

Special Report #222

July 2025

IPCS-BIMSTEC-HD Report

HARMONISING HA/DR IN THE BAY OF BENGAL

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Cover page: "People Walking on Water Near Green Trees," Kafeel Ahmed via Pexels,
<https://www.pexels.com/photo/people-walking-on-water-near-green-trees-13455964/>

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Introduction

Climate change poses increasing threats to the Bay of Bengal region—this requires urgent and concerted action. Home to nearly a quarter of the world's population, the Bay of Bengal faces rising sea levels, extreme weather events, and shifting climatic patterns that endanger livelihoods, ecosystems, and sustainable development. The growing frequency of natural disasters underscores the need for effective, coordinated, and timely disaster relief and humanitarian assistance (HA/DR), alongside the creation of resilient infrastructure. In this context, the Track 1.5 IPCS-BIMSTEC-HD Policy Implementation Workshop on Climate Change and HA/DR, held on 24-25 October 2024 in Bangkok, Thailand, marks a significant milestone in our collective efforts to confront these challenges.

Through a pioneering partnership between the Institute of Peace and Conflict Studies (IPCS), Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), and the Centre for Humanitarian Dialogue (HD), this workshop brought together key government and non-government stakeholders from across the region for three days of dialogue. The workshop benefited from our unique collaboration: between one of India's leading and oldest independent think-tanks; a nongovernmental organisation focused on mediation through discreet diplomacy; and the Bay of Bengal's premier intergovernmental organisation.

Our discussions have paved the way for a more unified approach to address the security implications of climate change in the region. By sharing best practices on HA/DR, we have been able to identify key opportunities to improve their implementation. The workshop report you are about to read encapsulates the outcomes of these deliberations. It offers four actionable recommendations on how to build resilient systems that can more effectively tackle the impacts of climate change and deliver expedient humanitarian support to those in need. As we move forward, we must ensure that HA/DR in and for the Bay of Bengal is comprehensive and grounded in practical realities.



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Workshop rationale

Research by IPCS and HD on maritime security and climate change in the Bay of Bengal points to strong institutional interest as well as existing initiatives to improve cooperation in humanitarian assistance and disaster relief (HA/DR).¹ BIMSTEC's institutional focus on regional cooperation in disaster response and climate resilience reiterate these findings. Practical impediments such as political, technical, and economic factors have, however, consistently derailed efforts aimed at regional cooperation.

IPCS' pioneering partnership with BIMSTEC and HD was designed to speak to each organisation's institutional strengths, while recognising that a workshop such as this would need to focus on policy-making's last mile challenge, i.e. implementation. As a result, our goals through this workshop were to:

- Facilitate a stock-taking of existing HA/DR guidelines in the region
- Assess and identify bottlenecks to their implementation
- Synthesise best practices for improved transnational cooperation.

Format and participation

To facilitate the workshop's objectives, we invited a select group of experts and practitioners from across the Bay of Bengal region, representing various agencies,

organisations, and countries.² Participants engaged in cross-cutting discussion on geopolitical challenges, institutional hurdles, regional capacities, and resource limitations. They did so by reviewing existing HA/DR guidelines and practices in Southern Asia; participating in a tabletop exercise designed by IPCS exclusively for this workshop; brainstorming pathways for better HA/DR policy implementation; and finally, vetting the practicality of these suggested pathways.

“Whether common guidelines are available or not, it all depends on how we define our region and how much we value it.”

Key takeaway: Harmonisation in HA/DR

While several key discussion points emerged through the course of the workshop, all of them indicated one fundamental regional expectation for more effective cooperation on HA/DR: harmonisation. This section explains what ‘harmonisation’ is and why it is a paramount policy necessity. The next section, ‘Four recommendations’, illustrates how harmonisation can be achieved in practice within the Bay of Bengal.

¹ Nair, Siddharth Anil; Et.al. 2023. [IPCS Regional Workshop on Climate Security in the Bay of Bengal](#), *Institute of Peace and Conflict Studies*, 31 May.

² Participants included representatives from national as well as multilateral organisations such as the Indian Ocean Regional Association (IORA) and the Asian Disaster Preparedness Centre (ADPC).

Why 'harmonisation'?

Conceptually, 'harmonisation' finds limited mention in scholarly literature on international security as a reflection of competing national interests.³ The IPCS-BIMSTEC-HD Workshop was designed to address this gap with specific reference to HA/DR. In this context, 'harmonisation' refers to an intentional effort to ensure complementarity between existing guidelines and best practices on HA/DR. Such harmonisation requires sustained regional cooperation. It offers several key benefits, not least of which is enabling interoperability between states and institutions while maintaining flexible national policies, as well as helping address disparities in response capacity in the event of a crisis. The objective is to build a stronger institutional and material foundation for the Bay of Bengal community and develop an effective public good that is accessible to all regional stakeholders. This will ultimately lead to a more resilient security community in the face of a changing climate.

“The key challenge is in practical implementation: harmonising different guidelines, avoiding duplication, and ensuring coherent stakeholder engagement.”

³ Nakagawa, Junji. 2011. [International Harmonization of Economic Regulation](#), Oxford University Press, 20 October.

The logic for harmonising HA/DR in the Bay of Bengal

The Bay of Bengal, home to a large and dense human population along a vast and low-lying coastline, is very susceptible to natural disasters.⁴ Human-driven climate change has increased disasters such as tropical cyclones, riverine floods and forest fires which escalates the region's vulnerability.⁵ The frequency and intensity of these events, as well as their transboundary nature, have magnified the costs and challenges exacted on the region. The impact of these disasters on food, water, health, and financial security amount in the billions of dollars and affect millions through migration and conflict.⁶ These above factors make the Bay of Bengal region uniquely vulnerable to the sometimes unpredictable and often unforeseen challenges posed by natural disasters. Importantly, they make a compelling case for enhancing regional, multilateral cooperation on HA/DR. Given that several initiatives, whether at national or regional levels, already exist,⁷ the fundamental next step is to harmonise these efforts and create greater coherence and interoperability between them, instead of recommending new policy measures.

The HA/DR domain is defined by three functions or stages: pre-planning, immediate relief, and extended recovery. Relief and recovery efforts

⁴ Ritchie, Hannah; Mathieu Edouard. 2019. [Which countries are most densely populated?](#), *Our World in Data*, 6 September.

⁵ Aldunce, Paulina, Et.al. 2023. [AR6 Synthesis Report: Climate Change \(2023\)](#), Intergovernmental Panel on Climate Change, 19 March.

⁶ Cohen Jarret. 2024. [Exploring Past and Future Tropical Cyclones in the Bay of Bengal with NASA High-End Computing](#), NASA Center for Climate Simulation, 21 February.

⁷ Mapari, R. 2025. [HA/DR Guidelines for the Bay of Bengal: A Primer](#), Institute of Peace and Conflict Studies. 28 April.

depend on the strength of the planning stage. Until recently, disaster management in the Bay of Bengal was primarily concerned with relief and recovery. Now, greater emphasis is being placed on mitigation, adaptation, and preparedness measures. As a result, there is significant scope for countries and organisations situated in the Bay of Bengal and the broader Indian Ocean region to apply some of these practices towards harmonising national and regional HA/DR guidelines for improved responsiveness.

In what institution can harmonisation efforts be centralised?

BIMSTEC, which has member countries in both the core and peripheral Bay of Bengal, is best positioned to coordinate disaster risk reduction and management efforts. BIMSTEC—whose Charter calls for the promotion of mutual assistance, active collaboration, and productive regional cooperation—and its many working groups make it the ideal multilateral body to improve HA/DR coordination within the Bay of Bengal community.⁸ BIMSTEC already has institutional mechanisms in place to spearhead harmonisation efforts, such as the Expert Groups on Disaster Management and Maritime Security Cooperation.⁹

“Regional frameworks, on their own, provide enabling conditions. For real change we need actions that are aligned with one another.”

Four recommendations

This section outlines four recommendations distilled from the workshop deliberations. These recommendations are specifically focused on how to operationalise harmonisation in HA/DR in its pre-planning stage, in the Bay of Bengal: 1) knowledge production, (2) mapping/modelling, (3) crisis communications, and (4) material procurement. All four can be achieved through the BIMSTEC Disaster Management Centre (BDMC), identified also as the BIMSTEC Centre of Excellence for Disaster Management at the Sixth BIMSTEC Summit held on 4 April 2025 in Bangkok, Thailand.¹⁰

⁸ Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation. 2022. [BIMSTEC Charter](#), March.

⁹ Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation. n.d. [Expert Group on Disaster Management](#); Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation. 2024. [3rd Meeting of the BIMSTEC Expert Group on Maritime Security Cooperation](#), 11 September.

¹⁰ Bay of Bengal Initiative for Multi-Sectoral, Technical and Economic Cooperation. 2025. [Sixth BIMSTEC Summit Declaration](#), April.

1. Establish a research database through collaboration with specialist/technical organisations

Domain knowledge creation through a consolidated cross-sector database of past climate-induced disasters and their impacts.

The long-term impacts of climate-induced disasters transcend multiple sectors such as agriculture, infrastructure, trade, and so on.¹¹ As the scale and complexity of disasters evolve, response strategies must also evolve simultaneously. Such strategies will need to be buttressed through policy and technical knowledge creation across a wide variety of sectors, such as food, connectivity, poverty, etc. For this, BDMC can focus on collaborating with specialised research institutions and civil society organisations (CSO) to develop a research database on disasters. It can provide the BDMC as well as its stakeholders with evidence for informed decision-making on how to meet future HA/DR challenges. This will also feed into an effective allocation of resources. Outreach to these organisations should clearly outline the responsibilities and expectations of the collaboration so that there is no duplication of efforts within BIMSTEC. BIMSTEC could use the EU's Thematic Programme for CSOs on Sustainable Development Goals as a reference.¹²

2. Establish a Unified Regional Climate Disaster Mapping and Response Centre for the Bay of Bengal within the BDMC

Proactive and coordinated disaster and climate risk management based on evidence-based scenario-building.

Climate disasters are inherently transboundary, requiring collaboration to mitigate their impact.¹³ A Unified Climate Disaster Mapping and Response Unit (UCDMRU) within the BDMC will help strengthen regional resilience. UCDMRC would use the data made available through recommendation #1 to model potential future pathways of climate-induced disasters. This can be of great value to policy-makers to better plan for emergencies. Further, the scenarios or pathways modelled by the UCDMRC will contribute to more effective coordination for disaster management as well as climate risk management. It would do so by providing a resource for data-driven assessments, using knowledge of past climate-induced disasters offered by recommendation #1. UCDMRC would involve collaboration among technical experts from member states' meteorological departments. It would also need a compact to share geospatial capabilities to gather real-time data and integrate national weather analysis teams. As a reference, BIMSTEC could leverage the disaster relief mapping initiative developed

¹¹ United Nations. n.d. [Causes and Effects of Climate Change, Climate Action](#)

¹² European Commission. 2021. [Thematic Programme for Civil Society Organisations Multiannual Indicative Programme 2021-2027](#), European Union, 14 December

¹³ Choudhury, Angshuman; Et.al. 2022. [Climate Security in the Bay of Bengal](#), Institute of Peace and Conflict Studies, 18 January.

by Australia and Singapore, endorsed by the ASEAN Regional Forum.¹⁴

“We must capture the power of partnerships, work together, and believe in an approach of co-creating and co-designing policy.”

3. Enhance Bay of Bengal crisis communications through a platform housed in the BDMC

Ensuring effective communication during crises to buttress disaster response efficiency.

Effective communications during crises are critical to disaster management operations and to maintain the reputation of responding organisations.¹⁵ Communications failure during a disaster can result in inefficient resource distribution, heightened distress for affected populations, increased recovery costs, and diminished institutional credibility. While there are a number of mechanisms to facilitate such communications in the Bay of Bengal region, including national disaster management authorities/information fusion centres, coordination between them is not optimal. This hampers timely and joint disaster responses. A

platform housed within the BDMC will help address this gap. This platform would centralise infrastructure for efficient regional communication, ensuring transfer of emergency information and enabling real-time crisis coordination. Such a platform would require coordinating with national disaster management agencies and key ministries (such as external/foreign affairs and defence). It could draw inspiration from the Web Emergency Operations Centre (WebEOC) of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA).¹⁶

4. Institute a cost-sharing and pre-positioning programme for HA/DR equipment and supplies coordinated by the BDMC

Quicker responses to natural disasters while mitigating the financial challenges faced by individual countries in doing so.

Costs to prepare for natural disasters have increased in the past decade.¹⁷ As the frequency of such disasters continues to rise, purchase of critical equipment for safety, aid, and sanitation, will constitute a significant portion of national disaster response reserves. These funds are constrained by national budgets, preparedness contingencies, and international shocks. To overcome these limits, a cost-sharing and pre-positioning programme for the acquisition and deployment of these

¹⁴ ASEAN Regional Forum. 2018. [ASEAN Regional Forum Strategic Guidance for Humanitarian Aid and Disaster Relief](#), March.

¹⁵ Coombs, W.T and S.J. Holladay. 2010. [The Handbook of Crisis Communication](#), Blackwell Publishing, 19 January, p. 34.

¹⁶ AHA Centre. [What We Do](#), ASEAN.

¹⁷ McDougal, T.L. and J.H. Patterson. 2021. [The global financial burden of humanitarian disasters: Leveraging GDP variation in the age of climate change](#), *International Journal of Disaster Risk Reduction*, 55, March.

materials would be useful. BDMC should serve as the coordinating body for this programme, ensuring that critical resources, including advanced reconnaissance and communication systems, are strategically pre-positioned and ready for deployment in the event of a disaster. Effective execution will require close coordination between national disaster management agencies and stockpiling entities within each BIMSTEC member state. BIMSTEC can use multi-country disaster preparedness models currently in operation in Southeast Asia (such as the SASOP) and the Caribbean as reference.¹⁸

¹⁸ Wijayanti, A. [Disaster Emergency Logistics System for ASEAN \(DELSA\)](#), Book #3, *The AHA Centre Knowledge Series*, ASEAN; Rodriguez-Pereira, J; Et.al. 2021. [A Cost-Sharing Mechanism for Multi-Country Partnerships in Disaster Preparedness](#), *Production and Operations Management*, 30(12), 1 December.

Partners



The Institute of Peace and Conflict Studies (IPCS)

is an independent think-tank in India. It was founded in 1996 with the aim of developing an alternative framework for peace and security in South Asia and the extended neighbourhood. IPCS works to bring policy-relevant research into scholarly and public debate through events, capacity building of the next generation of thought leaders, and media and online outreach. Its research and policy recommendations do not subscribe to any particular political view or interest. This Special Report is part of the 2021-2026 IPCS-Clingendael Institute collaboration on climate security in Southern Asia.

The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)

is a regional organization that was established on 6 June 1997 with the signing of the Bangkok Declaration. Initially known as BIST-EC (Bangladesh-India-Sri Lanka-Thailand Economic Cooperation), BIMSTEC today comprises seven Member States. A sector-driven grouping, thematic cooperation within BIMSTEC had initially focused on six sectors in 1997, which were then expanded to thirteen in 2008. Subsequently, following steps to rationalise sectors and sub-sectors, cooperation was reorganised in 2021.



Mediation for peace

Since 1999, the **Centre for Humanitarian Dialogue (HD)** has been achieving peace around the world. HD aims to deepen its global reach and strengthen its identity as a trusted, impartial and independent mediation actor. It works across international, inter-state and local levels, helping conflict parties to build a common vision of a better future. HD aims for comprehensive and inclusive peace agreements that reduce the human suffering caused by war and create the conditions for stability and development. Using its reach and networks, HD also supports humanitarian efforts in high-risk areas.

