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Global Goal on Adaptation

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Key highlights

- GGA was established in 2015, defining a collective ambition to reduce vulnerability and increase resilience and adaptive capacity in the context of the temperature goal.
- GGA will be instrumental in assessing adaptation progress under the Global Stocktake (GST).
- Albeit slow progress, so far, countries have agreed on targets for the GGA and are in the process of defining indicators.
- With indicators taking shape and less than half a year remaining in the UAE-Belem work programme, it is crucial to have more voices to further inform development of GGA indicators.

Background

The Global Goal on Adaptation (GGA) was formally established under the Paris Agreement in 2015, marking a significant milestone in international climate policy. As outlined in Article 7.1 of the Agreement, the GGA aims to "strengthen resilience, enhance adaptive capacity, and reduce vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal." This goal reflects the global community's recognition that adaptation is a critical pillar alongside mitigation in addressing climate change.





The concept of the GGA was originally introduced by the African Group of Negotiators (AGN) during the lead-up to the Paris negotiations, primarily to address the issue of adaptation costs faced by vulnerable countries. Since its inception, the GGA has been intended as a framework to guide collective efforts in adaptation and to measure progress in strengthening resilience globally.

Despite this early commitment, progress in operationalizing the GGA has been slow. Key challenges have included the absence of a clear, universally accepted framework and methodologies for tracking adaptation outcomes and impacts. This has hindered countries' ability to measure collective progress effectively and to demonstrate the tangible benefits of adaptation actions.

To address these challenges, significant work has been undertaken in recent years to develop robust indicators and methodologies that can provide reliable, actionable evidence on adaptation progress. This includes efforts under structured work programmes such as the Glasgow–Sharm el-Sheikh (GlaSS) and the UAE-Belem work programmes, which aim to establish a clear and practical set of indicators aligned with the GGA. These indicators are essential for enabling countries to monitor adaptation efforts, report on achievements, and inform future actions in a transparent and comparable manner.

Progress in operationalizing and measuring progress in the GGA

Scoping of available methodologies

Following requests made at COP 25¹, the Adaptation Committee (AC) was tasked with exploring a range of approaches for reviewing overall progress toward the Global Goal on Adaptation (GGA). In response, the AC published a technical paper that outlined diverse tools and methods for assessing adaptation progress². The report emphasized the variety of existing approaches and highlighted their potential, while also acknowledging significant capacity limitations, particularly in developing countries. Importantly, the paper concluded that no single, ready-made method could be universally applied. Instead, countries would need to establish tailored frameworks and methodologies suited to their national contexts in order to effectively assess progress under the GGA.

Glasgow-Sharm el-Sheikh (GlaSS) work programme

At COP 26 (CMA 3) in 2021, Parties launched the two-year Glasgow–Sharm el-Sheikh (GlaSS) work programme to advance the Global Goal on Adaptation (GGA). The programme aimed to support the full and sustained implementation of the Paris Agreement by enhancing adaptation action and support. A key focus was to deepen collective understanding of the GGA itself—particularly in relation to methodologies, indicators, data, and metrics, as well as the adaptation needs and the types of support required to assess progress.

^{1. 1/}CMA.2, para 14

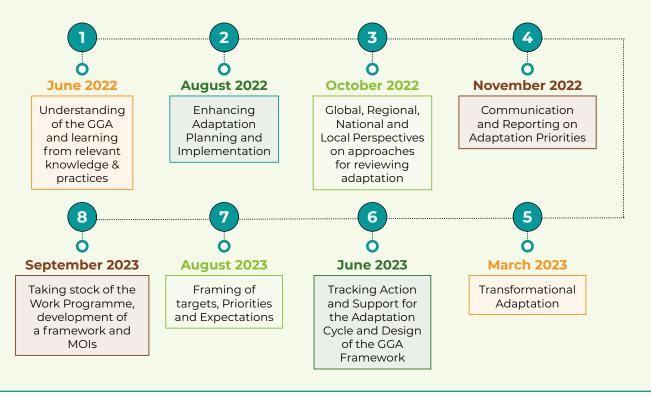
^{2.} https://unfccc.int/sites/default/files/resource/ac2021_tp_gga.pdf

The GlaSS programme also aimed to contribute to the Global Stocktake by informing the review of overall progress toward achieving the GGA. It sought to strengthen national planning and implementation of adaptation actions, notably through support for National Adaptation Plans (NAPs), Nationally Determined Contributions (NDCs), and adaptation communications. In doing so, the programme helped countries better articulate their adaptation priorities, needs, and actions, while also encouraging the establishment of nationally appropriate monitoring and evaluation systems.

Special attention was given to supporting vulnerable developing countries in scaling up adaptation efforts. Finally, the GlaSS programme aimed to clarify how various reporting instruments under the Convention and the Paris Agreement—particularly those related to adaptation—can work together efficiently to minimize duplication and strengthen coherence.

Workshops held throughout 2022 and 2023 under the GlaSS programme provided a platform for dialogue among Parties, negotiators, technical experts, and observers. These discussions explored global, regional, and local perspectives on adaptation planning, implementation, tracking of actions and support, and communication and reporting systems. A milestone was reached at COP 27, where Parties agreed to develop a framework for the GGA, laying the foundation for a more structured approach to assessing collective adaptation progress. Workshops in 2023 further examined transformational adaptation, Indigenous knowledge, and financial institutions' approaches to tracking action and support, with growing emphasis on defining targets, metrics, and indicators essential for operationalizing the GGA.

Figure 1: Timelines and topics discussed at the 8 workshops of the GlaSS work programme



UAE-Belem work programme on indicators

At COP 28 in 2023, marking the conclusion of the GlaSS work programme, countries established the UAE Framework for Global Climate Resilience (UAE FGCR) as a major milestone in advancing the GGA. The UAE FGCR introduced eleven targets to guide global efforts in tracking adaptation progress. These include seven thematic targets—covering water; food and agriculture; health; ecosystems and biodiversity; poverty and livelihoods; cultural heritage; and infrastructure—and four targets corresponding to stages of the adaptation cycle: impact, vulnerability, and risk assessment; planning; implementation; and monitoring, evaluation, and learning (MEL).



Figure 2: Thematic targets of the global goal on adaptation

Significantly reducing climate-induced water **scarcity** and enhancing climate resilience to waterrelated hazards towards a climate-resilient water supply, climate-resilient sanitation and access to safe and affordable potable water for all

Protecting cultural heritage from the impacts of climaterelated risks by

developing adaptive strategies for preserving cultural practices and heritage sites and by designing climate-resilient infrastructure, guided by traditional knowledge, Indigenous peoples' knowledge and local knowledge systems

Attaining **climate-resilient**

food and agricultural production and supply and distribution of food, as well as increasing sustainable and regenerative production and equitable access to adequate food and nutrition for all



against climate change related health impacts, promoting climate-

Attaining resilience

resilient health services and significantly reducing climate-related morbidity and mortality, particularly in the most vulnerable communities



Thematic targets







Substantially reducing the adverse effects of climate change on poverty eradication and livelihoods, in particular by promoting the use of adaptive social protection measures for all

Increasing the resilience of infrastructure and human settlements to climate change **impacts** to ensure basic and continuous essential services for all, and minimizing climaterelated impacts on infrastructure and human settlements

Reducing climate impacts on ecosystems and biodiversity,

and accelerating the use of ecosystembased adaptation and nature-based solutions, including through their management, enhancement, restoration and conservation and the protection of terrestrial, inland water, mountain, marine and coastal ecosystems



Figure 3: Dimensional targets of the global goal on adaptation

Impact, vulnerability and risk assessment: by 2030 all Parties have conducted up-to-date assessments of climate hazards, climate change impacts and exposure to risks and vulnerabilities and have used the outcomes of these assessments to inform their formulation of national adaptation plans, policy instruments, and planning processes and/or strategies, and by 2027 all Parties have established multi-hazard early warning systems, climate information services for risk reduction and systematic observation to support improved climate-related data, information and services

Monitoring, evaluation and learning: by

2030 all Parties have designed, established and operationalized a system for monitoring, evaluation and learning for their national adaptation efforts and have built the required institutional capacity to fully implement the system



Implementation: by 2030 all Parties have progressed in implementing their national adaptation plans, policies and strategies and, as a result, have reduced the social and economic impacts of the key climate hazards identified in the assessments referred to in paragraph 10(a) above

Planning: by 2030 all Parties have in place country-driven, gender-responsive, participatory and fully transparent national adaptation plans, policy instruments, and planning processes and/or strategies, covering, as appropriate, ecosystems, sectors, people and vulnerable communities, and have mainstreamed adaptation in all relevant strategies and plans

To facilitate implementation, COP 28 launched a twoyear UAE-Belem work programme (decision 2/CMA.5), focused on developing indicators for each target. Parties and observers were invited to submit views on how best to operationalize this work. A synthesis report prepared by the UNFCCC secretariat summarized these submissions³, highlighting the importance of leveraging existing global indicator frameworks—such as the SDGs and Sendai Framework—and integrating priorities already reflected in National Adaptation Plans (NAPs) and Nationally Determined Contributions (NDCs). Many parties emphasized the importance of inclusive engagement, recommending the use of technical workshops and expert working groups, and called for a stepwise approach to indicator development, rather than deferring all outputs until COP 30.

Acting on these inputs, the subsidiary bodies (SBI and SBSTA) invited additional submissions of existing adaptation indicators. The Adaptation Committee (AC) was also requested to contribute by extracting relevant indicators from national reports and communications. In total, the UNFCCC secretariat compiled a database of 9,529 indicators. To help refine this vast dataset, the SB Chairs initiated a global call for technical experts. Out of 602 applications, 78 experts were appointed, with each assigned to work on a specific target: seven experts per thematic target and 28 for the adaptation cycle targets.

A technical workshop was convened in September 2023, where experts shared progress and exchanged feedback with Parties. In preparation for COP 29, the expert groups reviewed the compiled indicators with a focus on their relevance to the GGA and its eleven targets. To inform negotiations, the experts submitted target-specific progress reports outlining key indicators and proposed approaches for further refinement⁴.

At COP 29, Parties recognized the need to significantly narrow down the list of indicators. They agreed to reduce the pool to no more than 100 indicators and adopted a set of criteria to guide this prioritization. These criteria emphasized the need for indicators to align with the objectives of the GGA, particularly enhancing adaptive capacity, strengthening resilience, and reducing vulnerability. Indicators should be capable of capturing both quantitative and qualitative dimensions of progress, be informed by the best



available science and traditional and Indigenous knowledge, and should not enable cross-country comparisons.

Additional criteria include the availability of data, methodological robustness, ease of interpretation, and flexibility for use at local, national, and regional levels. Indicators must also allow disaggregation by gender, age, disability, Indigenous identity, and other socioeconomic characteristics, and address crosscutting issues such as human rights, social inclusion, and the role of youth. The indicators are intended to form a globally applicable menu, from which Parties can select based on national circumstances. They should encompass inputs, outputs, outcomes, impacts, and processes, while also reflecting enablers of adaptation, such as financial resources, institutional arrangements, and capacity-building efforts.

By COP 29, Parties also agreed to explicitly include indicators addressing enablers of adaptation implementation, particularly means of implementation (3/ CMA6). These include institutional capacity, finance, and technical support, which are essential for scaling adaptation efforts and ensuring that progress on paper translates into action on the ground.

^{3.} https://unfccc,int/sites/default/files/resource/Synthesis%20of%20Submissions%20edited%20PDF.pdf

^{4.} https://unfccc.int/topics/adaptation-and-resilience/workstreams/global-goal-on-adaptation/experts-informal-progress-reports-november-2024-uae-belem-work-programme

Status of work on indicators

Technical experts have now completed a second phase of the indicator review. This began with developing a common analytical approach: breaking each target into measurable components, mapping existing indicators to those components, and tailoring methods to each target's context. Where gaps were identified, new indicators were proposed. Most groups built on existing international frameworks (e.g., SDGs, Sendai, Kunming-Montreal), leveraging their metadata and data sources while adapting them to reflect adaptation-specific dimensions.

During the review, indicators were evaluated based on alignment with targets (criterion a) and relevance to adaptation (criterion b). Many indicators needed refinement to better capture key adaptation outcomes such as resilience-building and vulnerability reduction. In response, experts proposed extensions and disaggregation strategies.

For example, the food and agriculture group (target 9b) developed adaptation pathways and theories of change to identify measurable elements across scales. This approach helped structure the indicators into headline and sub-indicators, improving their coherence and utility.

Through this process, the total number of indicators was reduced from 9,529 to 490.

Based on this work, the secretariat has published a technical report on the work done so far and a consolidated list of proposed indicators from the various expert groups .

Remaining Gaps and Key Questions

As the development of indicators under the UAE-Belem work programme progresses, several critical areas remain where further input from Parties and stakeholders is essential. First, it is important to assess whether the indicators proposed by technical experts truly reflect the most pressing adaptation priorities across different contexts and scales. This includes evaluating their relevance to local realities, their responsiveness to vulnerable groups, and their alignment with national and global adaptation goals.

In addition to reviewing the current proposals, stakeholders are invited to help identify gaps in the indicator set. Some dimensions of adaptation—particularly those that are context-specific or emerging—may not yet be adequately captured. Stakeholders can play a key role in suggesting new or complementary indicators to fill these gaps, especially where local or Indigenous knowledge systems offer valuable insights.

Another area requiring attention is the structure of the indicators. Stakeholders should reflect on what kind of organization—such as a hierarchical, thematic, or results-based structure—would most effectively represent the relationships among indicators.

The goal is to develop a structure that supports

transparent and efficient reporting while enabling meaningful assessment of adaptation progress over time.

For those indicators that have gained broad support, further work is needed to identify suitable methodologies and data sources. This includes determining whether existing tools can be adapted for use or whether new approaches must be developed. Where data availability is limited, guidance on data collection strategies and proxy indicators will also be important.

Finally, attention must be paid to the operationalization of the proposed indicators. This entails identifying the technical, human, and financial capacities required for implementation. Stakeholders should consider what types of support—such as training, institutional strengthening, or funding—are needed, and which actors (e.g., governments, research institutions, development partners) are best positioned to provide them. Engaging a broad coalition of stakeholders will be critical to ensure that the GGA indicators are not only technically sound but also feasible and impactful across a range of national and local contexts.

^{5.} https://unfccc.int/documents/647061

^{6.} https://unfccc.int/documents/647049





About this AICCRA LEARNING NOTE

This learning note is an output for AICCRA Theme 1: Policy and Partnerships. We would also like to acknowledge the contribution of Adaptation Insights. To learn more about the project explore **here**.

Please find links to other recent GGA publication materials from UNFCCC

- <u>UNFCCC technical report on indicators for measuring progress towards GGA targets</u>
- UNFCCC consolidated list of indicators
- UNFCCC report from agriculture group

About AICCRA



Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA) is a project that helps deliver a climate-smart African future driven by science and innovation in agriculture. It is led by the Alliance of Bioversity International and CIAT and supported by a grant from the International Development Association (IDA) of the World Bank. Explore our work at **aiccra.cgiar.org**.