

Entry points for integrating transboundary climate risks in the global goal on adaptation

KEY MESSAGES

- The framework to guide the achievement of the Paris Agreement's global goal on adaptation (GGA), due for adoption at COP28 in Dubai in December 2023, needs to reflect the increasing complexity of adaptation, as countries face climate risks at the local, national, regional and global levels all at once.
- The GGA framework can do this by explicitly recognising transboundary climate risks – those involving shared natural resources, supply chains, and the movement of people and finance – and the need to integrate them across the adaptation cycle and in adaptation support, as several countries and groups of countries have called for.
- Much remains to be decided about the GGA framework, but the Dubai decision should at least include an overarching statement on the need to address transboundary climate risks along with local and national-level risks, and a call for follow-on work to enhance cooperation on transboundary risks all along the adaptation cycle and across the themes covered by the GGA framework.
- The GGA framework should include targets and indicators specific to transboundary climate risks and cross-border collaboration for each stage of the adaptation cycle – impact, vulnerability and risk assessment; planning; implementation; and monitoring, evaluation and learning – and for means of implementation. A detailed GGA framework with clearly articulated targets and indicators could provide a stronger foundation for the global stocktake and for continued efforts to build climate resilience.

The Paris Agreement recognises that adaptation is a global challenge that requires international cooperation, particularly to support the most vulnerable communities.¹ It also sets a global goal on adaptation, of “enhancing adaptive capacity, strengthening resilience and reducing vulnerability” to contribute to sustainable development and ensure an adequate adaptation response.

Gauging progress towards that goal has posed significant methodological, empirical, conceptual and political challenges, as noted by the Adaptation Committee in a 2021 report.² In order to address them, at COP26, the Parties launched the Glasgow–Sharm el-Sheikh Work Programme on the Global Goal on Adaptation.

Over two years, through eight workshops, the work programme was tasked with enhancing understanding of the global goal, contributing to reviewing adaptation progress as part of the upcoming global stocktake, and supporting enhanced adaptation action around the world.³

The COP26 decision does not mention transboundary climate risks, but governments and experts alike increasingly recognise them as a serious concern. As the Intergovernmental Panel on Climate Change (IPCC) notes in its 2023 Synthesis Report: “The transboundary nature of many climate change risks (e.g., for supply chains, markets and natural resource flows in food, fisheries, energy and water, and potential for conflict) increases the need for climate-informed transboundary management, cooperation, responses and solutions through multi-national or regional governance processes.”⁴

Several countries and groups of countries have referenced transboundary risks in written submissions to the work programme, and at each of the workshops, Parties and Observers have emphasised the need to consider transboundary climate risks across the adaptation cycle and in adaptation support.⁵

The framework to guide the achievement of the global goal on adaptation (GGA), due for adoption at COP28

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in Dubai in December 2023, presents an opportunity to ensure that implementation of the global goal reflects the full complexity of climate risk, as countries have to manage and adapt to risks at the local, national, regional and global levels all at once.

This briefing paper identifies entry points for integrating transboundary climate risks in the GGA framework. Recognising that key decisions about the framework have yet to be made, and different Parties and negotiating groups have different priorities, the analysis considers a range of options, taking into account the stages of the adaptation cycle and themes to be covered by the framework.

The international dimensions of adaptation

While climate change mitigation has always been recognised as a global endeavour, adaptation has long been treated as a local or, at most, national issue, in part because climate risks are so context-specific. Indeed, even a common hazard such as sea-level rise will pose different threats depending on the geography of the coastline, how many people live and work there, and broader socio-economic conditions.

Yet, as highlighted by the body of research of the Adaptation Without Borders partnership, many climate impacts extend across national boundaries, generating risks to economies, societies and ecosystems far from their source.⁶ Some involve shared natural resources, such as river basins; many are transmitted through global supply chains, and others through financial flows and the movement of people.

For example, as climate change brings more frequent and severe droughts and floods to many parts of the world, the impacts on crop yields can reverberate across the globe.⁷ The poorest people in the most vulnerable countries are likeliest to go hungry as a result, as they lack the buying power of wealthier nations.⁸ As highlighted by the Transnational Climate Impacts Index, however, in our interconnected world, no country is immune.⁹ Climate impacts at home may limit domestic production as well, compounding the risk.

Without stronger international cooperation and coordination, individual countries’ adaptation choices may also exacerbate risks in other places. A dam that facilitates irrigation upstream, for instance, may leave people downstream without adequate water supplies. A hardened coastline may shift storm-surge risks to a nearby unprotected coastal zone. And a trade partner’s choice to stop buying an agricultural commodity from a climate-vulnerable supplier may disrupt the livelihoods of countless farmers and farm labourers.

As climate research has documented and raised awareness of transboundary climate risks, many regions have begun to analyse their own exposure and called for international cooperation to address them. The European Union has examined the implications of climate change for agricultural commodities it imports, for instance,¹⁰ and it is explicitly addressing transboundary risks through its 2021 Adaptation Strategy and in its forthcoming European Climate Risk Assessment.¹¹

The ASEAN State of Climate Change Report 2021 identifies the assessment of transboundary climate risks and actions as a priority, noting that the region “is rapidly integrating in terms of economy and culture”, which creates opportunities “while also having implications for transboundary climate risks”.¹² The African Union Climate Change and Resilient Development Strategy and Action Plan (2022–2032) proposes to “enhance coordination between the regional economic communities and Member States in addressing and managing transboundary and cascading climate risks”.¹³

Many individual countries have also examined transboundary climate risks and their implications for adaptation planning, including Canada, China, Finland, Kenya, Nauru, Norway, Sweden, the United Kingdom and the United States.¹⁴ The UK has been particularly proactive, devoting a full chapter of its Third National Adaptation Programme to “international dimensions”.¹⁵

“We live in an increasingly globalised world and climate change requires a collective and international response,” the document notes. “Flows of people, goods and capital are becoming more exposed to climate impacts, with potentially significant implications for our society and economy. While the resilience of UK critical sectors remains strong, recognising these challenges and taking early action will reduce climate risk, boosting our resilience and safeguarding our national security.”

Recognition of transboundary risks as a neglected priority extends beyond the climate community. The 2022 Global Assessment Report on Disaster Risk Reduction, for instance, identifies “myopia” about disaster risks as a key pitfall of current risk management systems, which “tend to align with political and geopolitical borders, thereby ignoring systemic and transboundary risks”.¹⁶ In reality, the report notes, even an event with minimal local impacts can be “devastating for an adjacent, economically and politically separate community”.

Managing these risks will require cooperation not only among governments, but multiple stakeholder groups. For instance, as the report says, global corporations operate across borders “and hold more financial resources than many nations, so the choices they make about which risks to govern and who they regard as their primary stakeholders have the potential for significant positive impacts on systemic risk”.

The United Nations Secretary-General’s Our Common Agenda notes that “our challenges are interconnected, across borders and all other divides” and require “an equally interconnected response”.¹⁷ For example, it proposes an Emergency Platform¹⁸ to be convened in response to complex global crises – which could be an appropriate opportunity to integrate measures for responding to global shocks induced by transboundary climate risks (e.g. via trade and supply chains).

It is time to address transboundary climate risks at the highest levels of global climate cooperation, recognising them as “a vital aspect of global adaptation efforts”, as the Least Developed Countries Group has articulated.¹⁹ For the Glasgow–Sharm el-Sheikh Work Programme, this means three things:

- Including an overarching statement on the specific need to build global resilience to transboundary climate risks in the Dubai decision on the GGA;
- Integrating transboundary climate risks in the GGA framework’s articulation of each stage of the adaptation cycle – impact, vulnerability and risk assessment; planning; implementation; and monitoring, evaluation and learning; in the cross-cutting discussion on means of implementation, and in addressing the themes covered by the framework;²⁰ and
- Adopting specific targets and indicators on transboundary climate risks and cross-border collaboration, as these are developed.

A detailed GGA framework with clearly articulated targets and indicators could provide a stronger foundation for the global stocktake and for efforts to accelerate and scale up action to build resilience to climate risks at all levels. Agreeing on the details will take time, however, and the work is expected to continue after COP28. Explicitly addressing transboundary risks in the Dubai decision is thus an essential first step. Ideally, this would be done in two ways:

- Recognising that countries face climate risks not only at the local and national levels, but also – through shared resources, trade, and the movement of people and finance – at the regional and global scales, and enhanced dialogue and cooperation are needed to ensure effective adaptation that is equitable and inclusive and protects the most vulnerable people.
- Including a specific call for follow-on work on the GGA to consider transboundary risks along with local and

national-level risks, with a view to enhancing cooperation at all stages of the adaptation cycle and across the themes covered by the GGA framework.

As a way to bolster the case for an overarching statement in the Dubai decision, and to inform any potential additional outcomes as well as follow-on work, the next sections delve deeper into the implications of transboundary climate risks for each stage of the adaptation cycle.

Impact, vulnerability and risk assessment

A systematic, comprehensive and reliable assessment of climate risks is crucial to effective adaptation. Put simply, if governments are to develop adaptation strategies and plans in line with the global goal on adaptation, they need to fully understand what they need to adapt to, and what key vulnerabilities they need to address.

If countries’ impact, vulnerability and risk assessments focus entirely on climate risks within their borders, they may not recognise their exposure or vulnerability to even larger climate threats that originate abroad. A study for the German government, for instance, found “the consequences of climate change through foreign trade alone are of the same size as the economic impacts of climate change within national borders”, drawing similar conclusions to assessments for Switzerland and Austria.²¹ The UK’s most recent climate risk assessment found that 10 of the 61 key risks and opportunities identified related to climate change impacts outside the UK.²²

Some types of transboundary climate risks have been assessed more than others – particularly those involving shared resources (e.g. river basins) and transboundary ecosystems (e.g. the Amazon or the Sahel), or stemming from regional climate hazards (e.g. cyclones). Even in these contexts, however, coordination can be challenging, so individual countries may not fully understand their share of the risk or how their neighbours’ planned responses might affect them.²³

Most of the studies to date that have attempted to assess teleconnected or systemic transboundary climate risks (i.e. those that connect two remote countries or disrupt entire global systems) have focused on the exposure of wealthier, developed economies, with particular attention to global supply chains as well as risks to businesses.²⁴ Some studies have also sought to quantify risks to global food security, covering a wider range of countries, as a quarter of the world’s food is traded internationally.²⁵

Still, large knowledge gaps remain, and recent experience with disruptions to global trade – from the COVID-19 pandemic, Russia’s war in Ukraine, and climate-related crop losses and reductions – suggests that lower-income countries that are already climate-vulnerable will be disproportionately affected by future climate shocks to supply chains.²⁶

Governments in developing countries are acutely aware of this,²⁷ which is why many of the most vocal advocates for including transboundary climate risks in the GGA framework have been groups of negotiators from vulnerable countries.²⁸ This is critical for understanding the full range of climate risks faced by each country around the world. It may also contribute to enhanced international cooperation on adaptation – a stated priority under Article 7 of the Paris Agreement.²⁹

Frameworks and tools already exist to support transboundary climate impact, risk and vulnerability assessments. For example, a protocol for case study research into transboundary climate risks published in 2022 assessed how the impact chain framework,³⁰ the International Risk Governance Framework³¹ and the Risk Ownership Framework³² could be evolved and adapted towards this end.³³

More recently, the CASCADES project developed a comprehensive conceptual framework to define and assess cascading climate impacts on Europe,³⁴ as well as a framework for identifying and assessing the appropriateness of different response options.³⁵ Other research endeavours have developed innovative multi-method approaches to identify and assess transboundary climate risks to particular countries and sectors (such as Sweden,³⁶ via its international trade links).

National risk assessments already explore the implications of climate change for a wide range of sectors and policy objectives. It is now imperative that they begin to account for the transboundary impacts of climate change and how they might imperil national economic and development goals.³⁷ For example, major infrastructure that is critical to a country's economy, but not within its boundaries, could be disabled or become unreliable due to climate change, as occurred with the Panama Canal due to unusually low river flows in 2023.³⁸

Sample target: Impact, vulnerability and risk assessments account for transboundary climate risks

Sample indicators³⁹

- Existence of robust and well-established methodologies/assessment frameworks that allow countries to identify and analyse transboundary climate risks;
- Number/share of national and regional climate risk assessments that include transboundary risks;
- Number/share of risk assessments that identify groups that are particularly vulnerable to transboundary risks and/or evaluate structural dynamics that drive inequities and power asymmetries in the context of transboundary climate risks.

As more national assessments are conducted, they can offer important models for others. There is huge potential to share best practices and encourage wider adoption. Indeed, that is one important outcome that the new framework should aim to achieve.³⁹

Adaptation planning

Once transboundary climate risks have been identified and assessed, the next step is to develop strategies and plans to address them. Several challenges can arise at this point. First of all, many countries' current approaches to adaptation planning focus mainly on action at the sub-national and local levels.⁴⁰ Such action remains crucial, but without dialogue and collaboration across levels of government, the people developing adaptation plans may not become aware of transboundary risks (or opportunities). They are also likely to focus on solutions within their own agencies' purview, which would preclude the kinds of international cooperation needed to address transboundary risks.

Another potential problem is that adaptation measures may be chosen without regard to other countries' needs, which could transfer or exacerbate risk instead of reducing it.⁴¹ (Autonomous adaptation in the private sector raises similar concerns, as strategies that are cost-effective for an individual company – such as dropping suppliers in high-risk countries,⁴² or securing rights to large amounts of water in a drought-prone region⁴³ – may harm vulnerable communities.) Conversely, a developing country facing transboundary risks may feel powerless to manage them, given limited resources and international power dynamics.

The GGA framework developed by the Glasgow–Sharm el-Sheikh Work Programme could steer countries towards more effective, equitable and collaborative approaches to adaptation planning and, in doing so, significantly improve the likelihood of achieving the global goal on adaptation.

National adaptation plans (NAPs) could both identify risks from abroad that a country may be exposed to, and consider how climate change impacts within the country's boundaries – and/or efforts to address them – could also affect others.⁴⁴ While an increasing number of NAPs refer to transboundary climate risks, emerging analysis suggests such efforts are sporadic rather than strategic. In drawing attention to the need for national adaptation plans to adopt a transboundary perspective, the GGA framework could better harness their potential to strengthen regional and even global resilience.

The technical guidelines for NAPs could also be further elaborated for this purpose.⁴⁵ They are already designed to be flexible and iterative, enabling countries to assess priority climate risks, identify suitable adaptation measures, and integrate those measures into their national

socio-economic plans. In addition, the NAP Global Network, the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) are considering how they can strengthen countries' capacities to tackle transboundary climate risks.⁴⁶

Transboundary climate risks cement the need for a whole-of-government approach to adaptation planning, to consider how they may undermine and influence health plans and strategies, trade relationships, food security, diplomatic and geopolitical relations, investment portfolios, migration and development policies, and law and governance. Sub-national and local governments should also be involved, to ensure coherence across levels of governance.

For best results, governments should develop their NAPs not only with domestic stakeholders, however, but also in dialogue and coordination with other countries with which they share risks, and with those that may bear the consequences of their adaptation decisions. Non-state actors and intergovernmental organisations focused on the collaborative management of shared resources can provide valuable input as well.⁴⁷

Trade partners can plan together to address climate risks in supply chains, for instance. If a country that exports a key food commodity or raw material faces severe climate hazards, its partner can choose to provide support for adaptation plans and actions that secure its supplies, instead of finding a new trade partner. For many lower-income countries, this kind of support from trade partners may make the difference between climate-resilient growth and entrenched poverty and vulnerability.⁴⁸

Countries that share a river basin can similarly benefit from cooperation to ensure their adaptation plans increase the resilience of all riparians, not just those fortunate enough to be upstream. Another prime example of the benefits of cooperation with neighbours is the Hindu Kush Himalayas, where deadly glacial lake outburst floods pose a growing threat.⁴⁹

Cross-border dialogue in adaptation planning might also help countries recognise the potential for unintended harm from their adaptation choices. For example, building large desalination plants might ease a country's water stress, but also devastate marine fisheries that its neighbour depends on.⁵⁰ By developing their adaptation plans collaboratively, countries can find better, mutually beneficial solutions.

The GGA framework can encourage such dialogue and cooperation, as well as the development of regional or joint sectoral adaptation plans, where appropriate, to pursue shared objectives.⁵¹ Just as countries can share climate risks, if they plan together, they can also share the benefits of adaptation.

Moreover, such an approach could advance the global goal on adaptation by strengthening the business case

Sample target: Adaptation policies and planning instruments include measures that aim to strengthen resilience to transboundary climate risks

Sample indicators

- Number/share of national and regional adaptation plans that identify response options to transboundary climate risks and assign responsibility for implementing them;
- Number/share of national and regional adaptation plans that account for the potential transboundary impacts of the measures they present;
- Number of adaptation strategies or plans developed jointly by countries that face common climate risks.

for adaptation finance and cooperation. When developed-country Parties invest in efforts to address transboundary risks, they could realise co-benefits across scales and “double dividends” in enhancing resilience in two or more countries at once.

Implementation

Transboundary adaptation projects already exist, but they are relatively rare. A 2022 analysis of adaptation projects approved by the Green Climate Fund, the Adaptation Fund and the Climate Investment Funds between 2010 and 2020 found most of the funding went to individual countries, and what little was shared was mainly to address common and shared risks – such as drought in the Niger Basin and cyclones in the Caribbean – rather than risks that cross borders.⁵²

The Adaptation Fund did finance comparably more joint projects, including five that explicitly framed risk as transboundary, but all involved neighbouring countries, not teleconnected risks. One focused on integrated flood and drought management in the Volta Basin, another on managing risks from cyclones in Western Indian Ocean cities. Three involved shared natural resources. These are helpful examples of what is possible, but the potential for cooperation is much broader.

The GGA framework could encourage countries to develop joint work programmes to address transboundary climate risks, through regional organisations or new partnerships and alliances. These might start with pilots, but ultimately adaptation needs to go beyond small-scale, time-bound projects, to manage risks across entire systems and account for their evolution over time (as physical impacts intensify and social, economic and political conditions change).⁵³

Joint efforts like these could also provide a valuable mechanism for developed-country Parties to enhance their support for adaptation in developing countries – above and beyond their existing climate finance commitments – while improving their own climate resilience. The rationale is clear: Although some transboundary climate risks can be managed effectively through national adaptation action, many require bilateral, regional and international cooperation.⁵⁴ Assessing the measures required to build resilience to climate-sensitive infectious diseases, for example, reveals actions at a range of scales – including data management and integrated surveillance across national borders.⁵⁵

Transboundary climate risks raise prospects for new and innovative forms of adaptation, even going so far as to challenge dominant assumptions about what “adaptation” is and who should lead it. In some cases, we might imagine that effective adaptation to transboundary climate risks involves projects that strengthen climate diplomacy, or regional dialogue and exchange, for example.

Regional organisations have a key role to play in supporting collaborative implementation. Existing regional adaptation programmes can help by identifying best practices and drawing lessons for others to learn from. It is important that adaptation programmes to manage transboundary climate risks take steps to embed ownership across governance levels (from the local to the national level); ensure that outcomes are harmonised with local, sub-national, and national development plans; and proactively manage competing political interests to strengthen trust-building between all actors involved.

Countries should also evaluate adaptation projects and programmes within their borders before they are implemented, to ensure they are resilient to transboundary climate risks they are exposed or vulnerable to, and to avoid creating or shifting impacts onto others. Implementing organisations will need support to do this. The active engagement of international organisations is vital, including UN agencies, non-governmental organisations, and especially funders; many have yet to recognise the severity of transboundary climate risks or the need to finance relevant adaptation measures.⁵⁶

The private sector could be a key partner in much of this work, particularly in mitigating global supply chain risks. Some already recognise the benefits,⁵⁷ but a recent S&P study found only one in five companies had a plan to adapt to physical climate risks,⁵⁸ and a 2022 survey of chief supply chain officers found only 27% had conducted a climate risk assessment.⁵⁹ Some companies are abandoning suppliers that are too exposed to climate risks.⁶⁰ Policies will be needed to incentivise companies to adapt proactively and justly, in ways that support the climate-resilient development of vulnerable countries.⁶¹ Civil society also has a role to play in holding governments and businesses accountable.

Sample target: Public and private stakeholders act to demonstrably enhance resilience to transboundary climate risks and strengthen regional and global cooperation on adaptation

Sample indicators

- Number of adaptation projects and programmes implemented that explicitly address transboundary climate risks;
- Number/share of adaptation projects/programmes undertaken jointly by countries to address transboundary climate risks (via regional or sectoral organisations or new collaborations);
- Number of inter- or intra-regional dialogues on adaptation to transboundary climate risks;
- Number of regional cooperation mechanisms established to strengthen cooperation on managing transboundary climate risks;
- Share of adaptation projects to transboundary climate risks that meaningfully involve the participation of the most exposed and vulnerable groups.

Monitoring, evaluation and learning

Many of the challenges posed by climate change are unprecedented in scope, if not in their fundamental nature. Crop failures are not new, for example, but globalisation has concentrated supplies of key commodities in just a few countries, and climate change has increased the likelihood that those countries will experience catastrophic extreme weather events in any given season, while increasing the risk of compound events in multiple producing countries.⁶² The countless uncertainties associated with climate change add to the complexity.

All this means that adaptation itself needs to be adaptable – and informed by new evidence as it arises.⁶³ The solutions identified through the risk assessment and planning process may not work as expected, or may have unforeseen consequences, or conditions may change (climatic, or social, economic or political). This is why monitoring, evaluation and learning (MEL) are widely recognised as essential to effective adaptation.

The GGA framework already recognises the importance of MEL by identifying it as one of the four stages of the adaptation cycle. It can add significant value from a transboundary risk perspective by encouraging countries to actively monitor and evaluate whether their adaptation policies, programmes and projects have impacts beyond their borders. If harmful impacts are found, they should be acknowledged transparently, and corrective measures should be taken to prevent further harm. If unexpected benefits to people in other countries are

found, lessons should be drawn out and shared to inform future work.⁶⁴

It is also essential, of course, for transboundary adaptation initiatives and projects to have robust MEL systems of their own. Governments need to know in a timely fashion whether these efforts are achieving the desired objectives, how equitably the benefits are distributed, and whether anyone has been unintentionally harmed – and make adjustments as needed. Insights from MEL systems will also help to identify best practices and replicable models in this burgeoning field.

The GGA framework can also emphasise the global nature of the adaptation goal and its implications for the monitoring and evaluation of adaptation projects and programmes within countries. MEL systems should consider not only whether adaptation actions build resilience where they are implemented, but also whether they advance climate resilience globally – which means, at the very least, not harming anyone else (what we might call transboundary maladaptation). Ensuring transboundary climate risks and impacts are captured in MEL systems can also provide the evidence for accelerating international cooperation for adaptation.

Lastly, the GGA framework can highlight the importance of supporting learning to address transboundary risks. Regional organisations and other platforms that support mutual learning could be beneficial not only for countries that are actively collaborating, but also for advancing adaptation efforts worldwide. As more and more projects and programmes are launched to tackle trans-

boundary risks, it will be crucial to draw lessons from their implementation and identify and share best practices and models that could be replicated elsewhere.

Means of implementation

Mobilising resources to support adaptation to transboundary climate risks is crucial to the success of efforts throughout the adaptation cycle. The GGA framework can send an important signal to the multilateral banks, climate funds and donor countries that this is a vital aspect of effective adaptation.

As discussed above, analysis of multilateral adaptation finance flows shows limited recognition of transboundary climate risks; climate risk continues to be treated largely as a local phenomenon with local solutions.⁶⁵ It is thus important to raise awareness of transboundary risks and of the value of collaborative solutions among the multilateral development banks and climate funds. Existing projects demonstrate the potential of current funding models to support effective transboundary initiatives.

At the same time, the GGA framework can promote the creation of regional funds to address transboundary risks,⁶⁶ building on existing regional collaboration platforms or creating new ones as needed. For example, ASEAN has recognised that the establishment of a regional adaptation fund “could make adaptation a regional agenda, help build solidarity, help address transboundary climate risks that individual country adaptation planning may not be able to address, and make easily available new resources that countries need”.⁶⁷

The GGA framework could also help developed-country Parties to see how financing adaptation in developing countries can enhance their own resilience – which, in turn, should stimulate the flow of new and additional finance through bilateral cooperation.

Mobilising national resources will be crucial as well, as recognised even by those with limited resources.⁶⁸ The private sector could be another important source of finance, especially given that businesses have to manage climate risks in their supply chains (though, as noted above, many still do not).⁶⁹ A task for governments in this context – which the GGA framework could explicitly address – is to steer businesses towards adaptation choices that align with their social and environmental commitments.⁷⁰ Dialogue, incentives and mandates may all be appropriate ways to achieve this.

Capacity-building is also crucial; many of the same actors discussed above will play key roles in building the knowledge, skills and expertise needed to implement effective adaptation measures across scales. Awareness and understanding of transboundary climate risk worldwide has to rise quickly from what is now a fairly low level. There is a need for better guidance, decision and risk assessment tools, training and capacity building

Sample target: Monitoring, evaluation and learning frameworks assess the efficacy of actions to adapt to transboundary climate risks, as well as the transboundary impacts of adaptation actions more broadly

Sample indicators

- Number/share of national and regional adaptation monitoring, evaluation and learning systems that assess the effectiveness of actions to adapt to transboundary climate risks;
- Number/share of national and regional adaptation monitoring, evaluation and learning systems that assess the transboundary impacts of adaptation programmes and projects more broadly;
- Number/share of adaptation projects and programmes that evaluate adaptation outcomes beyond the immediate beneficiaries, such as the redistribution of risk to other regions, groups or sectors;
- Share of national and regional agencies and institutions that collaborate to assess transboundary climate risks and impacts.

“The Glasgow–Sharm el-Sheikh Work Programme on the Global Goal on Adaptation has the potential to significantly enhance adaptation efforts around the world.”

courses, and tailored technical support if countries are to effectively account for transboundary climate risks at each stage of the adaptation cycle.

As noted earlier, the sharing of best practices and lessons learned and the facilitation of knowledge exchange between adaptation planners will be critical, too. The engagement of decision-makers in sectors such as trade, finance, infrastructure planning and foreign policy is also essential, given the implications of transboundary climate risks for diverse policy portfolios.

A number of global institutions are well placed to support these efforts, in addition to the Paris Committee on Capacity-building – including UNEP, UNDP, the NAP Global Network, the Climate and Development Knowledge Network (CDKN), South–South–North, and the Least Developed Countries University Consortium on Climate Change – as well as an array of region-specific adaptation support organisations.⁷¹

Sample target: Adaptation finance, technical assistance and capacity-building support efforts to adapt to transboundary climate risks along with local and national-level efforts

Sample indicators

- Volume/share of international public adaptation finance allocated to multiple countries working together to manage transboundary risks and build local resilience;
- Number of bilateral initiatives established by developed-country Parties to collaborate with developing countries to address transboundary climate risks;
- Number of regional adaptation funds established to support cooperation on managing transboundary climate risks;
- Number/share of national or regional adaptation planners who engage in capacity-building activities to better identify, assess and manage transboundary climate risks;
- Number/share of capacity-building activities focused on transboundary climate risks that build on South–South knowledge-sharing and engagement.

Closing reflections

The Glasgow–Sharm el-Sheikh Work Programme on the Global Goal on Adaptation has the potential to significantly enhance adaptation efforts around the world by turning the ideals of Article 7 of the Paris Agreement into an actionable framework, with clear guidance and agreed-upon priorities.

The dialogue initiated by the Work Programme has already encouraged the Parties to think more deeply about what it means to ensure “an adequate adaptation response” to the global climate crisis, and to identify gaps in the international climate policy discourse to date. One of those gaps is the lack of attention to transboundary climate risks.

The GGA framework that will be agreed by the Parties in Dubai will not be the end of this process, and deliberations on the outcome of the first global stocktake will offer additional opportunities to reflect on how to accelerate and scale up adaptation action – and how to do so in a way that is equitable and inclusive. Still, the messages and signals embedded in the GGA decision at COP28 matter profoundly for incentivising and informing future adaptation policies. It is thus essential that the framework explicitly address the need to assess and adapt to transboundary climate risks.

Endnotes

1. See Article 7 in: UNFCCC. 2015. “Paris Agreement.” FCCC/CP/2015/10/Add.1. Paris: United Nations Framework Convention on Climate Change. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.
2. This is the Parties’ language synthesising the findings of Adaptation Committee. 2021. “Approaches to Reviewing the Overall Progress Made in Achieving the Global Goal on Adaptation.” Technical paper. Bonn: United Nations Framework Convention on Climate Change. https://unfccc.int/sites/default/files/resource/AC_TP_GlobalGoalOnAdaptation.pdf.
3. The work programme has eight stated objectives under those themes, with several references to monitoring and evaluation. See UNFCCC. 2021. “Decision 7/CMA.3: Glasgow–Sharm El-Sheikh Work Programme on the Global Goal on Adaptation.” In *Report of the Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement on Its Third Session, Held in Glasgow from 31 October to 13 November 2021. Addendum Part Two: Action Taken by the Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement at Its Third Session*, 4–6. Glasgow: United Nations Framework Convention on Climate Change. <https://unfccc.int/documents/460952>.
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5. See workshop summaries at <https://unfccc.int/topics/adaptation-and-resilience/workstreams/glasgow-sharm-el-sheikh-WP-GGGA>. Among those calling for consideration of transboundary risks in their submissions have been the Alliance of Small Island States (<https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202307271659---AOSIS%20GGA%20Submission%20.pdf>), the Least Developed Countries Group (https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202307122209---LDC%20Submission_GGA_7th%20Workshop.pdf), Canada (<https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303151722---Submission%20for%20Canada%20-%20GlaSS%20Workshops%202023%20-%20Feb%202023%20-%20EN.pdf>), the African Group of Negotiators on Climate Change (https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303090951---Submission%20by%20the%20Republic%20of%20Zambia%20on%20behalf%20of%20the%20AGN%20_5%20GGA%20workshop.pdf), the United Nations Economic Commission for Europe (https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202309061127---GGA_8_workshop_transboundary_cooperation_final_6Sept2023.pdf) and the UN Foundation (<https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202305311331---United%20Nations%20Foundation.pdf>).
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