

Transformational Adaptation for COP29

Issues and Options

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A. Summary

1. Transformational adaptation is a concept with evolving definitions and applications in climate adaptation and resilience literature. There is no single agreed approach to either, although several common features emerge across the literature on transformational adaptation. Most definitions emphasize the depth of change required, often highlighting the need to foster systemic shifts that address the root causes of vulnerability and considering the spatial scale or extent of these changes. Many definitions also stress the importance of the durability of interventions and their potential to catalyze broader systemic changes. However, there is variability in how equity and power dynamics are addressed and whether broader goals like poverty reduction or sustainable development are integrated.
2. Transformational adaptation has been examined in various fora related to the UN Framework Convention on Climate Change (**UNFCCC**) process, such as the Glasgow Sharm el-Sheikh work programme, National Adaptation Plan Expos, and the Adaptation Committee. This has included proposals for measuring activities, context characteristics and "small transformational wins."
3. At the sixth meeting of the Parties to the Paris Agreement (**CMA6**) in November 2024, Parties will have the opportunity to consider transformational adaptation through various avenues, including the UAE Framework for Global Climate Resilience (**the Framework**), the UAE-Belém work programme on indicators, a separate agenda item, or other processes such as the just transition pathway.
4. Despite its complexity and the challenges of defining and measuring it, transformational adaptation is increasingly recognized as a potent concept for driving long-term climate resilience. CMA6 will serve as a platform for Parties to clarify transformational adaptation, explore its definition across different

spatial scales and sectors, showcase examples of implementation and discuss methods for assessing progress in planning, financing, and implementing transformative approaches globally.

5. This paper considers issues and options for transformational adaptation within the UNFCCC, outcomes from COP28, and how Parties can begin to define transformational adaptation for consideration at CMA6.

Issues

- Defining transformational adaptation
- Addressing capacity and resource constraints, in particular in Least Developed Countries (*LDCs*) and Small Island Developing States (*SIDs*)
- Addressing the question of intentionality
- Tracking and measuring transformational adaptation, whether ex ante or ex post
- Addressing false dichotomies between incremental and transformational adaptation
- Addressing trade-offs and risks of centering transformative approaches

Options

- Measures and approaches
- Development of elements for consideration
- Examples of practices to elevate
- Means of implementation
- Definitions
- Drawing on conceptual frameworks
- Conceptualize transformational adaptation on a spectrum

Questions for consideration:

- What aspects of transformational adaptation are most useful? What aspects are challenging?
- How can the concept of transformational adaptation support achievement of the GGA, the Framework, and the recommendations of the first GST?
- Should progress in planning and implementing transformational adaptation be assessed at the global level? What would need to be tracked?
- What are elements Parties should prioritize in adopting a decision on transformational adaptation at CMA6?

B. Context

1. At the 28th Conference of the Parties (*COP28*) and the CMA5, the UN Framework Convention on Climate Change (*UNFCCC*) adopted several pivotal decisions including the conclusion of the first Global Stocktake (*GST*),¹ and the establishment of the framework for the Global Goal on Adaptation (*GGA*). As part of the UAE Consensus, Parties agreed to the Framework.²
2. Additionally, Parties decided to consider defining transformational adaptation within the UNFCCC at CMA6 (November 2024). However, there is no single agreed definition for transformational adaptation.

3. CMA6 in November 2024 will allow Parties to highlight global commitments to transformational adaptation, define it across different scales and sectors, and discuss how to assess progress in planning, financing, and implementing these approaches globally.

Definitions

4. “Transformational adaptation” is a relatively new concept in scientific literature. It was first used in socio-ecological literature from the early 2010s to refer to the social dimensions of climate change adaptation and the extent to which adaptation is about preserving the stability of current systems, transitioning to new systems through incremental social change, or fostering transformation by enabling new rights claims to emerge and changing political regimes. It does not just address risk but rather the challenges underlying conditions that generate or perpetuate risk.³
5. A 2015 literature review by the United Kingdom Climate Impacts Program revealed that transformational adaptation had been defined in different ways.⁴ While some scholars see it as a tool to shift power, others recognize transformational adaptation for its potential to address poverty and sustainable development. Alternatively, other definitions describe it as a forced response to particularly rapid or extreme climate impacts and a mode for taking action to avoid crossing irreversible or undesirable tipping points.⁵
6. Action on Climate Today, an adaptation mainstreaming program, developed a bottom-up conceptual framework defining features of transformative adaptation based on experience in mainstreaming adaptation. These include actions and interventions that:
 - enable systemic change
 - catalyze broader changes in system
 - operate at scale
 - include and prioritize the needs of poor, vulnerable, and marginalized populations
 - have sustainable impact beyond the lifecycle of programs.⁶
7. In the Working Group 2 contribution to the Sixth Assessment Report, the Intergovernmental Panel on Climate Change (**IPCC**) defines transformational adaptation as new options for adapting to the impacts and risks of climate change by changing the fundamental attributes of a system, including altering goals or values and addressing the root causes of vulnerability.⁷
8. Donor agencies and climate funds have utilized the concept of “transformational change” as an inherently positive and aspirational impact area. Transformational change is a broader concept than transformational adaptation that encompasses both mitigation and adaptation interventions.⁸ The Climate Investment Fund’s Transformational Change Learning partnership defines transformational change for climate action as “a fundamental change in systems relevant to climate action with large-scale positive impacts that shift and accelerate the trajectory of progress toward climate-neutral, inclusive, equitable, resilient, and sustainable development pathways.”⁹
9. One definition of transformational change, as outlined by the United Kingdom’s International Climate Finance (**ICF**) 2022 report defines “change which catalyzes further changes, enabling either a shift from one state to another (e.g., from conventional to lower carbon or more climate resilient patterns of development) or faster change (e.g., speeding up progress on cutting the rate of deforestation).”¹⁰
10. The ICF 2022 report notes that changes are more likely to be transformational if several of the following criteria are in place: political will and local ownership, increased capacity and capability, innovation, shared evidence of effectiveness, incentives for others to act, replicability, scale, and sustainability. It tracks its investments against the extent to which ICF intervention is likely to lead to transformational change using a scorecard approach.¹¹

11. Despite the emergence of a variety of definitions and framings, several common features can be found across the literature. Most definitions point to the depth of change enacted, with some emphasizing the need to foster systemic change that address root causes of vulnerability, and/or the spatial scale or extent of changes.
12. Many definitions point to the durability of interventions and/or the catalysis of broader changes in a system. Definitions differ on to what extent equity and power dynamics are addressed, and/or the integration or achievement of broader goals such as poverty reduction or sustainable development. As such, definitions differ on to what extent transformational adaptation is inherently positive and desirable, neutral, or an unfortunate necessity to avoid tipping points or loss and damage.

COP28 Outcome

13. Several decisions were concluded at COP28 under the UAE Consensus, the title for the main formal outcomes from COP28, including the GST, the Framework and the loss and damage fund and funding arrangements. Adopted under the UAE Consensus at COP28, the Framework will guide the achievement of the GGA and review its the overall progress, with a view to reducing the increasing adverse impacts, risks, and vulnerabilities associated with climate change, as well as to enhance adaptation action and support. The decision sets out thematic targets aligned with other global frameworks to be achieved by 2030 and targets to enhance adaptation action.
14. Parties also agreed that the Framework should guide and strengthen efforts, including long-term transformational and incremental adaptation.¹²
15. In the UAE Consensus, Parties agreed to consider defining transformational adaptation at CMA6 in November 2024. The CMA5 decision: “Requests the secretariat to undertake work to examine how transformational adaptation is defined and understood at different spatial scales and sectors, and how progress in planning and implementing transformational adaptation approaches might be assessed at the global level, for consideration by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its sixth session (November 2024).”¹³
16. Therefore, Parties have an opportunity to consider transformational adaptation at CMA6 either under the Framework, the UAE- Belém work programme, a separate agenda item, or through other processes such as the just transition pathway, given linkages with justice and equity concerns.

Transformational Adaptation Within the UNFCCC

17. Under the UNFCCC, transformational adaptation has been discussed under different fora. They include the Glasgow Sharm el-Sheikh work programme, National Adaptation Plan (**NAP**) Expos, and the Adaptation Committee. These discussions have mainly focused on how to incorporate transformational adaptation and build out national capacity for adaptation action.
18. In the March 2024 round of submissions on the new UAE-Belem work programme on indicators for the Framework, some Parties highlighted the notion of transformational adaptation. Some non-Party stakeholders (**NPS**) submissions addressed the question of indicators and measurement of transformative adaptation, another term for transformational adaptation. In particular, it was recognized that conventional Monitoring, Evaluation, and Learning (**MEL**) systems struggle to assess transformational outcomes.¹⁴
19. Proposals for measurement included “measuring activities and context characteristics” as well as measuring “small transformational wins.”¹⁵ It was also noted that transformative change can be monitored at a lower frequency. Further, a few submissions by observer organizations highlighted some tools available to implement transformative climate action (e.g. UN Development Programme-

C. Issues and Options

20. The following section highlights potential issues for discussion as Parties consider transformational adaptation at CMA6. It also sets out a number of options for decision text and/or outputs for CMA6.

Issues

21. **Defining transformational adaptation:** Given that transformational adaptation is complex, context-specific and therefore more likely to be nationally determined, it is difficult to define at the global level. Some scholars note that transformational adaptation has been used as an “overarching metaphor for radical and fundamental change” and that attempting a single definition may be “unwise.”¹⁹ As a middle ground, it has been suggested that “conceptual plurality” could be helpful in addressing these complexities.
22. **Addressing the question of intentionality:** In order to have definitional clarity, is also important to address the question of intentionality. In other words, can transformation only be the result of planned adaptation, or it can be the result of natural changes (e.g., a shift to a new biome following large-scale ecosystem collapse).
23. **Capacity and resource constraints:** Capacity and resource constraints, including limited financial resources, of developing countries (especially LDCs and SIDs) make it difficult to deliver on systemic changes. Some Parties have expressed a concern that transformational adaptation is only relevant in resource-rich contexts. Some have further expressed concerns that transformational adaptation will set a new bar for countries that many cannot afford to reach and become an additional barrier in accessing finance for adaptation.
24. **Tracking and measurement:** Measuring and assessing transformational adaptation can be challenging. Especially *ex ante* assessments of the likelihood of transformational adaptation using proxy indicators or criteria as opposed to *ex post* measurement of impacts given the potentially long-time horizons for measurable impacts to materialize.²⁰
25. **False dichotomies:** Transformational adaptation is often defined in relation to incremental adaptation. However, this duality/dichotomy may not always work in practice or may not be reflected accurately in on-the-ground activities, as there is no pre-defined “threshold” beyond which we can definitively say that transformational adaptation has occurred. In addition, incremental adaptation can ultimately lead to transformational adaptation, making these stages even more difficult to identify.
26. **Trade-offs/risks of centering transformative approaches:** An underlying question is whether, to what extent, and in which contexts transformational adaptation may be desirable. By some definitions, transformational adaptation can be conceptualized as a last-resort option or a form of forced adaptation (e.g., relocating a community because of sea level rise). Such instances may cross over into “loss and damage.” In addition, focusing on transformational adaptation may involve the risk of deemphasizing critical adaptation options (such as early warning systems) that may be viewed as “incremental” in nature.

Options

27. The following options outline potential elements that could be included in a decision on transformational adaptation for consideration at CMA6. A CMA6 decision could set out elements for

consideration to help assess what qualifies as transformative adaptation, as well as the dimensions or characteristics of adaptation action that make it conducive to transformational change.

Table 1- Potential elements to be included in a decision

Potential Elements	Description
Development of elements for consideration	<ul style="list-style-type: none"> • systemic/nexus-based approaches • mindset/societal/behavioral shifts • equity considerations • the shift of power and interests • gender-sensitive adaptation investments • future elements and long-term solution • Indigenous knowledge and practice • capacity and capability • innovation • durability • sustainable and equitable resilience and development • the needs of poor, vulnerable, and marginalized populations • avoidance of maladaptation
Definitions	<p>A decision could include key attributes of transformational adaptation that are highlighted across the literature, while recognizing that there is not a singular universal definition that may be applicable in all contexts. This may involve clarifying linkages between incremental and transformative approaches (i.e., that the two are part of a continuum and incremental approaches may evolve into transformational adaptation on the long run) as well as noting the connections between sustainable development and transformational adaptation.²¹</p>
Conceptualize transformational adaptation on a spectrum	<p>Given the ‘conceptual plurality’ on around transformational adaptation, it can perhaps be conceptualized as part of a spectrum between surviving vs. coping vs. adaptation to climate disasters. Transformational adaptation occurs beyond coping and adapting.</p>
Measures and approaches	<p>A decision may highlight measures and approaches that can be conducive to transformational adaptation. Examples of key measures could include the following: focusing on systemic/nexus-based approaches; centering mindset/societal/behavioral shifts; embedding equity considerations; shifting power structures and interests that perpetuate risks; embedding gender-sensitive adaptation investments; focusing on future elements and long-term solutions, drawing on Indigenous knowledge and practices, where appropriate.</p>

Examples of practice to elevate	The UNFCCC Secretariat could compile case studies and examples of practices to elevate. The concept may be more useful in a “backward-looking” perspective. In other words, to assess projects by asking “did this project work/was it transformational”? If so, what made it transformational in its context?
Means of implementation	Other options within a decision could include establishing linkages with means of implementation and defining how support (finance, capacity-building, or technology transfer) can be transformational or facilitate transformational change, which can address concerns about transformational adaptation becoming a new bar to access finance for adaptation.
Draw on potential conceptual frameworks	Potential conceptual frameworks to draw for either an agreed definition or within decision text which could include the Action on Climate Today framework that identifies the five defining features of transformational adaptation or the IPCC’s framework to assess the transformative potential of adaptation actions based on depth (expansion of existing practices vs. new practices), speed (implemented slowly vs. rapid change), scope (localized vs. widespread), and limits (does not challenge soft limits vs. challenging hard limits). ^{22,23}

D. Conclusion

- 33. The evolving concept of transformational adaptation marks a shift towards addressing the root socio-political causes of vulnerability to climate change through systemic and far-reaching changes. Despite its complexity and the challenges associated with defining and measuring it, transformational adaptation is increasingly recognized as a potentially politically powerful concept to drive action towards achieving long-term climate resilience.
- 34. CMA6 in November 2024 provides Parties with an opportunity to highlight global commitments to transformational adaptation, how it is defined and understood at different spatial scales and sectors, and how progress in planning, financing and implementing transformational adaptation approaches might be assessed at the global level.

E. References

- ¹ Under Article 14 of the Paris Agreement, Parties must conduct a global stocktake every five years to evaluate overall progress towards the agreement's long-term goals in mitigation, adaptation, and finance.
- ² UN Framework Convention on Climate Change [hereinafter UNFCCC], Glasgow-Sharm el-Sheikh work programme on the global goal on adaptation referred to in decision 7/CMA.3, Decision -/CMA.5, ¶ 46 (December 2023), https://unfccc.int/sites/default/files/resource/cma5_auv_8a_gga.pdf.
- ³ Mark Pelling, *Adaptation to Climate Change, From Resilience to Transformation* (London, UK: October 14, 2010), <https://www.taylorfrancis.com/books/mono/10.4324/9780203889046/adaptation-climate-change-mark-pelling>.
- ⁴ Climate Investment Funds, *Principles for Transformational Climate Finance to Advance Just and Equitable Solutions* (London, UK: Climate Investment Funds, June 2023), https://www.cif.org/sites/cif_enc/files/knowledge-documents/principles-for-transformational-climate-finance.pdf.
- ⁵ Some definitions of transformational adaptation include both addressing the root causes of vulnerability linked to social equity and environmental sustainability and considering the scale and severity of climate impacts. Additionally, it is important to recognize that some perceive transformational adaptation as a buzzword or a concept primarily rooted in Northern perspectives, viewing it as a potential barrier to accessing funding. This perspective might represent another point on the spectrum. Climate Investment Funds, *Principles for Transformational Climate Finance to Advance Just and Equitable Solutions*.
- ⁶ Intergovernmental Panel on Climate Change [hereinafter IPCC], *Concepts, approaches and examples of Transformational adaptation Presenting on behalf of the IPCC Working Group II Author Team*, [PowerPoint Presentation] UNFCCC, https://unfccc.int/sites/default/files/resource/FINAL_IPCCContribution_GGA_5thWorkshop_IPCC.pdf.
- ⁷ IPCC, *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment (Cambridge, UK and New York, NY, USA: Cambridge University Press, 2022), 163, doi:[10.1017/9781009325844.003](https://doi.org/10.1017/9781009325844.003).
- ⁸ Deutsche Gesellschaft für Internationale Zusammenarbeit [hereinafter GIZ], *Transforming our work: Getting ready for transformational projects* (Bonn, Germany: GIZ, February 2020), https://www.giz.de/fachexpertise/downloads/Transformation%20Guidance_GIZ_02%202020.pdf.
- ⁹ Climate Investment Funds, *Principles for Transformational Climate Finance to Advance Just and Equitable Solutions*.
- ¹⁰ “UK international climate finance results 2022”, Government of the UK, updated July 19, 2023, <https://www.gov.uk/government/publications/uk-climate-finance-results-2022/uk-international-climate-finance-results-2022#fnref:31>
- ¹¹ “UK international climate finance results 2022,” Government of the UK.
- ¹² UNFCCC, *Glasgow-Sharm el-Sheikh work programme on the global goal on adaptation referred to in decision 7/CMA.3*, ¶ 8.
- ¹³ UNFCCC, *Glasgow-Sharm el-Sheikh work programme on the global goal on adaptation referred to in decision 7/CMA.3*, ¶ 46 (emphasis added).
- ¹⁴ UNFCCC, *Glasgow-Sharm el-Sheikh work programme on the global goal on adaptation referred to in decision 7/CMA.3*, ¶ 41.
- ¹⁵ University of Melbourne, *Submission for the UAE – Belém work programme on indicators for the UAE Framework for Global Climate Resilience Submitted by Melbourne Climate Futures (University of Melbourne) on behalf of Melbourne Climate Futures (University of Melbourne); Monash Business School Green Lab (Monash Business School); and Institute for Climate, Energy & Disaster Solutions (Australian National University)* (Victoria, Australia: University of Melbourne, March 28, 2024), <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202404031316---MCF%20GGA%20submission%2020240328r.pdf>.
- ¹⁶ Food and Agriculture Organization of the United Nations [hereinafter FAO], *Submission by the Food and Agriculture Organization of the United Nations (FAO) to the United Nations Framework Convention on Climate*

Change (UNFCCC) in relation to the Global goal on adaptation and the UAE-Belém work programme on indicators for measuring progress achieved towards the targets by 2030, including organization of work, timelines, inputs, outputs and the involvement of stakeholders referred to in Decision 2/CMA.5, paragraph 41 (Rome, Italy: FAO, March 28, 2024), [https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202403281557---FAO submission on Global Goal on Adaptation.pdf](https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202403281557---FAO%20submission%20on%20Global%20Goal%20on%20Adaptation.pdf).

¹⁷ The United Nations International Children’s Emergency Fund [hereinafter UNICEF] and UN Water, and Sanitation and Water for All, *Water and Sanitation Submission to the UAE – Belém work programme on indicators for measuring progress achieved towards the targets of the UAE Framework for Global Climate Resilience* (March 2024), <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202403291334---Joint%20UN%20Water%20Submission%20to%20UAE%20Belem%20Work%20Programme%20GGA%20Metrics%20FINAL%20March%2029th%202024.pdf>.

¹⁸ University of Pennsylvania, *Measuring Progress in the UAE Framework for Global Climate Resilience Submission by Perry World House, University of Pennsylvania* (Philadelphia, Pennsylvania: University of Pennsylvania, March 2024), <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202403291110---2024.3.29-PWH-GGA.pdf>.

¹⁹ K. Lonsdale, et al., *Transformational adaptation, what it is, why it matters & what is needed* (Oxford, UK: University of Oxford, 2015), <https://www.ukcip.org.uk/wp-content/PDFs/UKCIP-transformational-adaptation-final.pdf>.

²⁰ Robbie Gregorowski and Dennis Bours, *Enabling Systems Innovation in Climate Change Adaptation: Exploring the Role for MEL, Transformational Change for People and the Planet. Sustainable Development Goals Series* (January 13, 2022) 159–172, https://link.springer.com/chapter/10.1007/978-3-030-78853-7_11; Government of the UK, “ICF KPI 15: Extent to which ICF intervention is likely to have a transformational impact,” July 2014, <https://assets.publishing.service.gov.uk/media/5b179551e5274a191271788a/KPI-15-Transformational-impact.pdf>.

²¹ UNFCCC, *Summary of the fifth workshop under the Glasgow–Sharm el-Sheikh work programme on the global goal on adaptation: Changing mindsets and world views towards transformation in adaptation, with the inclusion of Indigenous Peoples’ wisdom, values and knowledge, and consideration of crosscutting issues, Decision 3/CMA.4, ¶ 20e and g* (April 24, 2023), https://unfccc.int/sites/default/files/resource/GGA_5_summary%20report_0.pdf.

²² United Nations Foundation, *Submission to the United Nations Framework Convention on Climate Change Glasgow Sharm el- Sheikh Work programme on the Global Goal on Adaptation from the UN Foundation : Prioritizing Transformational Adaptation* (Washington, DC: United Nations Foundation, March 2023), <https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303061937---UNF%20GLASS%20transformational%20adaptation%20submission.pdf>.

²³ IPCC, *Concepts, approaches and examples of Transformational adaptation Presenting on behalf of the IPCC Working Group II Author Team*, [PowerPoint Presentation].