

Next Steps for Defining a Monitoring, Evaluation, and Learning System for the Global Goal on Adaptation by COP 28

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Next Steps for Defining a Monitoring, Evaluation, and Learning System for the Global Goal on Adaptation by COP 28

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Executive Summary

Since the commitment taken by parties to the United Nations Framework Convention on Climate Change under the Paris Agreement in 2015 to enhance adaptation efforts and strengthen resilience, the last Conferences of the Parties (COPs) to the framework convention have been concentrated on negotiating a Global Goal on Adaptation (GGA). Progress was slow until COP 26 in 2021, with the establishment of the Glasgow–Sharm el-Sheikh work program, which initiated a series of eight workshops in 2022 and 2023 to advance on the GGA. Still, by the end of the first half of the program, there have been only limited advances toward areas of consensus and a lack of concrete proposals for the configuration and content of the GGA.

This report aims to support government stakeholders and other non-state actors involved in the negotiations on the GGA by providing non-prescriptive and pragmatic directions for finalizing a GGA framework by COP 28. This report first provides an overview of key concepts and elements needed under monitoring, evaluation, and learning (MEL) frameworks, along with examples and relevant conceptualizations of the GGA for actors to advance their understanding and views of the prospective GGA framework. This will also provide a basis for language and ideas with which parties can engage. The core outlined elements should include the following:

- Establishing an ultimate goal for the framework
- Organizing interventions around the theory of change
- Using multiple sources of information, including indicators and targets (either output/outcome/impact-level indicators or process/output-type targets and indicators)
- Defining roles and approaches for analysis and learning.

Subsequently, the report discusses the lessons from other international agreements, such as the Sustainable Development Goals (SDGs), Sendai Framework for Disaster Risk Reduction, and Convention on Biological Diversity and analyzes recent submissions under the Glasgow–Sharm el-Sheikh work program, highlighting the opportunity for the GGA to reframe roles and responsibilities for doing the MEL of adaptation globally.

Finally, the report provides directions for finalizing the GGA by COP 28, suggesting the use of a mixed approach with the aim of building on existing systems; not adding burden with new indicators and targets; focusing on country-driven, participative, and inclusive sources of information; and highlighting support and means of implementation to deliver the GGA. To be effective, MEL systems must be pragmatically bold and embrace simplicity. Successful implementation of the GGA framework will require strong political will, cooperation, and collaboration at all levels. Ultimately, it is important to remember that the primary aim of the GGA is not only to measure progress on adaptation actions but also to catalyze it.



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Abbreviations and Acronyms

ABU	Argentina, Brazil, Uruguay
AGN	African Group of Negotiators
AILAC	Association of Latin America and the Caribbean
AOSIS	Alliance of Small Island States
BTR	Biennial Transparency Reports
CBD	Convention on Biological Diversity
COP	Conference of the Parties to the United Nations Framework Convention on Climate Change
EU	European Union
GCF	Green Climate Fund
GEF	Global Environment Facility
GGA	Global Goal on Adaptation
GlaSS	Glasgow–Sharm el-Sheikh Work Program on the Global Goal on Adaptation
GST	The Global Stocktake of the Paris Agreement
IISD	International Institute for Sustainable Development
LDCs	least developed countries
LMDCs	Like-Minded Developing Countries
MEL	monitoring, evaluation, and learning
Mol	means of implementation
NAP	National Adaptation Plan
NDC	nationally determined contribution
SDGs	Sustainable Development Goals
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change



1.0 Introduction

In 2015, the Paris Agreement marked a global change in the commitment of countries to address adaptation, capturing the need to increase its visibility and support for it. As part of the efforts to bring adaptation “on parity” with mitigation, parties established the Global Goal on Adaptation (GGA) to serve as an overarching aspiration to raise ambitions and accelerate collective actions on adaptations (Ngwadla & El-Bakri, 2016).

Progress on the GGA was slow until the establishment of the Glasgow–Sharm el-Sheikh (GlaSS) work program (United Nations Framework Convention on Climate Change [UNFCCC], n.d.-a) under Decision 7/CMA.3 (UNFCCC, 2021) in 2021 at COP 26 (Beauchamp & Motaroki, 2022). The 2-year program, which focuses on convening eight workshops in 2022 and 2023 and on voluntary submissions by parties and non-party stakeholders, has raised visibility for the GGA (UNFCCC, n.d.-c). At the end of the first year of the GlaSS and its first four workshops, there had been only limited advances toward new areas of consensus and a lack of concrete proposals for the configuration and the content of the GGA (UNFCCC Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement [CMA], 2022a).

However, elements to be used as the basis for the GGA framework emerged from the COP 27 negotiations through Decision 3/CMA.4 (UNFCCC CMA, 2022b). This was primarily supported by the G77 but saw relative convergence for the elements to be considered as a draft GGA framework based on the four overarching dimensions of the adaptation cycle under the United Nations Climate Change regime¹ (Sangomla, 2022). Still, it remains unclear how the suggested dimensions and elements serve as a basis to be operationalized for the monitoring, evaluating, and learning (MEL) of collective adaptation progress and what are other parts of the GGA framework to be defined. These questions need to be urgently addressed, as parties also decided at COP 27 to use the last year of the GlaSS to finalize a GGA framework with a view to adopting it at COP 28.

This report aims to support government stakeholders and supporting actors involved in the negotiations on the GGA and adaptation more broadly by providing non-prescriptive and pragmatic directions for finalizing operationalizable elements of a GGA framework by COP 28. This report first provides an overview of key concepts and elements needed under MEL systems, along with examples and relevant conceptualizations for the GGA for actors to advance their understanding and views of a prospective GGA framework. This will also provide a basis for language and ideas that parties can engage with. The report then discusses lessons from other international agreements and from recent submissions under the GlaSS work program, highlighting the opportunity for the GGA to reframe roles and responsibilities for doing the MEL of adaptation globally. Finally, the report provides directions for finalizing the GGA by COP 28.

¹ While the adaptation policy cycle can be configured differently under different initiatives, the UN Climate Change regime, including the Cancun Framework, specifies four elements along an iterative process: assess impacts, vulnerability, and risks; plan for adaptation; implement adaptation measures; and monitor and evaluate adaptation—along with learning (UNFCCC, n.d.-b).



2.0 The GGA as a Basis for the Global MEL System for Adaptation Under the Paris Agreement

The GGA was established as a counterpart to the goal of limiting global temperatures to “well below 2°C and to 1.5°C”. In other words, the GGA implicitly represents the conceptual and methodological framework through which parties and the UNFCCC will conduct the MEL of adaptation under the Paris Agreement. Article 7, Paragraph 14 of the Paris Agreement explicitly tasks the Global Stocktake (GST) process to “review the overall progress made in achieving the Global Goal on Adaptation” (UNFCCC, 2015). As such, the GGA framework can be expected to provide the system, or the plan and processes, for the GST to assess collective progress on adaptation on a 5-year basis, along with how this assessment will contribute to the different dimensions of the adaptation cycles. In other words, a key component of the GGA framework should be the definition of the MEL system that will provide evidence and map out the way for the world to enhance adaptive capacity, strengthen resilience, and reduce vulnerabilities associated with climate change (UNFCCC CMA, 2022b).

The elements from Decision 3/CMA.4, as a GGA framework that emerged from COP 27, provide grounds for defining a MEL system; however, not all the elements of a full system are present. More importantly, considerations about the processes and roles for its implementation in alignment with other global, national, and sub-national MEL systems are not currently discussed. Ahead of COP 28, it is crucial for countries and observers involved in discussions on the GGA to understand concepts and elements of MEL systems to discuss (with an agreed language) how to move the elements from the COP 27 decision forward. Moreover, actors involved in the GGA discussions should consider good practices for designing and implementing MEL systems for the prioritization of elements and processes to be adopted for the GGA framework by COP 28.

This section reviews key MEL concepts, elements of MEL systems and systems, and conceptualizations of the configuration of a global MEL system under the GGA framework. The conceptualizations and elements used in this report are based on the most recent negotiation outcomes, namely the elements to be considered for the GGA framework in Decision 3/CMA.4 (UNFCCC CMA, 2022b). We recognize this is subject to change during the year. This report is neither a comprehensive guidance on MEL: rather, it focuses on key MEL concepts that are relevant to decisions as part of the GlaSS ahead in COP 28. We focus on key elements of MEL systems and on processes requiring definition to have implementable MEL systems that can accelerate adaptation actions.

For the purpose of this report, we differentiate between the Global Goal on Adaptation (GGA), as the goal defined under Article 7.1 of the Paris Agreement; the GGA framework, as the future arrangements and mandates to make that goal operational; and the MEL system under the GGA, as the system for track and assess data and evidence that will inform how progress is made against the GGA, and for multiple stakeholders to learn from the insights gained.



2.1 MEL Terms and Concepts

MEL systems vary highly according to the type and context of the intervention concerned (such as an initiative, policy, program, or project) and its scope, for example, across which levels it takes place (global, national, regional, and/or local levels). Overall, MEL helps initiatives clarify intentions, collect and monitor data to assess progress toward goals, and leverage insights to learn about and improve the design of interventions based on evidence (see Box 1). MEL systems play a crucial role in identifying how best to reduce vulnerability and build resilience, with several approaches, tools, and frameworks developed by countries and civil society over the years (Bours et al., 2014).

Box 1. Definitions of MEL

MEL consists of three types of exercises and processes:

Monitoring is the ongoing collection of data on chosen indicators to track the performance of an intervention and signal whether progress is being made.

Evaluation refers to the sporadic analysis or assessment of an intervention to understand the performance of an intervention according to determined criteria (e.g., effectiveness, sustainability, or impact). Evaluation uses monitoring and additional data to assess what is (or is not) being achieved and how.

Learning occurs when knowledge generated through monitoring and evaluation (and available research and insights) leads to changes in practices, behaviours, and policies. Learning allows the continuous improvement of an intervention and adaptation to new circumstances.

A **MEL system** refers to the actual tools, responsibilities, and processes used to implement the MEL system. In other words, it is the practical implementation of the MEL system.

See Appendix A for a MEL concept cheat sheet, including further terms and examples.

It is important to conceptualize MEL as both a distinct phase in the adaptation policy cycle and as an ongoing process throughout the entire policy cycle. MEL systems involve a dedicated set of processes, activities, and exercises associated with the development and implementation of a MEL system. At the same time, MEL activities carry on throughout the planning and implementation phases. For example, countries often start developing their MEL system during the planning phase, while monitoring happens during the planning and implementation phases to ensure things are on track; evaluation may include periodic reviews or assessments at key decision points. And, critically, learning happens continuously throughout the entire policy cycle—fuelling the ongoing, iterative nature of adaptation planning and action (National Adaptation Plan [NAP] Global Network, 2023a).

Various levels of understanding of MEL concepts and practices exist, along with different terminologies used (and different translations across several languages). This can easily cause confusion and slow progress toward creating a common understanding of what needs to be



achieved when finalizing the necessary elements of a MEL system for the GGA framework. Some MEL terminologies are often used interchangeably yet can have nuanced (or specific) implications depending on the levels at which they are used (see Appendix A).

2.2 Elements of the GGA to Inform a MEL System

As the basis for a global MEL system for adaptation under the Paris Agreement, the GGA framework must also include elements for the UNFCCC, countries, and other relevant actors to implement the activities necessary for its implementation across the policy cycle. Core elements needed for a MEL system to be operationalizable under the GGA framework include:

A Vision/Ultimate Goal/Ultimate Impact for the MEL System

Theory	An intervention and its related MEL system must identify its vision or ultimate goals and the related expected ultimate impacts. This will help determine what data need to be collected and how they should be analyzed. Interventions tend to be organized around a theory of change, defined as a planning process that articulates how change can be achieved through an intervention (Pringle & Thomas, 2019).
Applied to GGA	In the case of the GGA, Article 7.1 established a clear vision and ultimate goal of the “global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing 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 referred to in Article 2.”

Theories and Dimensions of Change/Medium-Term Outcomes

Theory	<p>Theories of change also articulate the theoretical and conceptual definitions of the intervention; they outline the broad dimensions through which change is expected to achieve the ultimate vision. Theories of change involve articulating the logic behind the intervention, including the assumptions, activities (inputs), outputs, outcomes, and impact.</p> <p>MEL systems and theories of change can be nested to break down large-scale, complex, and multi-level initiatives into simpler and more practical pieces. For example, the global MEL system for adaptation under the GGA will provide an umbrella for the regional, national, and sub-national MEL systems that exist.</p>
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<p>Applied to GGA</p>	<p>In the case of the GGA, Decision 3/CMA.4 (UNFCCC CMA, 2022b) proposes three layers of important elements through which changes at the output and outcome levels can be thought through and captured. First, the adaptation policy cycle provides the four overarching dimensions for achieving the aim of the GGA: i) impact, vulnerability, and risk; ii) assessment; iii) planning and implementation; and iv) MEL. The cycle conceptualizes that support and means of implementation (MoI) (in terms of finance, capacity building, and technology transfer) are intrinsic considerations under each of its dimensions. The elements of a draft GGA framework then suggest the possible classification and categorization of evidence on progress on two additional levels: themes and cross-cutting considerations (see Figure 1). The draft elements have not yet been agreed, and parties could aim to agree on these key elements by COP 28.</p>
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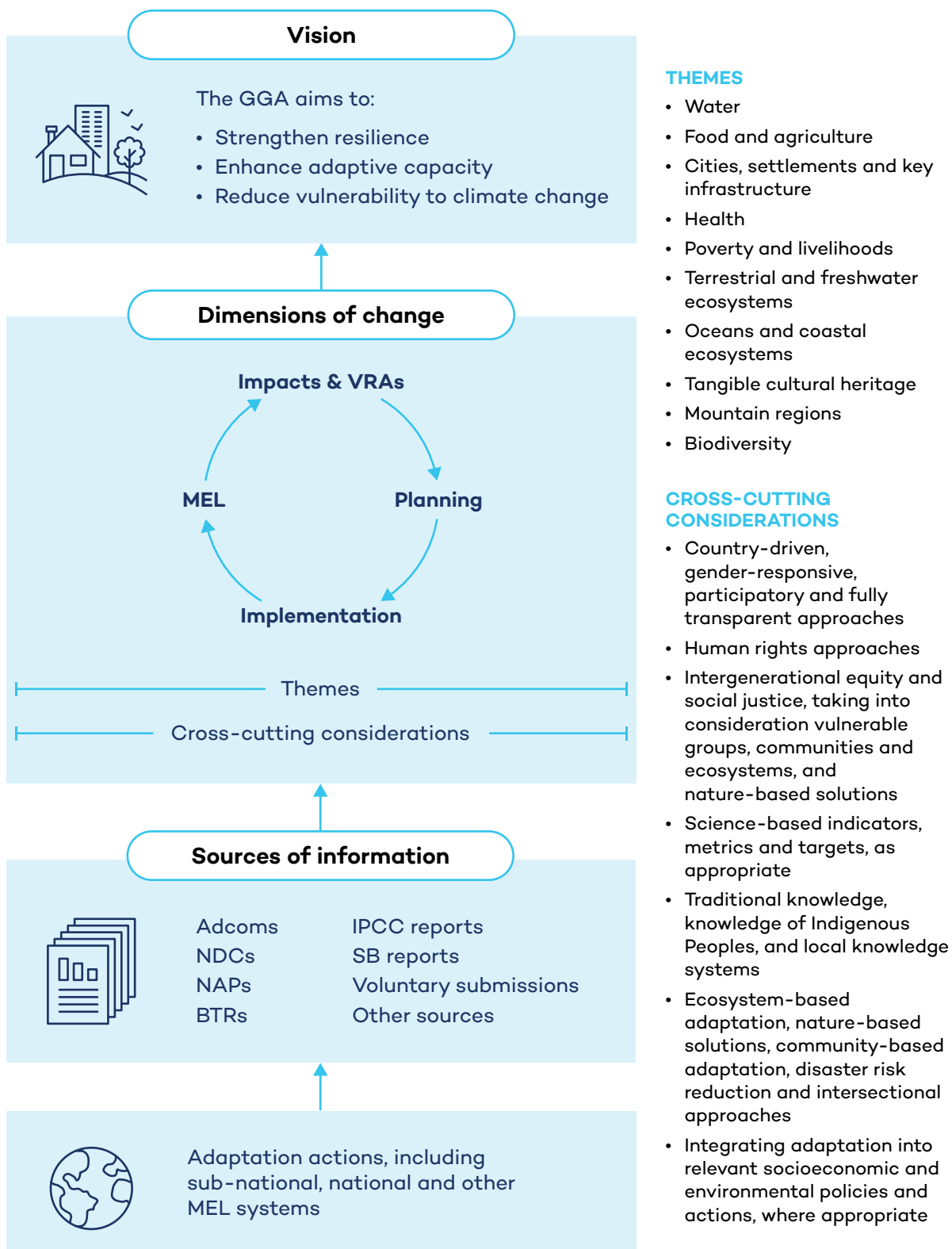
Figure 1 explains how the draft elements of a GGA framework as per Decision 3/CMA.4 (UNFCCC CMA, 2022b) can provide the basis for a global MEL system for adaptation.

Sources of Information

<p>Theory</p>	<p>MEL systems require the use of multiple sources of information to produce and triangulate evidence. There can be different types of sources of information, from primary data sources that require empirical data collection, to secondary sources that already exist, such as government statistics, reports, and studies, and are used to provide additional context or support to the primary data sources. Other MEL and performance systems can provide direct inputs, especially when frameworks are aligned and share key indicators. Expert opinions can also be a source of data sources (Institut du Développement Durable et des Relations Internationales, 2021).</p>
<p>Applied to GGA</p>	<p>Decision 7/CAM.4 identifies sources of information that are primarily secondary. Because it is focused on the assessment of global, collective progress, the GGA framework is not suited to directly include direct primary sources of information across all countries and communities of the world. It is, therefore, important for countries to capture varied voices and lessons about progress on adaptation that reflect their realities through inclusive national MEL systems. As such, sources of information under the GGA can be varied yet must rely on the MEL systems of other regional, national, and sub-national authorities and initiatives.</p>



Figure 1. A global MEL system for adaptation under the GGA framework



Source: Authors' diagram.



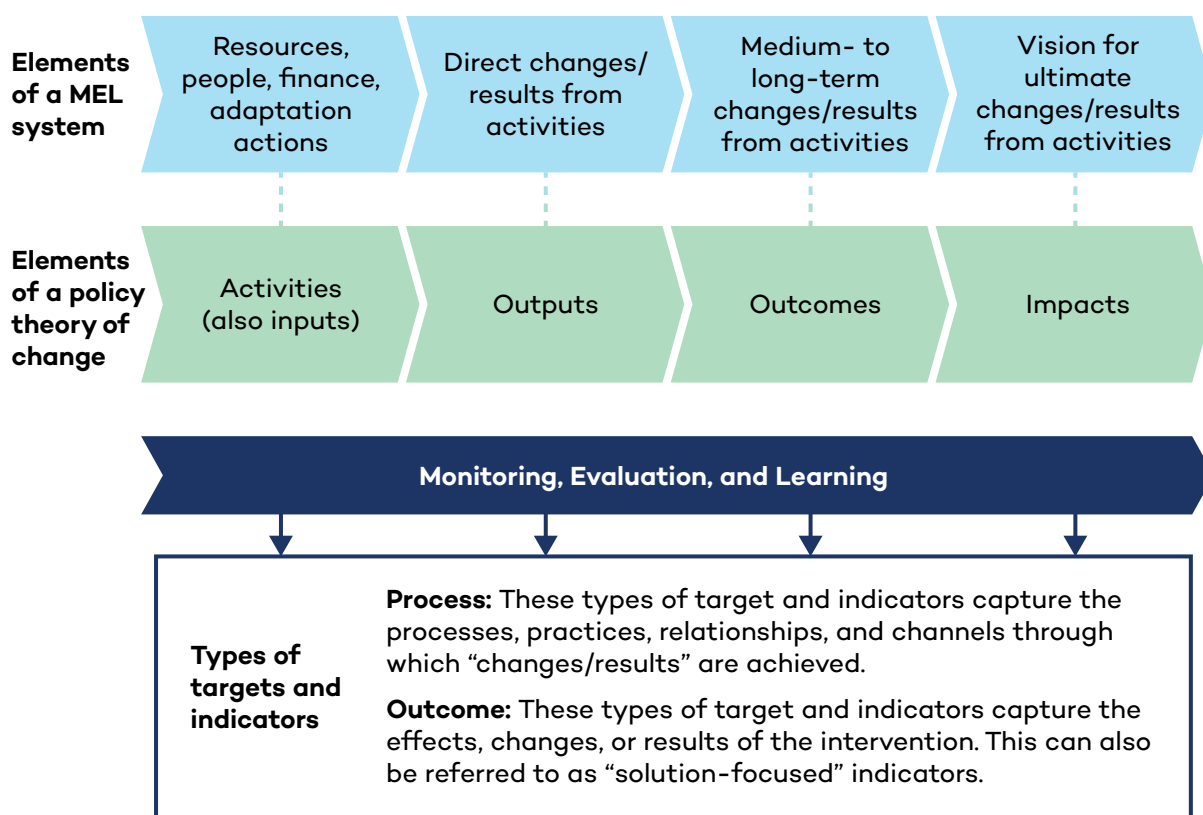
Indicators and Targets

<p>Theory</p>	<p>MEL systems include targets and indicators to assess progress toward achieving the goals and objectives of an intervention.² Targets and indicators are important to identify whether the theory of change is unfolding as intended and not creating unintended or negative consequences. Tracking progress through targets and indicators helps make adaptive changes to interventions. It is important to realize that due to varying national priorities and different adaptation plans, there is no single universal or standard set of indicators (Leiter & Pringle, 2018).</p> <p>MEL systems can include input-, output-, outcome-, and impact-level indicators (see Figure 2 and Appendix A). National MEL systems for adaptation policies are useful in assessing implemented activities, through looking at either process- or outcome-type targets and indicators. “Process” refers to progress in the implementation of an intervention aimed at enhancing adaptive capacity, strengthening resilience, and reducing vulnerability (Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ] & International Institute for Sustainable Development [IISD], 2015). “Outcome” refers to the actual changes and impacts resulting from an implemented intervention, and, therefore, it assesses whether an intervention has actually taken place (GIZ & IISD, 2015).</p> <p>Chosen targets and indicators can be verified and revised against some of the commonly used indicator standards, such as specific, measurable, attainable, relevant, and time-bound criteria (EvalCommunity, 2023). These represent the key elements that allow the testing of whether the selected indicators are clear and reachable.</p>
<p>Applied to GGA</p>	<p>To date, GGA discussions have not provided agreed targets or indicators, and discussions are ongoing on the scope and timing needed for defining targets and indicators for the GGA. However, the Adaptation Committee report on approaches to review the GGA and submissions to the GlaSS work program provides a set of good practices for setting targets and indicators. Sections 3 and 4 analyze current views and directions for advancing these elements in the GGA framework. When considering a GGA framework for adoption by COP 28, countries and observers may wish to consider the pros and cons of using different levels of targets (see Table 1).</p>

² While most MEL systems and activities use targets and indicators to track and assess progress, evaluative exercises such as progress reporting can be done without pre-existing indicators (Grenada, 2021; Guerdat, 2021).



Figure 2. Conceptualizations of the elements and levels of a MEL system and its relationship with a theory of change



Source: Authors' diagram.

Note: See also Appendix A.

Table 1. Pros and cons of different target types

Type of target	Pros	Cons
Output level	<ul style="list-style-type: none"> • Relatively easy to measure and verify • Relatively easy to combine at the global level to assess collective progress • Relatively straightforward for countries to apply • Tangible • Can be directly controlled without being affected by external factors 	<ul style="list-style-type: none"> • Often does not indicate the real impact of an intervention but only its course • Can create a biased understanding of progress and lead to maladaptation • Can only show a narrow snapshot of evidence rather than a more comprehensive view



Type of target	Pros	Cons
Outcome level	<ul style="list-style-type: none"> • Enables the longer-term understanding of results • Provides a broader perspective of the activity results, taking into account various aspects • Reflects the level of achievement, not solely the result • Helps increase accountability for achieving results • Indicates project effectiveness and not only completeness 	<ul style="list-style-type: none"> • Requires agreed methodologies for informing on the same target • Can involve complex and resource-intensive methods • Can be affected by external factors beyond the control of the person planning the activity (therefore also requires a keen understanding and anticipation of those potential factors) • Cannot be observed immediately • Can sometimes be set at an unrealistic level, which can lead to disappointment and disillusionment • Adds reporting burden to states

Roles and Approaches for Analysis and Learning

Theory	<p>MEL systems must also include approaches for assessing and learning from the data collected under monitoring and evaluation activities. While monitoring and collecting data on indicators help check if the interventions are progressing, evaluative analysis is required to understand if the intervention has achieved its objective and also—most importantly—if and how the expected pathways of changes are leading to the intended effects. Evaluation is required to understand the performance of an intervention in terms of different criteria, such as effectiveness, adequacy, impact, efficiency, and sustainability—among others (GIZ & IISD, 2015; Silva Villanueva, 2011).</p> <p>Learning is essential to put into practice the insights gained from monitoring and evaluation. It is vital to communicate and share the lessons learned to improve how adaptation interventions are implemented, accelerate adaptation action, and avoid maladaptation (Pringle, 2020). Learning, reporting, and communications are processes that underpin transparency and mutual accountability, fostering stakeholder engagement and ownership. All MEL processes require robust stakeholder engagement.</p>
Applied to GGA	<p>The Adaptation Committee’s 2021 report on assessing approaches for reviewing the GGA suggested different analysis and learning processes for the GGA (Adaptation Committee, 2021). The Adaptation Committee, in collaboration with the Least Developed Country Expert Group and the Standing Committee on Finance, has also produced useful work on related methodologies for reviewing the adequacy and effectiveness of adaptation and support (UNFCCC, n.d.-d). However, there have been only limited discussions on this topic under the GlaSS work program to date. While the GST is the mandated process for assessing progress on the GGA, the GGA has the remit to define the analytical approach and frameworks for the GST to apply, along with other potential assessment and learning processes.</p>



3.0 Opportunities for the GGA Framework

Decision 3/CMA.4 (UNFCCC CMA, 2022b) provides elements that serve as a basis for a global MEL system for adaptation under the GGA framework. Countries should use these foundations to agree on what a fully fledged GGA framework could look like. With the hope of finalizing an operationalizable framework by COP 28, actors involved in the GlaSS work program must now turn to finalizing elements and processes for doing the different MEL activities throughout the adaptation policy cycle.

3.1 Lessons From Other International Agreements

Global frameworks and initiatives looking to track progress across countries for climate change adaptation have often started by developing indicators. This top-down approach sets global targets and indicators that countries then need to inform through the national MEL exercises. The Sustainable Development Goals (SDGs) (United Nations Department of Economic and Social Affairs, 2022), Sendai Framework for Disaster Risk Reduction (United Nations Office for Disaster Risk Reduction, 2015), and Convention on Biological Diversity (CBD) (1992) are examples of international agreements that have taken this approach. For example, the SDGs' global indicator framework includes 248 indicators that can be chosen and contextualized by countries (United Nations Department of Economic and Social Affairs, 2022). Global targets and indicators can help generate political buy-in and support for development policies, as they are seen as legitimate and widely accepted. Using global indicators, such as the SDGs, can help ensure that development policies are aligned with global priorities and commitments.

However, this approach has limitations because the lack of available information to fit into the framework means the overview and indicators cannot provide a comprehensive and nuanced view of global progress (Diaz-Sarachaga et al., 2018). While, in theory, top-down approaches can promote standardization and comparison of the information collected through MEL, global indicators often don't reflect local context or priorities. Not only can a top-down approach render indicators meaningless for capturing local realities and informing policies, but it often ignores the existing MEL systems in place in countries (Hickmann et al., 2022). Almost half (48%) of submitted NAP documents already include MEL systems as part of their NAP processes, with 55% referencing specific indicators (NAP Global Network, 2023b). A 2021 report from the African Group of Negotiators (AGN) Expert Support on indicators to inform the GGA reviewed over 400 indicators used to monitor adaptation across the AGN (Nowak et al., 2021).

Long lists of top-down indicators often create excessive bureaucracy in negotiating indicators and their methodologies as well as additional burdens for collecting evidence. In fact, the SDGs' global indicator framework took nearly 2 years to develop, while the CBD's Global Biodiversity Framework took over 4 years to negotiate and adopt (United Nations General Assembly, 2017; IISD Earth Negotiations Bulletin, 2022). Importantly, while top-down approaches can create political buy-in, the incentives and financial support for the technical



work on MEL rarely follow. This means that countries' capacities to do MEL and reporting on a voluntary basis remain limited and disincentivized.

Ahead of COP 28, the GGA negotiators have the opportunity to learn from previous exercises in creating global MEL systems by combining a minimal top-down approach that can set global ambitions and political buy-in in the process while leveraging bottom-up or country-driven approaches to inform detailed indicators and sources of information.

3.2 Views From GlaSS Conversations and Submissions

The submissions to the GlaSS work program and to the GlaSS workshops to date show that most parties support a different approach for the GGA to present a new type of global MEL system. Following the call of the UNFCCC to share additional views on the workshops regarding the GlaSS work program on the GGA to be held in 2023, 28 parties and observers contributed by submitting their recommendations, most of which were joint submissions as a group of countries (e.g., the European Union [EU], Alliance of Small Island States [AOSIS], AGN, Like-Minded Developing Countries [LMDC]), as well as UN bodies (e.g., UNEP), intergovernmental organizations (e.g., the International Union for Conservation of Nature), and non-governmental organizations (e.g., World Wildlife Fund). Parties expressed views on both the modalities and the content of the remaining four workshops planned in preparation for COP 28 to be held at the end of the year in the United Arab Emirates.

A majority of submissions urged discussions not to duplicate previous work or workshop topics and move forward to concretize the elements of the framework. Additionally, submissions showed areas of convergence between parties and topics that remained to be discussed, indicating that the GGA should focus on the following:

- **Build on existing systems:** One common point was the insistence that the new framework be built on what already exists, on the one hand, to avoid putting an unnecessary burden on states, and on the other hand, to use previously developed resources that appear to be adequate (AGN, 2023; Canada, 2023; LMDC, 2023; United Kingdom, 2023). For this purpose, it was proposed to look to other existing regimes or agreements as reference points (e.g., UNFCCC sources, the UNEP Adaptation Gap Report [2022], Convention on Biological Diversity, 2030 Agenda for Sustainable Development, Sendai Framework for Disaster Risk Reduction) (Argentina, Brazil, Uruguay, 2023; EU, 2023). In addition, a commonly mentioned approach across the submissions was locally led adaptation, which emphasizes the need to reflect local realities through a bottom-up approach to the GGA. For example, the EU proposed that national and sub-national adaptation goals (including the existing methodologies, data, metrics, and indicators) should constitute a point of departure for the GGA framework (EU, 2023). LMDCs insisted that targets must be based on a bottom-up approach, taking into account national circumstances (LMDC, 2023).
- **Agree on the scope for defining targets and indicators:** All groups agree that there is no “one-size-fits-all” approach to measuring adaptation due to varying national features. Both the United Kingdom and Japan reiterated that it is not possible to set and apply one single globally uniform quantitative target(s) and/or indicator(s)



(Japan, 2023; United Kingdom, 2023). Views still differ on the timing and the scope for the GGA to identify and select specific indicators for assessing collective progress. Australia proposed to avoid the establishment of indicators or metrics altogether and instead enhance efforts to analyze good-practice trends and subsequent risk mitigation (Australia, 2023). Most groups like AOSIS welcomed discussions on that matter, specifying the need for any set of metrics and indicators to be both quantitative and qualitative in nature (AOSIS, 2023). Finally, the Least Developed Countries (LDCs) Group underscored the need for metrics, indicators, or targets, arguing that the GGA framework is intended to support the global assessment of progress (LDCs, 2023). The LDCs group also emphasized the need for indicators to be based on metrics already in use by countries. Furthermore, some countries have proposed a re-clustering of themes (Canada, 2023) or alignment with the sector in the Intergovernmental Panel on Climate Change reports (Russian Federation, 2023).

- **Be guided by multiple types of knowledge:** Regardless of the level of development, many countries indicated that the framework should be guided by the best available science (AOSIS, 2023; EU, 2023; United Kingdom, 2023), or drew attention to the importance of complete and accurate data (Russian Federation, 2023). An additional important element was the emphasis on the inclusive approach, which would draw on Traditional and Indigenous Knowledge and wisdom (Australia, 2023; Canada, 2023; Iceland, 2023; EU, 2023). Finally, adaptation actions should be kept progressive by ensuring their periodic revision and adjustment in line with mitigation action outcomes (AOSIS, 2023; Canada, 2023). In their submissions, developed countries also emphasized the role of the private sector, especially in terms of financing adaptation efforts and the development of new technologies (Canada, 2023; Japan, 2023).
- **Highlight the need for support:** Several developing countries highlighted the importance of MoI, both in terms of the need for the GGA to capture MoI and to provide MoI to achieve the GGA. Countries reiterated that the GGA needs to contribute to making financial flows consistent with a pathway toward lowered greenhouse gas emissions and climate-resilient development (Article 2.1 of the Paris Agreement) (LMDC, 2023; Russian Federation, 2023). They also stressed the necessity to increase support for capacity building. This can include a GGA framework that would be forward-looking in providing guidance (AOSIS, 2023) since the framework should include both an action and a support function (Argentina, Brazil, Uruguay negotiating group, 2023). AGN (2023) and the LMDC (2023) both indicated that no additional burden in terms of communication and reporting should be imposed on developing countries.



4.0 Directions for Finalizing the GGA by COP 28: A mixed approach for defining elements and processes

Convergence for using a mixed approach of both top-down and bottom-up processes to define a MEL system for the GGA has emerged from UNFCCC reports, voluntary submissions, and good practices from MEL literature over the past 2 years. The aim is to build on existing systems (not add burdens with new indicators and targets), focus on country-driven, participative, and inclusive sources of information, and highlight support and MoI to deliver the GGA.

The GGA must remain focused on its overarching goal of enhancing adaptation action and meeting developing-country needs from its first adoption onwards rather than becoming a long-lasting methodological exercise (Wilkinson et al., 2021). As such, countries should remember to focus on advancing elements of both a MEL system and the GGA framework that would make them directly implementable after COP 28. With this in mind, this report highlights directions for advancing on five elements of the GGA framework. Countries should:

Define Indicators Based on Existing Systems

To ensure national and global political buy-in, agreed targets and indicators for the GGA can be important (Bueno & Falivene Fernández, 2023). However, the GGA does not need a MEL system with an extensive list of globally agreed targets and indicators. In fact, evaluative exercises such as progress reporting and stocktakes can be done without rigid indicator-based frameworks (Grenada, 2021; Guerdat, 2021; Leiter, 2022). The GGA should be able to accommodate a diversity of metrics without narrowing down methodological pathways. In fact, a long list of detailed indicators can pose the risks of slowing down the implementation of the GGA framework and actions if negotiations focus on defining indicators and specific methodologies.

Instead, the GGA framework could use a mixed approach to identify a handful of top-down targets that can be informed by a range of bottom-up, contextualized and existing indicators from national MEL systems and existing global MEL systems (AC, 2021; Wenger, 2022). The GGA framework could focus on compiling and synthesizing various targets, indicators and methods from existing systems and sources through a meta-analysis of national and sub-national evidence to ensure the least additional burden on countries. In fact, the elements in Decision 3/CAM.4 already provide four overarching dimensions of the adaptation policy cycle for analyzing and categorizing country-level indicators.

For instance, mapping exercises already exist, such as the IISD and GIZ's Repository of adaptation indicators (2014), and the World Meteorological Organization's mapping of climate changes to specific SDG indicators (n.d.), which can ensure data and reporting synergies between the GGA and other global frameworks, such as the SDGs, the Sendai framework for Disaster and Risk Reduction, and the Convention on Biological Diversity. While the GGA's MEL system should be based on existing system, it will nonetheless need



to evolve to cover issues that are currently not well tracked yet, such as locally led processes and transboundary risks and their management, and new issues emerging from unpredictable climate changes.

Design an Iterative and Boldly Pragmatic MEL System for the GGA

In 2023, the GGA framework and its MEL system should be based on pragmatic and set realistic expectations of what countries can achieve now and before the second Global Stocktake starting in 2026 (Dekens, 2021). Ambitious targets can create a sense of urgency and drive efforts, but they can also discourage stakeholders from implementing MEL and actions to move toward seemingly unachievable targets (Green et al., 2019). It is important to choose indicators that do not exceed the capabilities of the planned intervention and can be feasibly attained. Output-level targets can nonetheless be ambitious (see Appendix A). For example, focusing on increasing the percentage of people covered by NAPs or sub-national adaptation plans is already ambitious, given that several countries are currently formulating their NAPs, with only 44 developing countries having submitted them (NAP Global Network, 2023b; UNFCCC, 2015).

The MEL system under the GGA framework should be an iterative process that continuously evolves to reflect new realities brought by the increasing climate crisis (Bours et al., 2014). This could mean agreeing on overarching dimensions and broad-ranging targets for the GGA framework by COP 28 and proceeding to further analyze information vehicles and sources between COP 28 and the next GST. Technically, targets could even be set only future revisions of MEL system. This could allow for time to mandate specific assignments to constituted bodies such as the Adaptation Committee, the Least Developed Country Expert Group, the Standing Committee on Finance, the Nairobi Work Programme, and the Climate Technology Centre and Network. This step-wise approach could allow the integration of more complex dimensions or outcomes of adaptation, such as how to capture and drive transformational adaptation.

Strengthen Country-Driven and Participatory Processes

To strengthen country-driven and participatory processes, a non-prescriptive framework for the first GGA can guide countries in reinforcing their national MEL systems to gather and communicate data, helping them to articulate their adaptation story (Beauchamp & Bueno, 2021). National MEL systems already compile, synthesize, and aggregate various data for reporting and communicating to the UNFCCC and other global reporting processes, playing a key role in summarizing and analyzing data in both local and global contexts (Leiter, 2021). This includes the forthcoming first voluntary adaptation section of the Biennial Transparency Reports, which are due at the end of 2024.

National and sub-national MEL systems for adaptation play a crucial role in ensuring the evidence communicated captures varied voices and views of progress reflective of local realities (Arora-Jonsson, 2011). Going slowly is important to ensure the process is participatory and that the framework reflects and integrates the voices of the most marginalized groups. Here again, there is an opportunity for the GGA to learn from the lessons of previous MEL systems—by consulting and contextualizing first and analyzing afterwards.



As such, national MEL systems can generate a more comprehensive and representative body of evidence to be assessed in the second GST process. Working from this basis helps refine our understanding of what a global yet nationally informed framework for adaptation could look like. In future iterations, the GGA could use a more predetermined or top-down MEL system that will evolve over time to reflect new realities. Ultimately, it is crucial that countries define indicators that align with the risks and vulnerabilities identified in their risk and vulnerability assessments through consultations and link to the tracking of those priorities in their MEL systems (Eriksen et al., 2007).

Establish Pathways for Informing Policy and Practice

To enhance adaptation actions, the GGA discussions should focus on processes as part of its MEL system and beyond, not just on data (UNEP, 2009). Learning and reflection processes must be embedded throughout the adaptation cycle and at different stages of the GGA framework's implementation. For example, it could identify clear pathways and responsibilities to support countries in improving their NAPs, policies, and projects. Information and dissemination pathways must reach all levels: global, national, regional, and local (Eriksen et al., 2015). Those processes can be defined as part of the MEL system of the GGA, or as additional processes for the GGA framework to increase visibility and political buy-in for adaptation.

Other areas for global assessment and learning include understanding the enablers and barriers of progress, good practices and case studies, and the effect of external factors on adaptation progress (Berrang-Ford et al., 2015). The GGA framework should also attempt to create space for errors, mistakes, and failures to be discussed to avoid maladaptation (Berrang-Ford et al., 2011; Eriksen et al., 2021). A global-level analysis is also required to tie progress on adaptation with the parallel progress on mitigation and the global temperature goal.

Importantly, the GGA framework can clarify pathways to other discussions under the UNFCCC and beyond to secure support and MoI. The COP 27 decision already suggests including MEL of MoI under each of the four adaptation dimensions. This means the GGA's MEL system could assess what and how investments are achieving positive results, but it should also allow for spaces influencing policy and keeping policymakers accountable to their commitments. It can also highlight key areas where further support is critically needed.

Define Roles for Implementing the GGA Framework

Under the remit of the GGA, defining the aspects for implementing a global MEL system on adaptation ahead of COP 28 is critical. This includes modalities, timelines and roles for the global community to support countries to inform the GGA, analyse the evidence gathered, and recommendations to share back insights from the global assessments to regional, national, and sub-national stakeholders. While countries are responsible to communicate and report as comprehensively as possible on adaptation within their boundaries, global actors should be concerned with assessing the collective dimensions of adaptation progress. This means identifying which specific bodies under the UNFCCC or other supporting institutions can lead on the analysis or review of the information provided under the GGA MEL system.



Defining roles to deliver the GGA framework is tricky as there is currently no dedicated body with the capacity to produce global assessments on adaptation evidence under the UNFCCC. Mandates under the GGA framework should carefully consider how existing UNFCCC bodies could work together to deliver and raise ambitions on adaptation, how collaboration with external institutions could help, and whether new capacities should be dedicated to adaptation under the UNFCCC. In fact, the GGA framework can serve as an umbrella for more than the global MEL system on adaptation: it should hold further provisions and mandates in its decision text at COP 28 to link adaptation with mitigation and finance issues.



5.0 Conclusion

The GGA is a crucial component of the Paris Agreement, one that has the potential to improve global adaptation efforts by offering evidence-based guidance and support. As we approach COP 28, discussions on the scope and extent of the GGA framework should consider country views and best practices for designing MEL systems. By focusing on building on existing systems, avoiding additional burdens, and emphasizing MoI, the GGA framework can be operationalized to enhance adaptation actions. A mixed approach can help reach these goals in an achievable and adaptable manner.

To be effective, MEL systems must be pragmatically bold and embrace simplicity. The GGA presents an opportunity to incentivize and strengthen MEL systems in countries and globally while shifting power to national and local strategies, needs, and priorities. However, having a well-designed MEL system is not a substitute for the political will and financial support necessary for implementing sustainable national MEL systems, building lasting capacities, and financing adaptation actions themselves. Successful implementation of the GGA framework and its MEL system requires strong political will, cooperation, and collaboration at all levels. Ultimately, it is important to remember that the primary aim of the GGA framework is not only to measure progress on adaptation actions but mainly to catalyze it.



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Appendix A. Monitoring, Evaluation, and Learning Concept Cheat Sheet

This appendix provides definitions and examples of key monitoring, evaluation, and learning (MEL) concepts and a conceptualization of the relationship between the different terms in Figure 2.

Terminology Related to Levels of Intended Achievements

- Aim** An aim is a general statement of purpose that a project, program, or policy is designed to achieve. Aims are often broader than goals and may be more abstract. For example, the aim of the Global Goal on Adaptation (GGA) is to “enhance adaptive capacity, strengthen resilience and reduce vulnerability to climate change” as stated under Article 7.1. The terms “aims” and “goals” are often used interchangeably.
- Goal** A goal is a broad, overarching aim that an intervention aims to achieve. Goals are typically more general than objectives and may be qualitative or quantitative. For example, a goal might be to increase the resilience of vulnerable communities to the impacts of climate change. The terms “aims” and “goals” are often used interchangeably.
- Objective** An objective is a specific, measurable, and time-bound outcome that a project, program, or policy is designed to achieve. Objectives are typically more specific than goals and are often used to break a larger goal down into smaller, achievable outcomes. For example, an objective might be to increase the resilience of a specific coastal community to sea level rise by a certain percentage within a specified time frame. The terms “objective,” “goal,” and “outcome” are often used interchangeably.

Terminology Related to Levels of Expected Effects or Results

- Impact** An impact is the broader long-term effect of an intervention on the intended beneficiaries or on the environment. Impacts may be positive or negative and may occur over a longer time frame than outputs or outcomes. For example, an impact might be the reduction of vulnerability to extreme weather events for a vulnerable population, leading to increased well-being and decreased poverty.
- Outcome** An outcome is the result or impact of an intervention, often seen in terms of change or transformation. Outcomes are usually more general than objectives and may occur over a longer time period. For example, an outcome might be increased food security and improved livelihoods for a vulnerable population due to the implementation of climate-resilient agricultural practices. The terms “outcome” and “objective” are often used interchangeably.



Output An output is the tangible or intangible result of an activity or project, usually expressed in terms of quantity or quality. Outputs are often used to measure the efficiency of an intervention but may not necessarily reflect the medium-term outcomes or ultimate impacts of the intervention. For example, an output might be the number of households provided with climate-resilient housing.

Terminology Related to Types of Measurements

Target A target is a specific, quantifiable level of achievement that an intervention is designed to reach. Targets are usually expressed as a numerical value or percentage and are often linked to a specific timeframe. They are associated with indicators to measure progress toward achieving goals and objectives. Targets can reflect both the processes and the outcomes created. There can be targets at different levels or time periods of an intervention (output, outcome, and impact). For example, a target might be to reduce the number of households in a vulnerable community that are at risk of flooding by 50% within the next 5 years.

Indicator An indicator is a specific and measurable characteristic to assess the current state and monitor a change throughout an intervention toward achieving a goal or objective. Indicators can be quantitative (such as the number of households with improved access to water) or qualitative (such as changes in attitudes toward household water management). For example, an indicator for the above-mentioned target might be the percentage of households in a vulnerable community that have been relocated to safer areas. The terms “indicators” and “metrics” are often used interchangeably.

Metric A metric is a specific measure or unit of measurement used to quantify the value or level of an indicator. It provides the data or information that is used to track progress over time and assess whether targets have been met. Metrics are usually quantitative and can calculate or composite measures based upon two or more indicators or measures. Metrics help put a variable in relation to one or more other dimensions. They can be expressed in a variety of units, such as percentages, ratios, or absolute numbers. For example, a metric for the above-mentioned indicator might be the number of households in a vulnerable community that have been relocated to safer areas, as measured through household surveys or field visits. The terms “indicators” and “metrics” are often used interchangeably.



Appendix B. Examples of Targets and Indicators Comparing Output and Outcome Levels (Table B1) and Across the Four Dimensions of the Adaptation Policy Cycle (Table B2)

Table B1. Examples of output- and outcome-level targets for impact & vulnerability and risk assessments (VRAs), planning, implementation, and monitoring, evaluation, and learning

Type of target→	Output level	Outcome level
Impact & VRAs	<ul style="list-style-type: none"> • Percentage of population covered by National Adaptation Plans (NAPs), nationally determined contributions (NDCs), and Adaptation Communications (AdComs) that incorporate risk, impact, and vulnerability assessments (Source: Authors). • Percentage of population acquiring an attestation of completion of an adaptation-oriented training (Source: Authors). • Proportion of climate finance effectively used for the purpose of vulnerability reduction (Source: Authors). 	<ul style="list-style-type: none"> • Percentage of reduced deaths from climate-related extreme events (Source: Authors). • Percentage of vulnerable populations protected by NAPs, NDCs, and AdComs that incorporate risk, impact, and vulnerability assessments (Source: Authors). • By 2030, all countries can access climate financing through the Financial Mechanism of the UNFCCC to reduce risk and vulnerability induced by climate change by 80% (Source: UNFCCC, 2022b, Appendix 1).



Type of target→	Output level	Outcome level
Planning	<ul style="list-style-type: none"> • Number of countries with NDCs, long-term strategies, and national adaptation communications, as reported to the Secretariat of the UNFCCC (Source: United Nations Department of Economic and Social Affairs, 2022). • Average time from the beginning of the application process to the effective disbursement of the financing granted and available to support NAP preparation processes through the UNFCCC Financial Mechanism (Argentina, Brazil, Uruguay [ABU] & Association of Latin America and the Caribbean [AILAC], 2023). • Percentage of population covered by national and sub-national adaptation planning exercises grounded in VRAs (Source: Authors). 	<ul style="list-style-type: none"> • All countries have developed national policy instruments to address adaptation to climate change and have integrated it into their development strategies (Source: Authors). • All countries establish policies and regulations that promote and enforce resilience measures (Source: UNFCCC, 2022b, Appendix 1).
Implementation	<ul style="list-style-type: none"> • Total climate finance, mobilized and awarded, to support NAP planning and implementation processes in developing countries, by region (Source: Sustainable Development Goal [SDG] Indicator Framework, 13.a.1; United Nations Environment Programme [UNEP] 2022, Annex 3B). • Proportion and type of transformative adaptation actions implemented by sector and region (Source: Authors). • Percentage of target population covered by adequate risk reduction systems (UNFCCC, 2022b, Appendix 1). 	<ul style="list-style-type: none"> • Percentage of population with strengthened adaptation capacities (Source: Authors). • Percentage of states with strengthened capacities to prepare and implement NAPs and to address the needs and priorities present in AdCom, Biennial Transparency Reports (BTRs), and other climate planning instruments at the national level (Source: UNFCCC, n.d.-c). • Percentage of targeted population aware of predicted adverse impacts of climate change and of appropriate responses (Source: UNFCCC, 2022b, Appendix 1).



Type of target→	Output level	Outcome level
<p>Monitoring, evaluation, and learning (MEL)</p>	<ul style="list-style-type: none"> • Number of countries that have designed and applied a framework or system for the MEL of the adaptation component of their AdComs, NAPs, and other national climate policy instruments (Source: UNFCCC, 2022a, paragraph 174). • Number of technical committees/associations formed to ensure transfer of knowledge (UNFCCC, 2022b, Appendix 1). • Number of tools and guidelines developed (thematic, sectoral, institutional) and shared with relevant stakeholders (UNFCCC, 2022b, Appendix 1). 	<ul style="list-style-type: none"> • By 2030, all countries have accessed funds from the Global Environment Facility (GEF), Green Climate Fund (GCF), Adaptation Fund, etc. for the design and implementation of MEL systems or systems (ABU & AILAC, 2023). • By 2030 all countries have designed and implemented a framework or system for the MEL of the adaptation component (Source: UNFCCC, 2022b, Appendix 1). • Strengthened capacity of national and sub-national stakeholders and entities to capture and disseminate knowledge and learning (Source: UNFCCC, 2022b, Appendix 1).

Note: These outputs and outcome targets in Table B1 are for illustrative purpose only and are not a suggestion of indicators to be used under the GGA framework and its MEL system. This table aims to show the difference between output and outcome-level indicators, drawing from examples from the 2022 annual report of the GlaSS work (United Nations Framework Convention on Climate Change [UNFCCC], 2022b), the ABU-AILAC 2023 submission to the GlaSS (ABU & AILAC, 2023), and from authors.



Table B2. Examples of targets and indicators across the four dimensions of the adaptation policy cycle

Dimension	Target	Indicator
<p>Impact & vulnerability risk assessment</p>	<ul style="list-style-type: none"> Substantially increase the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to the people by 2030 (Source: Sendai Framework target G). 	<ul style="list-style-type: none"> Number of countries that have accessible, understandable, usable, and relevant disaster risk information and assessment available to the people at the national and local levels (Source: Sendai Framework indicator G-5). Percentage of population exposed to or at risk from disasters protected through pre-emptive evacuation following early warning (Source: Sendai Framework indicator G-6). Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030 (Source: SDG indicator 13.1.2).
<p>Planning</p>	<ul style="list-style-type: none"> Substantially increase the number of countries with national and local disaster risk reduction strategies by 2030 (Source: Sendai framework target E). [By 2030] integrate climate change measures into national policies, strategies, and planning (Source: SDG target 13.2). 	<ul style="list-style-type: none"> Number of countries with NDCs, long-term strategies, NAPs, and AdComs, as reported to the secretariat of the UNFCCC (Source: SDG indicator 13.2.1). Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (Source: SDG indicator 13.1.3) Percentage of local governments having a plan to act on early warnings. (Source: Sendai Framework indicator G-4).



Dimension	Target	Indicator
<p>Implementation (including finance)</p>	<ul style="list-style-type: none"> • [By 2030] strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries (Source: SDG target 13.2). • Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020–2030 compared with 2005–2015 (Source: Sendai Framework target A & SDG target 11.5). • Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and Small Island Developing States, including focusing on women, youth, and local and marginalized communities (Source: SDG target 13.b). • Implement the commitment undertaken by developed-country parties to the UNFCCC to a goal of mobilizing jointly USD 100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible (Source: SDG target 13.a). 	<ul style="list-style-type: none"> • Number of deaths, missing persons, and directly affected persons attributed to disasters per 100,000 population (Source: SDG indicator 11.5.1 & Sendai Framework indicator A-1). • Number of people whose livelihoods were disrupted or destroyed, attributed to disasters (Source: Sendai framework indicator B-E). • Total official international support (official development assistance plus other official flows) for national disaster risk reduction actions (Source: Sendai Framework indicator F-1). • Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the USD 100 billion commitment through to 2025 (SDG indicator 13.a.1).



Dimension	Target	Indicator
MEL	<ul style="list-style-type: none"> • [By 2030], enhance capacity-building support to developing countries, including for least developed countries and Small Island Developing States, to increase significantly the availability of high-quality, timely, and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location, and other characteristics relevant in national contexts (Source: SDG target 17.8). • [Learning] Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning (Source: SDG target 13.3). 	<ul style="list-style-type: none"> • Statistical capacity indicator for Sustainable Development Goal monitoring (Source: SDG indicator 17.18.1). • Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding (Source: SDG indicator 17.18.3).

Note: Examples are included from the Sustainable Development Goals and from the Sendai Framework on Disaster Risk Reduction to illustrate the position that a GGA framework could be based on existing indicators, to avoid additional burden on countries. This table also shows that specific indicators on climate adaptation may be needed to complement existing systems. This also outlines the need for better indicators for implementation.

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