

## Global Climate Adaptation: Overcoming Political and Policy Challenges

### Post-Workshop Report<sup>1</sup> April 2025

Rising global temperatures, extreme weather events—including floods, droughts, and storms— and sea-level rise are already threatening lives and livelihoods all around the world, especially in the poorest communities.<sup>2</sup> Societies must implement adaptation strategies that both minimize negative climate impacts, and build resilience to future risks. Although technologies and policy tools to manage adaptation exist, their uptake remains politically and socially constrained. Meanwhile, rising geopolitical tensions, unpredictable aid flows, and tightening fiscal space also undermine efforts to meet adaptation needs.

These challenges prompt critical questions: How can adaptation efforts advance in the face of rising political and financial barriers? What promising strategies can overcome political and policy bottlenecks? What research priorities could generate both scholarly insights and actionable solutions?

To explore these questions, the MIT Center for International Studies convened a research workshop on April 11, 2025, bringing together climate-focused academics and distinguished practitioners. Participants represented a wide range of disciplines, including political science, economics, environmental science and policy, law, and urban studies.

This report summarizes the workshop’s key takeaways from the presentations and discussions and presents a research agenda. The full workshop program is provided in Appendix I.

### Political and Policy Challenges of Global Climate Adaptation

Based on the workshop discussions, three major political and policy challenges – policy commitment, public awareness and engagement, and mismatched solutions – emerged as critical barriers to advancing global climate adaptation.

Policy Commitment: Fragility, Incentives, and Institutional Gaps. A major political barrier to effective climate adaptation is the lack of durable, credible commitment from key actors. Governments often struggle to maintain sustained focus and funding, particularly during political transitions or under fiscal pressure, undermining both domestic progress and international cooperation. In politically polarized countries like the United States, leadership transitions can swiftly pivot policy from advocating adaptation to pursuing environmental deregulation. More broadly, government leaders with short time horizons frequently prioritize highly visible projects over more impactful measures and neglect the integration of

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<sup>1</sup> Mihaela Papa and Evan Lieberman prepared this report. We are grateful to Jackson Hamilton for serving as the workshop rapporteur. For questions, please contact mpapa@mit.edu.

<sup>2</sup> For an overview of adaptation challenges, see Intergovernmental Panel on Climate Change (IPCC). “Summary for Policymakers.” In: *Climate Change 2022 – Impacts, Adaptation and Vulnerability: Working Group II Contribution to the Sixth Assessment Report of the IPCC*, 3-34. Cambridge: Cambridge University Press, 2023. <https://doi.org/10.1017/9781009325844.001>

climate risks into infrastructure planning. In the Global South, debt and fiscal pressures further drive the prioritization of immediate needs over long-term adaptation. Private sector investment is limited without committed government support. Even where multilateral support exists, slow disbursement processes — often exceeding 500 days<sup>3</sup> for Green Climate Fund projects — undermine the success of even committed leaders.

Public Awareness and Engagement. Public understanding and support for adaptation policies remain limited, creating political obstacles for governments seeking to advance climate resilience agendas. Limited access to information is a major barrier to public engagement. For instance, in highly polluted areas, citizens may not seek out information on air pollution—or may lack access to it altogether (e.g., the case of Kampala). Moreover, simply providing information does not always foster engagement; if adaptation policies are not framed in ways that connect directly to public concerns, they may instead provoke resistance, as seen in Costa Rica’s experience with its “decarbonization” program. Rural Brazilians, for example, have taken a wide variety of approaches to climate adaptation; age, gender, and education are predictive of individual responses to climate shocks. Yet, our understanding of how individuals and groups respond to climate change remains limited, particularly in predicting who will be affected, how they will react, and whether they will demand and/or initiate adaptation actions.

Mismatched Solutions: Financial and Standardization Concerns. Given the global scale of adaptation needs, it is tempting to search for scaled solutions that can be rolled out quickly and at low cost. Financial resources are typically provided at national, regional, or global levels. However, such approaches tend to neglect local knowledge about practices and priorities and frequently fail to attract community engagement. As a result, adaptation efforts often miss the mark: fishing communities reject technologies that do not align with their practices; when multilateral banks use adaptation funds for administrative travel to island states, it limits the resources available for local resilience efforts; programs misalign with local intentions, such as youth coalitions advocating to remain in low-lying areas; and, grants are awarded to countries unable to absorb them due to capacity constraints.<sup>4</sup>

Nonetheless, scaling and standardization remain important. For example, international water norms evolve over time and are eventually ratified, improving global management. Similarly, international trade can reduce overall water depletion, offering a more sustainable alternative to every country cultivating its own water-intensive crops. Thus, an ongoing challenge is how to balance imperatives of scale and context.

### **Promising Strategies for Overcoming Political Bottlenecks**

Our discussion identified a range of promising strategies to meet these challenges, focusing on leadership, financing, and better aligning adaptation efforts with local priorities, political incentives, and broader societal narratives.

Seize Strategic Moments. Although rising geopolitical tensions and fiscal constraints are narrowing the space for climate investment, crises and political shocks create openings for transformative action. As U.S. engagement declines, other actors have stepped in to sustain and strengthen adaptation efforts. For

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<sup>3</sup> See, for example, Independent Evaluation Unit (IEU). *Independent Evaluation of the Relevance and Effectiveness of GCF Investments in the Latin American and Caribbean States*. Evaluation Report No. 20 (October), 44. Songdo, South Korea: IEU, Green Climate Fund, 2024. [https://ieu.greenclimate.fund/sites/default/files/document/lac2024-final-report\\_0.pdf](https://ieu.greenclimate.fund/sites/default/files/document/lac2024-final-report_0.pdf)

<sup>4</sup> Participants illustrated these points with examples from Tonga, the Cook Islands, the Marshall Islands, and Samoa, respectively.

example, while the State Department stopped providing air quality data in Africa, local organizations like the CLEAN-Air Africa Network have assumed a growing role in this space. Participants also highlighted the potential for BRICS nations to emerge as new adaptation leaders. In addition, they emphasized the importance of protecting investment in U.S. research and technology development to support long-term adaptation efforts both domestically and globally.

Cultivate Leadership Through Strategic Narrative Building. Clear, inclusive narratives are essential for building coalitions and securing public and political support. Messaging should relate adaptation directly to people's daily lives, highlighting benefits such as job creation and improved public health — rather than relying on technical jargon or even the term, “climate change.” Costa Rica’s experience showed that reframing its national decarbonization plan as a strategy for sustainable growth and access to international finance helped overcome political resistance and build cross-party support.

Use Media Campaigns to Drive Behavioral Change. Participants emphasized the power of embedding climate adaptation themes into popular culture to drive public behavioral change. Mass media initiatives — such as incorporating climate themes into films and soap operas — have successfully shifted behaviors around energy efficiency and resilience in Mexico. Culturally resonant storytelling strengthens the link between climate adaptation and well-being, particularly as emotional responses to climate risks vary across socioeconomic and cultural contexts.

Link Mitigation and Adaptation: Energy and Infrastructure Focus. Some raised concerns about a tendency to decouple mitigation efforts from adaptation, given potential complementarities and synergies. For example, energy efficiency strengthens resilience to economic shocks, trade-offs between energy and food production must be managed, and improved energy systems and building design can enhance public health. Embedding energy efficiency initiatives into broader adaptation strategies and prioritizing climate-resilient infrastructure are essential to building long-term social and economic resilience. In this way, financing directed at mitigation can be leveraged towards adaptation.

Improve Financial Strategies: Community Empowerment, Debt Relief, and Fast-Track Mechanisms. Make adaptation finance more accessible, flexible, and locally responsive using the following strategies:

- Expand debt-for-climate swaps and debt relief initiatives;
- Learn from transformational projects: Green Climate Fund investments in climate resilient agriculture in vulnerable extreme north areas, converting farmers into market actors;
- Recapitalize multilateral development banks to lower borrowing costs for climate adaptation;
- Create fast-disbursing grant mechanisms to meet urgent local adaptation needs;
- Prioritize investments in soft capacities like institutional strengthening and community resilience;
- Directly fund civil society organizations and municipal governments to implement context-specific solutions;
- Embed two-way accountability: projects must be accountable not only to donors but also to the communities they serve.

Accelerate Regional and City-Led Innovations in Adaptation. Institutional innovations at the regional and city level are critical to accelerating adaptation efforts and expanding access to finance, particularly for cities, local NGOs, and marginalized communities that are often sidelined by global financing systems, which prioritize national governments and impose heavy accreditation requirements. Promising strategies include promoting regional cooperation frameworks to manage shared resources (e.g., water and agricultural trade); building new alliances beyond traditional North–South divides to lead adaptation efforts; empowering cities and community networks to access adaptation finance directly; and reforming financing rules and reporting requirements that create barriers for fragile and underserved areas.

Better Define Adaptation Goals and Measures of Success. Defining and measuring adaptation goals remains a persistent challenge, whether at the global level (such as specifying the Global Goal on Adaptation) or in setting local climate targets. Several strategies can help: developing context-sensitive indicators that move beyond one-size-fits-all metrics; improving the granularity of weather forecasting to support better adaptation planning; and, systematically measuring the co-benefits of adaptation initiatives.

## **A Forward-Looking Research Agenda**

Following a discussion of the observed challenges and proposed solutions, workshop participants reflected on research opportunities and priorities. Their insights point to key areas where further research is needed to add greater specificity to the identification and prevalence of bottlenecks, to identify effective strategies, and examine the conditions that enable or constrain success.

### Research Questions and Focus Areas

- Climate narratives:
  - Which messages, messengers and modalities are most effective for which audiences to promote awareness of climate-related hazards and the costs and benefits of action?
  - How do the media, arts, and cultural interventions affect the take-up of adaptation policies and practices? To what extent must these be tailored or co-created locally in order to be effective?
  - How can misinformation be effectively countered?
  - How to communicate uncertainty about forecasts and effective solutions without undermining policy impact?
- Institutional research:
  - Which governance structures are most effective for producing adaptation policies and delivering resources for which places? For instance, in the U.S., state and local governments are often thought to be more effective authorities; in many low-income countries, other types of authorities may be more effective.
  - What incentives do decision-makers within institutions face, and can understanding these incentives help direct attention to adaptation needs? To what extent and under what conditions do local authorities, including traditional authorities, deliver on adaptation needs?
  - Which multi-level or polycentric arrangements successfully connect local- and higher-level governance structures (e.g., communities, countries and regions)?
  - Which aspects of the COP generate tangible action and why? How can non-performing aspects be improved (or eliminated)? How can forest/biodiversity and desertification negotiations improve adaptation policies?
  - Could BRICS provide a viable institutional architecture for climate adaptation within member countries and beyond? To what extent do BRICS' internal decision-making arrangements facilitate or constrain its agency in global climate adaptation governance? How does its engagement compare to that of other multilateral global governance arrangements?
- Policy strategies, especially finance:
  - What is the financial impact of bundling mitigation and adaptation strategies relative to decoupling, especially in the energy context?
  - Do political crises provide openings for policy innovation and transformative change? How to compare the uptake of adaptation policies and practices in places with shared risks, but

different exposures to harms? To what extent have water diplomacy and mutual gains approaches been effective in achieving their goals, and what concrete lessons do they offer for improving climate adaptation in other sectors?

- What are the consequences of various financing arrangements for effective adaptation? For example, are resources better and more uniformly deployed at the national level or do they risk being diverted to other priorities or even for corrupt ends when channeled through national governments?
  - What types of new and more equitable financing arrangements show the most promise?
  - To what extent have past efforts to implement “global taxes” been effective, and what lessons can inform similar initiatives moving forward?
  - What are the broader implications of high-level discussions and agreements on “loss and damage” funds? Which stakeholders benefit from these arrangements?
  - What are the positive and unintended effects of conditional and unconditional cash grants on climate adaptation?
  - In fragile and conflict-affected areas, identify where adaptation initiatives are advancing or stalling, who is driving or opposing them, and how related conflicts are managed.
- Understanding attitudinal and behavioral change:
    - Deploy a mix of observational and experimental studies
    - Investigate the loss of well-being due to extreme temperatures
    - Be mindful of timelines when designing research:
      - Move beyond analyzing adaptation responses to climate shocks: people may take immediate adaptive action, but what drives behavior when payoffs aren’t visible?
      - Frame adaptation at the science/society interface: adaptation needs are both immediate and long-term given the time lag between behavioral change and changing outcomes in nature.

#### Additional Considerations

- Research orientation
  - Continue to collect data on adaptation policies, practices and related outcomes at as high resolution as possible, but within integrated frameworks that facilitate comparisons.
  - Cast a wide net: Study successes and failures, consider areas with lower- and higher-levels of past damages and future risks, and across varying social, political, and economic contexts. Advance both focused case study research and quantitative studies.
- Research conduct
  - Clearly explain why the research matters—highlighting its relevance and impact—to build public trust and engagement.
  - Since the most pressing adaptation challenges are in the Global South, how can research capacity in the Global North be effectively harnessed in a collaborative manner with researchers and experts in the Global South?

#### Boston-Area Policy and Collaboration Opportunities

- Boston is a member of the C40 Cities Climate Leadership Group – how to advance adaptation in this network?
- What steps can be taken to foster a robust adaptation research community in Greater Boston, particularly around Global South-focused research?

## **Global Climate Adaptation: Overcoming Political and Policy Challenges**

MIT Center for International Studies (CIS) Workshop on April 11, 2025  
51 Vassar Street, Cambridge, MA 02139 (Building 45-801)

**Purpose:** This workshop explores the evolving landscape of climate adaptation in the context of recent COP outcomes, financial challenges, and shifting geopolitical dynamics. How can adaptation efforts progress amid these complexities? What bold strategies can drive equitable financing and policy innovation? Designed as a highly interactive forum, the workshop seeks to foster interdisciplinary dialogue and generate new research directions, culminating in a report that outlines a forward-looking research agenda to drive impactful scholarship and policy engagement.

8:30–9:00AM *Arrival & Breakfast*

9:00–9:15AM **Welcome and Introduction** by [Evan Lieberman](#), Toot Professor of Political Science and Contemporary Africa and Director, MIT CIS

9:15–9:50AM **Keynote Remarks** by [Carlos Alvarado Quesada](#), Professor of Practice, The Fletcher School, Tufts University, Former President of Costa Rica

9:50–11:20AM **Panel 1. Responses to Climate Change: Sentiment, Action, and Infrastructure**

[Sigi Zheng](#) (MIT), global sentiment analysis and climate change  
[Santiago Creuheras](#) (Harvard), reducing impacts through energy efficiency in LatAm  
[James Neumann](#) (Industrial Economics, Inc.), climate resilient infrastructure in Africa (joint research with Ken Strzepek, MIT)  
Chair/Discussant: [Lauren Honig](#) (Boston College)

11:20–11:30AM *Coffee Break*

11:30AM–1:00PM **Panel 2. Governing Key Resources: Water, Food & Air Quality in the Global South**

[Sharmila Murthy](#) (Northeastern), environmental justice, right to water, water governance  
[Melina Platas](#) (Hoover/NYU Abu Dhabi), air quality in Africa  
[Jacob Moscona](#) (MIT), adaptation of food system/agriculture via innovation/trade/land use  
Chair/Discussant: [Greg Sixt](#) (MIT)

1:00–2:00PM *Lunch*

2:00–3:00PM **Panel 3. Transforming Climate Adaptation Finance: What Does it Take?**

[Vera Songwe](#) (Brookings), practice perspective, transformational potential  
[Laura Kuhl](#) (Northeastern), research perspective, transformational potential, L&D fund  
Chair/Discussant: [John Githongo](#) (MIT/Transparency International)

**3:00–4:00PM Panel 4. UN Climate Negotiations and the Most Vulnerable: Toward COP 30 in Brazil**

[Rishikesh Ram Bhandary](#) (BU), progress from Baku to Belem, LDCs and SIDS strategies, other bodies e.g. G20  
[Zoha Shawoo](#) (SEI), global architecture & reaching vulnerable communities on the ground  
[Preston R. Johnston](#) (MIT), COP host considerations/adaptation dynamics in Brazil (joint research with Clemente Sánchez, MIT)

Chair/Discussant: [Mihaela Papa](#) (MIT)

4:00–4:10PM *Coffee Break*

**4:10–5:00PM Toward a New Research Agenda?**

All participants are welcome to participate in a brainstorming session.

Facilitators: [Evan Lieberman](#) (MIT) and [Mihaela Papa](#) (MIT)