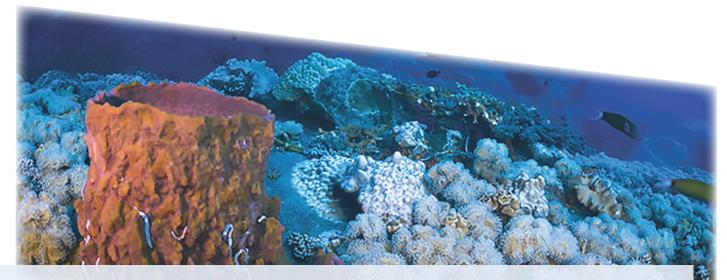
CLIMATE SECURITY IN THE INDO-PACIFIC:

Priorities and Challenges

Dhanasree Jayaram and Aanehi Mundra



The climate vulnerabilities of the Indo-Pacific region have grown immensely with grave implications for regional, national, human, and ecological security. Climate action has been prioritized by most of the countries, including by integrating it into their national security strategies and reiterating the need for cooperation among the countries. Yet there are several impediments to effective collaborative climate action such as the lack of climate finance and geopolitical tensions. Against this backdrop, this issue brief locates climate security within the Indo-Pacific strategies of countries in the region (Australia, New Zealand, the U.S., India, Japan, and South Korea) as well as regional organizations (ASEAN and the Pacific Islands Forum or PIF) besides the European Union (EU), an extra-regional player, and the Quad. The climate security agenda in the Indo-Pacific requires to be strengthened through closer coordination among and between countries and regional/sub-regional actors to mitigate divergences, reinforce convergences, and achieve both climate and development objectives.

Introduction

The Indo-Pacific region, home to 60 percent of the world's population, advanced and emerging economies and markets, strategic trade/shipping routes, and crucial manufacturing supply chains, is also highly vulnerable to climate change. As the geopolitical, geo-economic, and geostrategic stakes are high in the region, the great, middle, and regional powers have formulated or at least begun to design their respective Indo-Pacific strategies, focusing on both national and regional interests. Regional organizations such as the Association of Southeast

Asian Nations (ASEAN), East Asia Summit (EAS), and the Pacific Islands Forum (PIF) have also begun to recalibrate their positions and policies based on the evolving geopolitical scenarios in the Indo-Pacific region. Amidst this geopolitical and geoeconomic flux, climate change has emerged as an integral part of these security strategies and policies.

The Indo-Pacific region is essentially carved by two oceans, wherein the littoral states are vulnerable to various climate impacts, ranging from sea level rise, ocean acidification, and typhoons/cyclones to floods,

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droughts, and heatwaves. As climate change affects water, food, energy, and livelihood security, the countries of the region are working towards building capacities to both mitigate and adapt to climate change. For instance, a vast majority of the population residing in the region is dependent on the oceans for resources; and climate change-influenced sea level rise, ocean acidification, and changing migratory routes of economically vital fish affect livelihoods and food security in the region.² Similarly, the Pacific island states are some of the most climate-vulnerable countries of the world that face the existential threats of losing land, displacement of people, and economic consequences of climate impacts on their vast, resource-rich exclusive economic zones (EEZs). At the 2021 Glasgow climate summit, Tuvalu's

Climate security, covering a broad spectrum of dimensions, including ecological security, human security, and national security, has found its way into the Indo-Pacific strategies of the major powers in the region. Within these strategies, the security implications of climate change in terms of biodiversity degradation and loss, threats to development, migration and displacement, food-waterenergy security nexus, and disasters are highlighted.

minister delivered his speech knee deep in seawater to bring the world's attention to worsening climate vulnerabilities in the Pacific.³ The vulnerabilities are high, but capabilities of the majority of countries in the Indo-Pacific region are low.

In this context, climate security, covering a broad spectrum of dimensions, including ecological security, human security, and national security, has found its way into the Indo-Pacific strategies of the major powers in the region. Within these strategies, the security implications of climate change in terms of biodiversity (on which human survival is dependent) degradation and loss, threats to development, migration and displacement, food-water-energy security nexus, disasters, and others are highlighted. The strategies also focus upon solutions to deal with these vulnerabilities by strengthening resilience and disaster risk reduction measures, protecting biodiversity hotspots, reducing greenhouse gas (GHG) emissions, and much more. Furthermore, beyond a narrow focus on traditional security concerns associated with climate change, especially for military and border security, they call for greater regional, transboundary cooperation. The scope of regional security has broadened to include non-traditional security concerns. This issue brief provides an overview and analysis of different climate security approaches espoused by different countries in the region by specifically focusing on their formal and informal Indo-Pacific strategies.

Climate Change in Indo-Pacific Strategies

The Indo-Pacific region consists of around 20-40 countries (depending on the region's delineation). While not all countries are equally invested in the geopolitics and geo-economics of the region, no country is impervious to the evolving geopolitical and geo-economic developments in the region. Based on individual interests, threat perceptions, and capabilities/capacities, most countries in the region have proposed or launched their respective Indo-Pacific strategies. In this section, the Indo-Pacific

strategies of some of the region's major players are discussed in correlation with their focus on climate security.

To start with, in Australia's case, discussions on direct and indirect impacts of climate change, such as coral degradation, intense heatwaves and wildfires, and floods have been gradually integrated into national security discourses.4 Besides national territory, Australia's Indo-Pacific approach involves supporting the Climate Change Action Strategy and Australia Pacific Climate Partnership (APCP) whose scope extends to assist partner countries in the region to adapt to climate change, lower emissions, and develop innovative solutions. Australia has pledged climate finance of A\$700 million over 2020-25, to the Pacific region. It has introduced several climate change-related initiatives in the region such as the Australian Infrastructure Financing Facility for the Pacific (AIFFP), Climate and Oceans Support Program in the Pacific (COSPPac), Australian Climate Finance Partnership (ACFP), Australia's Science and Technology for Climate Partnerships (SciTech4Climate), and Climate Resilient by Nature.⁵ Australia's 2020 Defence Strategic Update states that climate change could aggravate frictions within and between countries due to impacts on food and water security, among other issues.6

New Zealand identifies climate change and related impacts on food, energy, and water security as well as migratory patterns in particular as security threats for the country in the future. Collaborative and cooperative efforts to advance climate adaptation and mitigation can help avoid an armed conflictlike scenario, according to the draft "National Security Long-term Insights Briefing". Yet again, the climate impacts in the broader Pacific region are of particular concern to New Zealand.7 The country's Indo-Pacific strategy is guided more by economic factors, such as through the proposed Indo-Pacific Economic Framework for Prosperity (IPEF)—involving New Zealand, Australia, the U.S., Japan, Singapore, Republic of Korea, India, Thailand, Vietnam, Indonesia, Malaysia, Brunei, the The Indo-Pacific strategy
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Philippines, and Fiji. The IPEF, among other issues, will work towards decarbonization and resilience-building efforts. Climate security is also a part of the country's strategic calculus as it engages with France and Australia through the FRANZ agreement to respond to climate-related risks and disasters in the region. 9

The Indo-Pacific strategy of the U.S., while perceived as an attempt to counter China, highlights the need for cooperating with it on issues such as climate change. While emphasizing the role of the Quadrilateral Security Dialogue (Quad) in climate security cooperation, it also refers to cooperation with regional organizations such as the ASEAN as critical to peace and stability in the Indo-Pacific region. Other climate change-related issues mentioned in the strategy include critical-infrastructure resilience and energy security (referring to energy transition too). In financial year (FY) 2022, the U.S. budgeted for US\$165 million in the Indo-Pacific region with the aim to boost climate resilience, adaptation, and mitigation. With energy transition

emerging as a core area of cooperation with its Indo-Pacific partners, it has launched (along with G-7 countries and supported by international financial institutions) Just Energy Transition Partnerships (JETPs) with Indonesia and Vietnam, with an aim to expand to other countries in the region. As far as the U.S. National Security Strategy is concerned, climate change is highlighted as a critical and urgent concern, with references to several issues, ranging from climate disasters to impacts on public health.

Japan's Free and Open Indo Pacific (FOIP) strategy has a special focus on climate security too. Japan has recognized climate change as an existential threat that could have several national security consequences— "including through more frequent and severer natural disasters, increased responses to disasters, more serious energy and food problems, a decrease in national land area, and increased use of the Arctic sea routes."13 Besides referring to mitigation measures to reduce the impacts of climate change, it also highlights Japan's resolve to support island nations and developing countries in building climate resilient economies and societies. For instance, it has been assisting ASEAN countries, Bangladesh, the Maldives, Pakistan, Sri Lanka, Timor-Leste, the Pacific Islands Countries, Mauritius, and Djibouti among others in promoting disaster risk reduction.

The European Union (EU) is an extra-regional player, yet it has also shown keenness to engage strategically with the Indo-Pacific region through tangible strategies. The EU's Indo-Pacific strategy includes creation of "green alliances", green transition, disaster risk reduction, and ocean governance as priorities.

Similarly, environmental considerations and disaster resilience are key components of its infrastructure investment strategy in the region.¹⁴

South Korea recognizes climate change as a transnational security challenge that requires multilateral and minilateral cooperation in the region, including with the Quad and NATO. The country's Indo-Pacific strategy underscores the need for promoting regional cooperation on climate mitigation by focusing on "regional carbon markets, zero emission vehicles (electric and hydrogen vehicles, etc.), green shipping, and methane emissions reduction.¹⁵ It also proposes to practice "contributive diplomacy" by designing development assistance partnerships with the developing, climatevulnerable countries of the region. For instance, South Korea has committed to provide "green" overseas development assistance to Southeast Asian, South Asian, and the Pacific countries for "climate change response and low-carbon energy transition."16

The European Union (EU) is an extra-regional player, yet it has also shown keenness to engage strategically with the Indo-Pacific region through tangible strategies. The EU's Indo-Pacific strategy includes creation of "green alliances", green transition, disaster risk reduction, and ocean governance as priorities. 17 Around 35 percent of the EU's Horizon Europe Programme for research and innovation is focused on climate action; and a part of these resources is channeled into the Indo-Pacific region.¹⁸ Besides, the EU is also focusing on greening supply and value chains through policies such as the Carbon Border Adjustment Mechanism, with implications for countries of the Indo-Pacific region, especially the manufacturing hubs of East Asia. 19 In the oceans governance sector, the EU is interested in developing sustainable fisheries partnership agreements with the Indo-Pacific countries.

India's Indo-Pacific strategy took a leap with the India-led Indo-Pacific Ocean's Initiative (IPOI) in 2021. The initiative focuses on the regional security architecture, with "marine ecology" as one

of the seven pillars as its main focus area.²⁰ While India does overtly recognize climate change as a security concern, it is broadly integrated into its other security agendas such as maritime security.²¹ India is also a part of Quad, which has consistently showed interest in tackling the climate challenge and building partnerships around the issue among the four countries (India, Australia, Japan, and the U.S.), as well as with countries of the region.²² In 2022, the Quad launched the Climate Change Adaptation and Mitigation Package (Q-CHAMP) aimed at promoting green shipping and ports, clean energy cooperation, climate information services, and disaster risk reduction. Among other issues, Quad leaders have also emphasized cooperation on "clean fuel ammonia, CCUS/Carbon Recycling, cooperation and capacity building support to advance high integrity carbon markets under Article 6 of the Paris Agreement, climate-smart agriculture, knowledge sharing on subnational climate actions, and ecosystem-based adaptation" as critical to the group's Indo-Pacific strategy.²³

Regional organizations have also been focusing on climate change as an integral part of their Indo-Pacific approaches. The ASEAN, while emphasizing "ASEAN Centrality as the underlying principle for promoting cooperation in the Indo-Pacific region," has recognized "climate change and disaster risk reduction and management" as an area of cooperation in the ASEAN Outlook on the Indo-Pacific document.²⁴ It has been cooperating with all the major powers (including the above-mentioned ones) in climate mitigation and adaptation-related measures as well as advancing institutionalization of climate action through regional mechanisms/ declarations such as the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) and its Work Programme 2021-2025, "One ASEAN One Response: ASEAN Responding to Disasters as One in the Region and Outside the Region," and ASEAN Socio-Cultural Community (ASCC) Blueprint 2025. The ASEAN has been dealing with the climate change issue through a sectoral approach based on

Climate finance is therefore one of the foremost concerns for the developing and least developed countries of the Indo-Pacific region. Most countries of the region lack capacities and resources to cope with climate change. While mitigation still gets financial assistance, the huge demand for adaptation finance is hardly being met by either public or private sources.

the member-countries' development requirements/ aspirations and nationally determined contributions (NDCs) announced under the Paris Agreement. For instance, the ASEAN Plan of Action for "includes Energy Cooperation (APAEC) renewable energy target of 23 percent in total primary energy supply by 2025." For land userelated sectors, the Vision and Strategic Plan for ASEAN Cooperation in Food, Agriculture and Forestry (SP-FAF) 2016-2025 "includes action programmes to facilitate climate smart/friendly agriculture, land use and fisheries based on naturebased solutions (NbS)."25 Many of these regional policies and strategies are dependent on external support, due to which partnerships have been signed with Japan, South Korea, the EU, and others.

The Pacific Islands Forum (PIF), represented by some of the most climate-vulnerable countries in the world, adopted the Boe Declaration on Regional Security in 2018, which refers to climate change as the "single greatest threat to the livelihoods, security and wellbeing of the peoples of the Pacific." By adhering to a broadened conceptualization of security, this declaration focuses on four major

dimensions—"human security, humanitarian assistance, prioritizing environmental security, and regional cooperation in building resilience to disasters and climate change."27 In 2019, the PIF leaders issued the Kainaki II Declaration for Urgent Climate Change Action Now-calling upon the "international community" to "pursue global efforts to limit global warming to 1.5°C above pre-industrial levels," mobilize climate finance, support "Pacificled science-based initiatives intended to improve our understanding of risk and vulnerability," and "appoint a Special Adviser on climate change and security and...a special rapporteur to produce a regular review of global, regional and national security threats caused by climate change."28 It is the strongest collective statement the PIF has ever issued on climate change, which was also supported by New Zealand and Australia.

Challenges to Climate Cooperation in the Indo-Pacific

There are divergences between the industrialized and developing/least developed countries of the region over issues such as climate finance, loss and damage, and emissions reduction targets, as reflected

The geopolitical competition in the Indo-Pacific region could hamper much-needed climate security cooperation between the countries. However, today the Indo-Pacific security architecture seems to be evolving in such a manner that the U.S. and China in particular are pitted against each other, even when it comes to climate change-related issues.

in the climate change negotiations. Although human security concerns are being prioritized, there are brewing disputes over linkages between climate action and trade policies that are deemed as protectionist, such as the EU's CBAM.²⁹ Countries where development imperatives are critical, climate considerations at times take the backseat. At the same time, even the most industrialized economies of the region such as the U.S., Australia, and Japan have historically been laggards in climate action.³⁰

Similarly, although military capabilities increasingly being leveraged for Humanitarian Assistance and Disaster Relief (HADR) operations in the region, military security concerns over competing geopolitical interests supersede climate security concerns. For instance, amid growing geopolitical tensions between the U.S., China, Australia, and other powers in the Pacific leading to further military buildup, the island nations of the region are in fact demanding greater support to tackle climate change. Nevertheless, the island countries see the growing interest in the region to get the attention of the leading GHG emitters and seek more financial and capacity-building support.31

Climate finance is therefore one of the foremost concerns for the developing and least developed countries of the Indo-Pacific region. Most countries of the region lack capacities and resources to cope with climate change. While mitigation still gets financial assistance, the huge demand for adaptation finance is hardly being met by either public or private sources.³² Yet, the calls for decarbonization have intensified in recent years, with greater pressure on the emerging economies of the region such as India and Indonesia to raise their climate ambition—which also requires vast amount of resources.

The geopolitical competition in the Indo-Pacific region could hamper much-needed climate security cooperation between the countries. Climate change, being a global challenge, requires multilateral cooperation. However, today the Indo-Pacific security architecture seems to be evolving in such

a manner that the U.S. and China in particular are pitted against each other, even when it comes to climate change-related issues. For example, the Quad countries and many others are making efforts to diversify their supply and value chains, including in the area of energy transition-related industries. While they have reiterated the need to decouple from China's critical mineral supply (for energy transition), this will not be easy, especially due to the current dominance of China in the downstream, midstream, and upstream activities of this supply chain.33 China's unilateral actions in the past, such as to impose a ban on rare earths exports to Japan over the East China Sea dispute;³⁴ and the current aggressive posture on Taiwan (including its decision to suspend climate cooperation with the U.S. over the former speaker of the U.S. House of Representatives Nancy Pelosi's visit to Taiwan), South China Sea, and India-China border issues (among others) have spilled over into other domains such as climate change that have earlier seen cooperation.

Conclusion

Despite the recognition of climate change as a fundamental part of all the countries and regional organizations' Indo-Pacific strategies and approaches, much needs to be achieved to advance climate security cooperation. Even the traditional and human security implications of climate change are not well-defined and accounted for within the many security strategies and architectures released by the major powers of the region. There is a need to conduct a comprehensive assessment of climate security challenges and responses in the region, not just within the countries, but also through the existing regional organizations, and perhaps even new regional mechanisms that could circumvent various geopolitical pressures mentioned above.³⁵ Besides, the industrialized countries of the Indo-Pacific region and extra-regional players such as the EU need to step up to bridge the massive gap in the demand and supply of finances for climate action efforts, particularly adaptation needs of the developing and

least developed countries of the region in order to prevent climate security challenges from worsening in the future. With climate security being prioritized by the region's countries through their national security strategies and other frameworks, the next logical steps would be to design a participatory and inclusive implementation agenda, invest in both top-down and bottom-up climate security efforts, and sustain them, keeping in view both human and ecological security.

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