



The Global Goal on Adaptation

A CONCEPTUAL ANALYSIS

Discussion Note

October 2022

by Xolisa Ngwadla¹ with contributions by Benito Müller²

Table of Contents

EX	EXECUTIVE SUMMARY	
1.	BACKGROUND OF THE GGA	.2
2.	KEY CONCEPTS OF THE GGA	.4
3.	ELABORATION OF THE KEY CONCEPTS	.4
	.1 The Goals	
3	2 Adaptation Elements Targets	
	a. Adaptation Planning	. 6
	b. Implementation of actions	
	c. Adaptation Finance	
4.	SOME POINTS TO CONSIDER IN THE GLASS	. 8

¹ Independent Expert, Lead Negotiator of the African Group to the Paris Agreement. ² Managing Director OCP and Director ecbi.

Executive Summary

The Glasgow-Sharm el Sheikh Work Programme on the Global Goal on Adaptation (GGA) has the potential to enhance adaptation action under the Paris Agreement, building on the institutions and information generation processes of the past. Much of the hope lies in the Agreement's notion of setting collective goals which are periodically assessed during a global stocktake.

The Paris Agreement contains agreed concepts that are crucial in the operationalization of the GGA; these concepts include, risk, and needs. This Concept Note asserts that a further articulation of the GGA should be built on a risk framework that recognizes complementarity of adaptation to mitigation in the context of the temperature goal. It reinforces the notion of adaptation needs being dependent on the level of mitigation action.

The risk-related framing of the GGA is predicated on 'acceptable' risks based on a temperature goal. The framing presumes that for a temperature scenario, climate impact risks can be understood for each adaptation sector. As such, risk reduction of climate impacts forms part of the goal towards which the global community is working. Whereas a needs-based framing allows for outcomes to be defined in respect of activities and resources to achieve risk reduction goals, for which the global community can set targets.

The Concept Note proposes two key concepts. The first, *risk-based metrics*, define an overarching 'Goal' based on acceptable risk, with 'Sub-goals' that elaborate the overarching goal to adaptation sectors and/or impacts, such as health, agriculture, floods, and heatwaves. The second concept of 'Adaptation Elements Targets' is premised on adaptation activities and needs contained in elements of adaptation communications in Decision 9/CMA.1. The implementation of these activities translates to a positive direction of travel towards achieving the goals. The Adaptation Elements Targets would, therefore, be set for: (i) adaptation planning; (ii) implementation of adaptation actions; and (iii) adaptation finance, as a minimum.

The Concept Note illustrates how metrics for Goals, Sub-goals, and Adaptation Elements Targets can be developed/set, which would facilitate assessment of progress towards the GGA in the global stocktake. The Concept Note further identifies some key characteristics of such metrics, including: aggregability assessment, simplicity, and glocal relevance, noting some metrics may not have a termination point, but rather a direction of travel.

Finally, the Concept Note presents some suggestions on what the GGA work programme needs to achieve at different stages, in order to achieve effective outputs. The recommendations primarily consider the necessary operational outcomes that could include guidelines on the preparation of adaptation communications and biennial transparency reports, such that their synthesis provides meaningful information to the global stocktake.

1. Background of the GGA

The objective of the UN Framework Convention on Climate Change (UNFCCC) is a valuable starting point in understanding the centrality of adaptation in climate action. The UNFCCC assesses the level of emission reductions on the impact of a changing climate system on ecosystem functioning, food production, and economic development (UNFCCC, 1992) [1]. It stands to reason that an increase in greenhouse gas (GHG) concentrations is only relevant due to the associated climate impacts, from which derives the importance of adaptation as a tool to manage these impacts.

Despite adaptation being central to the objective of global climate action, prior to the Paris Agreement, its prioritization was modest at best. Adaptation action lacked operational coherence and political commitment, hence a limited ability to drive outcomes and an understanding of progress thereof. In this era, adaptation action can be characterized as having been related to institution building and information sharing. The tacit posture being that of adaptation as a national remit.

The institution building progress, prior to the Paris Agreement, included arrangements such as the LDC Fund [2], the Adaptation Fund [3], and the Adaptation Committee [4], among others. information generation and Progress on sharing was through processes such as National Communications [5], Research and Systematic Observation [6], National Adaptation Programmes of Action [7], National Adaptation Plans [8], the Nairobi Work Programme [9], and the Cancun Adaptation Framework [10]. However, the international system had no obligation to act on information generated from these processes; the focus was rather on what each Party can do for itself. Therefore, the global nature of adaptation did not feature prominently.

The predominant posture prior to Paris was that while adaptation was a 'challenge faced by all', responsibility primarily was at the national level; however, now the global nature of the challenge and an explicit linkage to the level of mitigation is codified in the Paris Agreement [11]. The climate regime has demonstrated the effectiveness of target setting as a driver of political commitment, and advancement of climate action particularly in mitigation. The establishment of the Global Goal for Adaptation [12] (UNFCCC, 2015) does put adaptation on a target setting trajectory and, as such, highlights the potential for an advancement of action.

The GGA was first mooted in 2013 by the African Group in the form of a submission to the Ad Hoc Working Group on the Durban Platform (ADP), proposing a link between levels of climate impacts and costs with the temperature goal. The proposal posited that adaptation costs associated with the long-term goal – temperature – shall constitute the Adaptation Goal (UNFCCC, 2022) [13].

The African Group proposal formed part of the group's vision of an equitable agreement which recognized that the required global effort is not limited to mitigation. The vision asserted that the global effort includes mitigation, adaptation, and finance. In defining the GGA, Ngwadla, X. (2014) [14] asserted that "... with a temperature goal having been defined under the Convention, it is possible to define the scale of adaptation needs required to address the damage likely to be suffered by developing countries. The challenge is to find a methodology for defining and measuring the scope of the adaptation assistance needs globally."

In the Paris Agreement, the view of an adaptation goal evolved to a framing that adaptation needs are beyond just costs; furthermore, adaptation is beyond national remit but is global in nature. As such, provisions for a collective goal with respect to adaptation, as well as an assessment of progress towards achieving such a goal, have become more important [15]. The Paris Agreement further made provisions for communication [16] and reporting of adaptation information [17], which are core inputs to the global stocktake assessment.

The Global Goal on Adaptation, therefore, provides a step change in how the UNFCCC addresses adaptation, and its further definition and operationalization is mandated in Decision 7/ CMA.3 through a two-year work programme. This work programme is, however, being undertaken in parallel with the first global stocktake charged with assessing progress made in achieving the same.

This Concept Note presents options towards operationalization of the GGA by providing a conceptual framework to allow for meaningful discussions under the Glasgow–Sharm el Sheikh work programme. The Note contends that key elements to operationalizing the GGA have been defined to a large extent in previous decisions under the UNFCCC.

2. Key Concepts of the GGA

The Paris Agreement aims to strengthen the global climate change response by increasing the ability of all to adapt to the adverse impacts of climate change and to foster climate resilience. It implicitly already defines a global goal on adaptation, namely:

- to enhance adaptive capacity and resilience;
- to reduce vulnerability, with a view to contributing to sustainable development; and
- to ensure an adequate adaptation response in the context of the goal of holding average global warming well below 2°C and pursuing efforts to hold it below 1.5°C (UNFCCC, 2022b) [18].

Among the **conceptual aspects** addressed in the Paris Agreement are: (i) the goal is to reduce risk posed by a warming climate system as a purpose; (ii) the adaptation response (as such, adaptation activities), should be needs based; and (iii) that the adaptation risks, needs, and costs are not static, but intrinsically linked to the level of mitigation.

Relevant to the goal, important **operational provisions** of the Paris Agreement include that all Parties should, as appropriate, communicate their priorities, plans, actions, and support needs through adaptation communications, which shall be recorded in a public registry (UNFCCC, 2022b). Furthermore, as appropriate, Parties are expected to provide reports as part of the Biennial Transparency Reports (BTR) on adaptation. The BTR mirrors the communicated information to a large extent [19].

Lastly, there is an expectation for assessing collective progress towards achieving the GGA both in Articles 7 and 14 of the Paris Agreement. It is on this basis that the outcomes of both the 'Goals' and 'Targets' outlined in Section 3 of this Concept Note can be assessed. As such, the Katowice decisions define elements of the *ex ante* communication, and there is an *ex post* report on progress on those elements which are inputs towards understanding the progress made. It is therefore imperative that there are aggregable metrics to paint a picture of collective progress towards the goal/s and targets.

3. Elaboration of the Key Concepts

3.1 The Goals

The multilateral climate change regime's goal/purpose, generally speaking, would be to keep the **risk of adverse impacts** due to climate change at an 'acceptable' level. This can be achieved through mitigation and/or adaptation. What is 'acceptable' from a global perspective can be understood by reference to the mitigation goal, namely "pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels [as a starting point], recognizing his would significantly reduce the risks and impacts of climate change" [Paris Agreement Art.2.1.a]. Mitigation is the primary tool to keep impacts at an acceptable state. Adaptation can, therefore, be seen as complementary to this primary tool, if the mitigation efforts fail to keep to the temperature goal.

The basic expression of the Global Goal on Adaptation should, therefore be in terms of risk reduction:

Reducing climate impact risk to within levels consistent with a 1.5°C rise in temperature, starting in 2030.

However, the global average surface temperature increase implies different temperature increases in various parts of the world; as such, what is 'acceptable' at a national or regional level may/will differ. An example is that Africa is warming at about twice the global average, with the Arctic at two to three times that average (IPCC, 2018) [20]. It would, therefore, be appropriate for tools responding to the global discourse to base their response/analysis on 1.5°C, whereas an acceptable level may be lower for specific countries.

As instructive as such a goal can be, it remains a level of abstraction that falls short of operational meaningfulness. It is therefore important to further elaborate the global goal in line with what has to be done to mitigate the risk for specific adaptation sectors such as: ecosystem and biodiversity, food systems and food security, water systems and water security, health and wellbeing, cities–settlements– infrastructure, and economic sectors (IPCC, 2022) [21]. The risk in these sectors can be expressed as metrics of how climate hazards – such as drought, floods, and heatwaves – impact these sectors. These are Sub-Goals of the GGA.

The fundamental question is: What are the changes in risk profile, in the light of temperature targets and mitigation ambition? As an example, the following metrics can be used in goal setting, and tracked at national and global level to assess changes, e.g., flood risk profile. Floods pose a significant risk to the global populace, according to the IPCC (2022), with medium confidence, the projection of increases in direct flood damages are 1.4 to 2 times higher at 2°C, and 2.5 to 3.9 times higher at 3°C (compared to 1.5°C global warming) without adaptation, with mortality from floods–droughts–storms being 15 times higher in vulnerable regions compared to those with very low vulnerability.

Sub-Goals being set on the basis of returning to the 'acceptable' 1.5 °C profile by a certain target year are, for example:

- % of population vulnerable to floods,
- % of Gross Value Added/Gross Domestic Product vulnerable to floods,
- % reduction in mortalities from floods.

Targets can be set for each sector, using a set of metrics. However, it is important to clearly define such metrics, and carry out a review of available methodologies to assure fungible metrics, and hence aggregability. With metrics agreed, there would be a need for a guideline to inform the communication and reporting of such information.

3.2 Adaptation Elements Targets

Climate impact risks are fundamental to the understanding of **adaptation needs**, as different mitigation scenarios translate to a varying level of the required effort [22]. Adaptation needs should always be expressed with reference to the agreed temperature goals of 1.5°C, where possible. But these needs can also be expressed in relation to 'no climate change', 2°C, and the scenario associated with the communicated mitigation ambition.

The concept of needs can further be understood in that there are necessary 'adaptation activities' that reduce climate impact risks, such as, planning for adaptation, and implementing adaptation actions. The other set of needs are 'financial and support needs' which should be delivered according to the provisions of the Paris Agreement [23]. It is, however, important to note that recognition of the adaptation efforts of developing countries [24] suggests some resourcing by developing countries themselves, which should be recognized as part of their contribution to the global effort/response to climate change.

The reduction of risk can be achieved through 'adaptation activities', namely activities required to achieve the GGA, such as planning, implementation of actions, and financing. These activities are based on the agreed adaptation elements constained in the further guidance to adaptation communications [25] and BTR guidelines [26]. Furthermore, these elements are consistent with the

Cancun Adaptation Framework and UNEP Gap Report elements of assessment. In this formulation, the risk and vulnerability element is addressed as part of Goals rather than Adaptation Elements Targets.

The Paris Agreement provides for an assessment of progress towards achieving the GGA as part of the global stocktake, which suggests a need for **metrics to set Adaptation Elements Targets** and to track each of these elements. It is a fair assumption that the first aspect of elaborating the Adaptation Elements Targets requires a question to be defined in order to arrive at appropriate metrics to track progress. This section presents examples of metrics that would meet the standard of simplicity, aggregation, and glocal relevance, with metrics primarily based on the 2020 and 2021 UNEP Adaptation Gap Report [27].

a. Adaptation Planning

The relevant main question would be, **how well are we planning for adaptation?** This question elicits an understanding of preparedness and adequacy of planning. The Adaptation Gap Report, therefore, tracks this element with respect to three aspects – law/policy, strategy, plan – using a scale of whether a country 'has one', 'doesn't', or is 'in progress'.

This is a sound starting point, which can be expanded under the GGA to include a tracking of whether countries have plans – subnational or priority sector – to further understand their depth of adaptation understanding, planning, and implementability. As much as this can be seen as a benign measure, it does send a message to the national government and the international community on areas of focus following a global stocktake [28].

The metrics could include;

1: How many countries have an adaptation policy, strategy, plan?

2: How many countries have institutional arrangements for adaptation?

3: How many countries have a facility/finance arrangements to address adaptation?

b. Implementation of actions

The main question in this respect is, **are we making progress in the implementation of adaptation action**? This question provides a sense of both the response to risks as well as any bottlenecks in the implementation of adaptation actions. The Adaptation Gap Report presents metrics, such as the number of projects funded by the finance mechanism, the number of projects funded by donors, and the number of principal adaptation projects – in other words those whose fundamental motivation is adaptation. There are additional metrics that can be considered, including, but not limited to, tracking time between project proposal and funding by the finance mechanism, reported under finance.

Relevant metrics can have national and global perspectives assessing whether implementation is progressing or not, based on nationally appropriate responses such as:

- 1: Number of adaptation projects, submitted to the finance mechanism/developed by countries; size in \$.
- 2: Number of adaptation projects approved by the finance mechanism/implemented by countries; size in \$.
- 3: Number of pipeline projects submitted to the finance mechanism; size in \$.

c. Adaptation Finance

The central question to finance is that of needs, **how adequate is 'adequate finance and investment'**, **relative to needs**? A response to this question provides a collective perspective of the direction that adaptation needs are taking in light of changing climate and temperature scenarios. This perspective has no predetermination of the sources of that finance, even though such information would inform the finance mechanism of the UNFCCC. The Adaptation Gap Report 2020 indicates increasing adaptation needs from the 2016 estimate of \$140–300 billion by 2030, often due to the increased understanding and incorporation of new sectors. This necessitates a guideline on a suite of methodologies to estimate adaptation costs for credible estimates that can be synthesized bottom-up to complement top-down collective approaches.

Relevant metrics could include:

1: \$ figure of global adaptation needs in light of temperature scenarios.

2: \$ figure of disbursements to developing countries.

3: \$ figure of domestic investments and costs.

Some performance-related metrics could include:

1: \$ approved by the finance mechanism, ODA and MDB finance; projects implemented from own resources; approximate the GCF 50% funding for adaptation by 2030.

2: Time to approval of project from proposal stage by MDBs and the finance mechanism; 80% of proposals funded in less than one year by 2030.

It should be noted that some metrics have a terminal goal/target, whereas for others this would concern tracking the direction of travel. However, there are key characteristics of such metrics in order to be useful, such as:

- aggregability, as the stocktake is a collective assessment;
- simplicity in addressing potential data and information limitations;
- global and local usefulness to enhance uptake; and
- understanding that some metrics may not have a termination point, but it is necessary to track the direction of travel as envisaged in Article 3 of the Paris Agreement.

This use of metrics requires the development of methodologies and guidelines to ensure consistency of information. Such methodologies would further guide information provided through adaptation

communications and BTRs, as the latter are key sources of information in understanding progress made from a bottom-up perspective.

4. Some Points to consider in the GlaSS

The implication of a successful operationalization of the GGA under the two-year time frame of the Glasgow–Sharm el Sheikh work programme suggests a sequence that could include:

- Conceptual convergence, and on a minimum set of elements building from Decision 9/ CMA.1, as well as criteria/principles in identifying metrics at CoP27, as this would coherently inform the bulk of the work in 2023.
- In 2023, there would therefore be an opportunity for Parties to submit their views on metrics under each element/sub-goal with a view to narrow down and agree on metrics by CoP28.
- The CoP 8 decision would need to include a decision with clear guidance to the IPCC [28] to support the development of guidelines outlining a suite of methodologies for use in Adaptation Communications and BTRs.

The further work would need to be concluded at the beginning of 2025 in time for the communication of the next set of NDCs and Adaptation Communications, as this would allow Parties to communicate information that can be meaningfully assessed in the second global stocktake. Such a process would also allow for the Secretariat to update the adaptation synthesis report along the Goals and Targets, in as far as practicable for the ongoing stocktake.

References

- [1] Article 2 Objective of the UN Framework Convention on Climate Change.
- [2] Decisions 5/CP.7 and 7/CP.7 establishing the fund.
- [3] Decision 10/CP.7 establishing the fund.
- [4] Decision 1/CP.16 establishing the Adaptation Committee.
- [5] Decision 3/CP.1 and 9/CP.2 for Annex 1; 8/CP.1 and 10CP/2 for Non-Annex 1.
- [6] Decision 14/CP.4 on climate information gathering and sharing.
- [7] Decision 28/CP.7 for identifying LDC adaptation priorities and needs.

[8] Decision 5/CP.17 on the process to be followed in developing national plans.

[9] Decision 1/CP.10 and 2/CP.12 on technical aspects of climate modelling and vulnerability assessment.

- [10] Decision 1/CP.16 brings some coherence to adaptation information and planning.
- [11] Article 7.2 and 7.4 of the Paris Agreement.
- [12] Article 7 of the Paris Agreement.
- [13] <u>Glasgow-Sharm el-Sheikh work programme on the global goal on adaptation</u>.

[14] Xolisa Ngwadla (2014) 'An operational framework for equity in the 2015 Agreement', *Climate Policy*, 14:1, 8–16, DOI: 10.1080/14693062.2014.857199.

[15] Article 7.14 and Decision 19/CMA.1 on the periodic assessment of progress made in achieving the global goal.

[16] Article 7.10 and Decision 9/CMA.1 on adaptation communications and further guidance in relation to adaptation communications.

[17] Decision 18/CMA.1 on Biennial Transparency Reports.

[18] <u>New elements and dimensions of adaptation under the Paris Agreement (Article 7)</u>.

[19] Chapter IV of the Transparency Framework in Decision 18/CP.24; in the MPGs, Section A mirrors Element A of Adaptation Communications, whereas Section B mirrors Element B of the Adaptation Communications, with Sections C and D being a mirror of Element C of Adaptation Communications and Section E, specifically § 111 specifically provides for developing countries to report on supported adaptation actions, as well as reporting on progress of actions and planning activities, amongst others, as such tracking of progress.

[20] IPCC, 2018: 'Summary for Policymakers'. In: *Global Warming of 1.5°C*. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press.

[21] IPCC, 2022: *Climate Change 2022: Impacts, Adaptation, and Vulnerability.* Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press. In Press.

[22] Climate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase with global warming of 1.5°C and increase further with 2°C ... Poverty and disadvantage are expected to increase in some populations as global warming increases; limiting global warming to 1.5°C, compared with 2°C, could reduce the number of people both exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050 (medium confidence). IPCC, 2018. Global Warming of 1.5 °C.

[23] Articles 9.3 and 9.4 of the Paris Agreement emphasize that developed countries, in mobilizing and providing scaled-up financial resources, should take into account the needs and priorities of developing countries.

[24] Article 7.14 of the Paris Agreement.

[25] Decision 9/CMA.1 Elements of Adaptation Communications.

[26] Decision 18/CMA.1 Chapter IV of MPGs.

[27] United Nations Environment Programme 2021. Adaptation Gap Report 2020. Nairobi; United Nations Environment Programme 2021. Adaptation Gap Report 2021 – The gathering storm – adapting to climate change in a post-pandemic world. Nairobi.

[28] Build on para 15 of Decision 9/CMA.1 on the development of guidelines.