accelerated to ensure that policy responses adequately address the cross-cutting impacts of climate change. India has recently strengthened its multilateral efforts, including by launching coalitions such as the International Solar Alliance Assembly (ISA) and the Coalition for Disaster Resilient Infrastructure (CDRI).⁴⁶ India should expand its leadership and work to mainstream climate considerations in these regional institutions, setting the example for nexus approaches and policymaking.

Ensuring adequate climate finance: Finally, in the context of COP28 and the Global Stocktake, the need for robust climate financing for both mitigation and adaptation has never been clearer. The commitments by developed countries to raise to 100 billion US dollars per year by 2020 have clearly fallen short. Climate finance efforts are also largely failing to support those most directly impacted by climate change – including partners in Southeast Asia.⁴⁷ As one of the largest regional (and global) economies, India has maintained a steadfast position regarding climate financing, with equity and adaptation serving as its guiding principles, but it must deploy finance to support adaptation and mitigation regardless of disputes on the multilateral stage. As suggested by experts at the World Group, blended finance that includes support from the private sector can help fill these gaps.⁴⁸ It is therefore critical for India's leaders to target the private sector, incentivizing commercial banks and Development Financial Institutions (DFIs) to support the infusion of external resources to bridge this gap.

Conclusion

Given India's growing economy, population, and geopolitical strength, its domestic and foreign climate policy has implications beyond its immediate borders. Absent aggressive investments in development, adaptation, and mitigation, extreme weather events and other

⁴⁴ Sarang Shidore, "Climate Security and Instability in the Bay of Bengal Region", in *Discussion Paper Series on Managing Global Disorder*, No. 13 (April 2023), https://www.cfr.org/node/246183.

⁴⁵ Ibid.

⁴⁶ India Ministry of New and Renewable Energy, *India Hosts the 6th Session of the International Solar Alliance Assembly in New Delhi*, 31 October 2023, https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1973449.

⁴⁷ Barbara Buchner et al., *Global Landscape of Climate Finance 2023*, Climate Policy Initiative, November 2023, https://www.climatepolicyinitiative.org/?p=59601.

⁴⁸ Roshika Singh, *Blended Finance for Climate Investments in India*, Washington, International Finance Corporation, October 2023, https://www.ifc.org/en/insights-reports/2023/blended-finance-for-climate-investments-in-india.

climate impacts will affect the region's food supplies, energy production, security and stability. It is therefore critical that India's leaders take a leadership role and overcome the coordination and capacity challenges hindering the green transition, both within the country and the broader South and Southeast Asian region. Leveraging political willpower to strengthen domestic architecture; developing regional and transnational policy making platforms to effectively address the climate-migration-insecurity nexus; building institutional capacity with adequate coordination mechanisms; and ensuring adequate climate finance will therefore be critical in the fight to address nexus challenges in the years to come.







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Nexus²⁵ will host events on the sidelines of the IMF and World Bank Spring Meetings in Washington, DC and a Conference in Rome in 2024. For additional information please visit <u>https://www.nexus25.org</u> or contact the Nexus²⁵ team at <u>info@nexus25.org</u>.

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Front cover: India gate covered in heavy smog, Delhi, 21 November 2017.

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info@nexus25.org - www.nexus25.org