Operationalising the Global Goal on Adaptation

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COP28 will mark the first iteration of the five-year cycle of the Global Stocktake (GST) and lay foundations for tracking progress against the Global Goal on Adaptation (GGA) established under the Paris Climate Agreement. Success will partly rely on taking clear decisions on some of the structural elements of the GGA framework that have been discussed over the last two years, at the crossroads of diverse political expectations, technical challenges relating to assessing climate adaptation, and implemention challenges under a relatively constrained timing between GST#1 in 2023 and GST#2 in 2028. These structural elements refer to defining high-level political messages/overarching targets (official wording not yet stabilized), specific targets (e.g. sector-oriented), metrics to assess progress/ gaps towards the targets, the role of means of implementation (finance, technology transfer, capacity building), and potential follow-up work to be undertaken after COP28.

This *Policy Brief* focuses on the adaptation assessment[1] structural element. It builds on recent scientific work by IDDRI and submissions made by Parties to the series of workshops, between June and September 2023, of the Glasgow - Sharm-El Sheikh Work Programme on the GGA (GlaSS). It proposes a *modus operandi* for the GGA framework, in close connection with the development of the GST, and with a focus on combining policy and scientific expert judgments instead of exclusively relying only on a quantitative indicator basis. Its conclusions can inform both processes scheduled to conclude at COP28: the GlaSS and the adaptation component of the GST.

[1]   Magnan, A., Vallejo, L. (2023). Time to spell out the Global Goal on Adaption. *Blogpost*, IDDRI, November 2023.

KEY MESSAGES

Assessing adaptation at the global level is critical to reflect progress towards achieving the Global Goal on Adaptation and thus inform the next UNFCCC Global Stocktake. This is however challenging as classical quantitative indicator-based methods are limited by difficulties in identifying both indicators that are relevant and comparable across countries, and sufficient underlying data.

The assessment challenge can be addressed through an alternative method based on expert judgment and informed by a set of key questions paired with a scoring system, whilst allowing for local to national circumstances to be reflected.

This method has been successfully applied to the assessment of global coastal adaptation, showing that it is both scientifically robust and technically doable, and has the potential to minimise the additional burden to countries, facilitate the aggregation of multi-sourced information on adaptation efforts, and deliver sound results ahead of key policy moments. The next step consists of scaling up the analysis to a broader set of key risk areas.

In order for this approach to inform the second Global Stocktake in 2028, COP28 could acknowledge the added-value of the proposed *modus operandi* and call for both methodological bases to be refined by COP29 (questions, scoring system, guidance) and a full deployment by COP32.

1. THE PROBLEM

Assessing progress on climate adaptation under the UNFCCC refers to, *interalia*, understanding the adequacy and effectiveness of adaptation policies and actions, including support, from national to global levels. In the international climate policy context, assessments generally rely on metric systems made of country-level quantitative indicators and using national communications and project-based international funding support as the main sources of information.[2] This however raises multiple challenges, among which stand out (i) the definition of a set of indicators to describe the multi-faceted nature of adaptation and (ii) the identification of the most relevant reporting mechanisms under the UNFCCC. Regarding indicators, there is a risk of being trapped into a quantitative bottleneck: while characterizing adaptation in a quantitative way is still usually viewed as the most robust way to assess and track adaptation over time from the country to the global level, most countries face huge data gaps, which in turn limits the implementability of overly indicator-driven assessment frameworks. In addition, even the most data-heavy list of indicators requires interpretation and contextualisation to effectively inform action; indicators alone are not sufficient. Hence the following key questions: which alternative approaches exist to assess adaptation progress? And how can they support the design and implementation of the framework for the Global Goal on Adaptation (GGA)?

2. INSIGHTS FROM POLICY

Designing a framework for the GGA is a core part of climate negotiations since COP26 in 2021 and the establishment of the Glasgow - Sharm-El Sheikh Work Programme on the GGA (GlaSS). Issues discussed over the GlaSS[3] touched on the definition of high-level political messages/overarching targets, more specific targets (e.g. sector-oriented), indicators to assess progress/gaps towards the targets, the role of means of implementation (finance, technology transfer, capacity building), and potential follow-up work to be undertaken after COP28.

Recent submissions by Parties and groups of Parties advance concrete proposals to structure such elements into a coherent framework for the GGA. As an example, the Republic of Senegal on behalf of the Least Developed Countries Group (LDC)

proposes a framework[4] that brings together key elements identified by the GlaSS process (Figure 1 Panel A):

— Four *structural dimensions* reflecting the adaptation policy cycle: Impacts, Vulnerability and Risk assessments; Planning; Implementation; and Monitoring, Evaluation and Learning;
— Nine *critical themes* dealing with Water, Food and Agriculture, Cities Settlements and Key Infrastructure, Health, Poverty and Livelihoods, Terrestrial and Freshwater Ecosystems, Tangible Cultural Heritage, Mountain Regions, and Biodiversity;
— And *indicators* to inform the structural dimensions through various considerations: Finance, Capacity Building, and Technology Transfer.

Submissions by the European Union,[5] Australia[6] and ABU-AILAC,[7] for example, involve the same framing elements, though organised differently. Only few submissions propose concrete indicators,[8] but none feature sets of indicators across both the *structural dimensions* and the *critical themes*. Some submissions refer to targets and indicators from other UN processes (Sustainable Development Goals, Sendai Framework on Disaster Risk Reduction), but they do not discuss the actual relevance of these indicators to reflect the specificity of adaptation. Ultimately, the question of which information needs to be collected and aggregated in order to provide a global picture of adaptation progress and gaps remains unresolved. Yet, recent advances in adaptation science highlight a way to break this barrier down.

2 See Canales, N. *et al.* (2023). Assessing adaptation progress for the global stocktake. *Nature Climate Change* 13, 413–414, and Adaptation Gap Report 2022 (2022). Too Little, Too Slow: Climate Adaptation Failure Puts World at Risk. https://www. unep.org/resources/adaptation-gap-report-2022

3 Bueno Rubial, M.P. *et al.* (2023). Setting up a framework for the GGA: state of play and proposals for the 8th workshop of the GlaSS. https://arg1punto5.com/index.php/2023/09/26/state-of-play-and-proposals-for-the-8th-workshop-of-the-glasgow-sharm-el-sheikh-work-programme-gga-2/

4 LDC (2023). Submission by the Republic of Senegal on behalf of the Least Developed Countries Group (LDCs) on the 7th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202307122209---LDC%20Submission_GGA_7th%20Workshop.pdf

5 Australian Government (2023). Submission: Party views on the 6th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202305151441---Australian%20Submission%20-%20GlaSS%20workshop%206%20FINAL.pdf

6 EU (2023). Submission by Sweden and the European Commission on behalf of the European Union on the 6th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202305111433---SE-2023-05-11%20EU%20submission%20on%20the%206th%20GlaSS%20workshop.pdf

7 AIBU-AILAC (2023). Submission by Argentina on behalf of ABU and AILAC. Vision on the 6th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202305162235---Submission%20by%20Argentina%20on%20behalf%20of%20ABU%20-%20AILAC.pdf
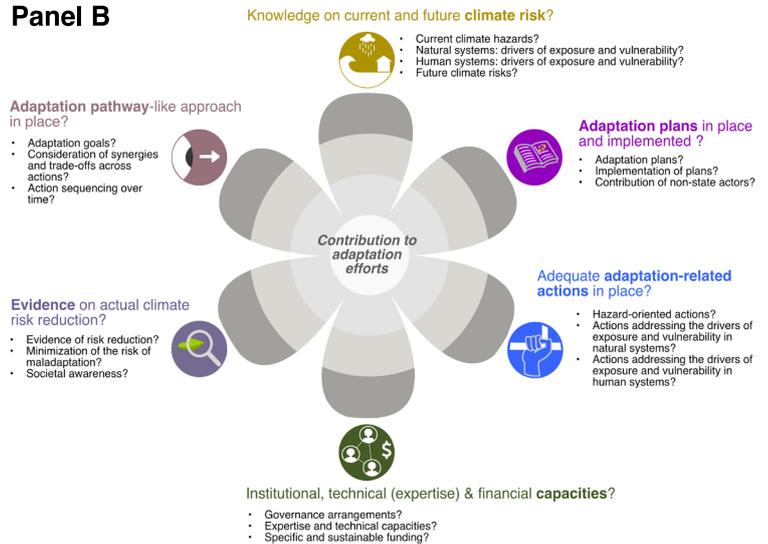
8 Bueno Rubial, M.P. *et al.* (2023). Setting up a framework for the GGA: state of play and proposals for the 8th workshop of the GlaSS. https://arg1punto5.com/index.php/2023/09/26/state-of-play-and-proposals-for-the-8th-workshop-of-the-glasgow-sharm-el-sheikh-work-programme-gga-2/

FIGURE 1. Contextual elements. Panel A shows a version of the GGA framework viewed by the Least Developed Countries Group (LDC). Panel B describes the assessment framework of the GAP-Track. Sources: refs in footnotes 4 and 9.

Panel A

Panel B

3. INSIGHTS FROM SCIENCE

One example of alternative approaches is the GAP-Track structured expert judgment exercise that assesses climate adaptation efforts globally.[9] It relies on four main characteristics that provide a useful perspective on how to deploy the GGA framework:

— GAP-Track circumvents the quantitative indicator bottleneck by relying on a scoring system associated with confidence levels. From a GGA framework perspective, this challenges the usual bias towards exclusively statistics-based approaches and suggests that the indicator issue can partly be resolved;

— GAP-Track is framed by 6 overarching questions (and 19 sub-questions; Figure 1 Panel B) reflecting core dimensions of adaptation: knowledge about current and future climate risks, planning, action, capacities, evidence towards reducing climate risks, and long-term pathway strategising. The scoring system allows to inform these dimensions despite quantitative data gaps, and thus emphasize a more comprehensive understanding than when only dimensions for which quantitative information is available are considered (e.g. GDP-related). The GAP-Track framing questions strongly overlap with the four *structural dimensions* identified under the GlaSS;

— GAP-Track uses a bottom-up approach that aggregates local case studies to inform the global scale, hence providing a more accurate perspective on what is actually undertaken on the ground. It therefore challenges the usual view that informing the global scale requires relying on country-level averaged information;

— To date, the GAP-Track approach has been applied to a specific theme–coastal adaptation–in order to showcase the feasibility of the assessment method and the potential usefulness of the results to feed the GGA and GST discussions. The methodological bases being not coastal-specific,[10] the approach could be applied to other socio-geographical systems and sectors covering a wider range of key risk areas and adaptation challenges (e.g. in cities, rural areas, mountain areas, health, etc.), and in the aim of informing a cross-country and cross-sector understanding of global adaptation efforts. Future themes of investigation could easily fit the above 9 *critical themes* identified under the GlaSS.
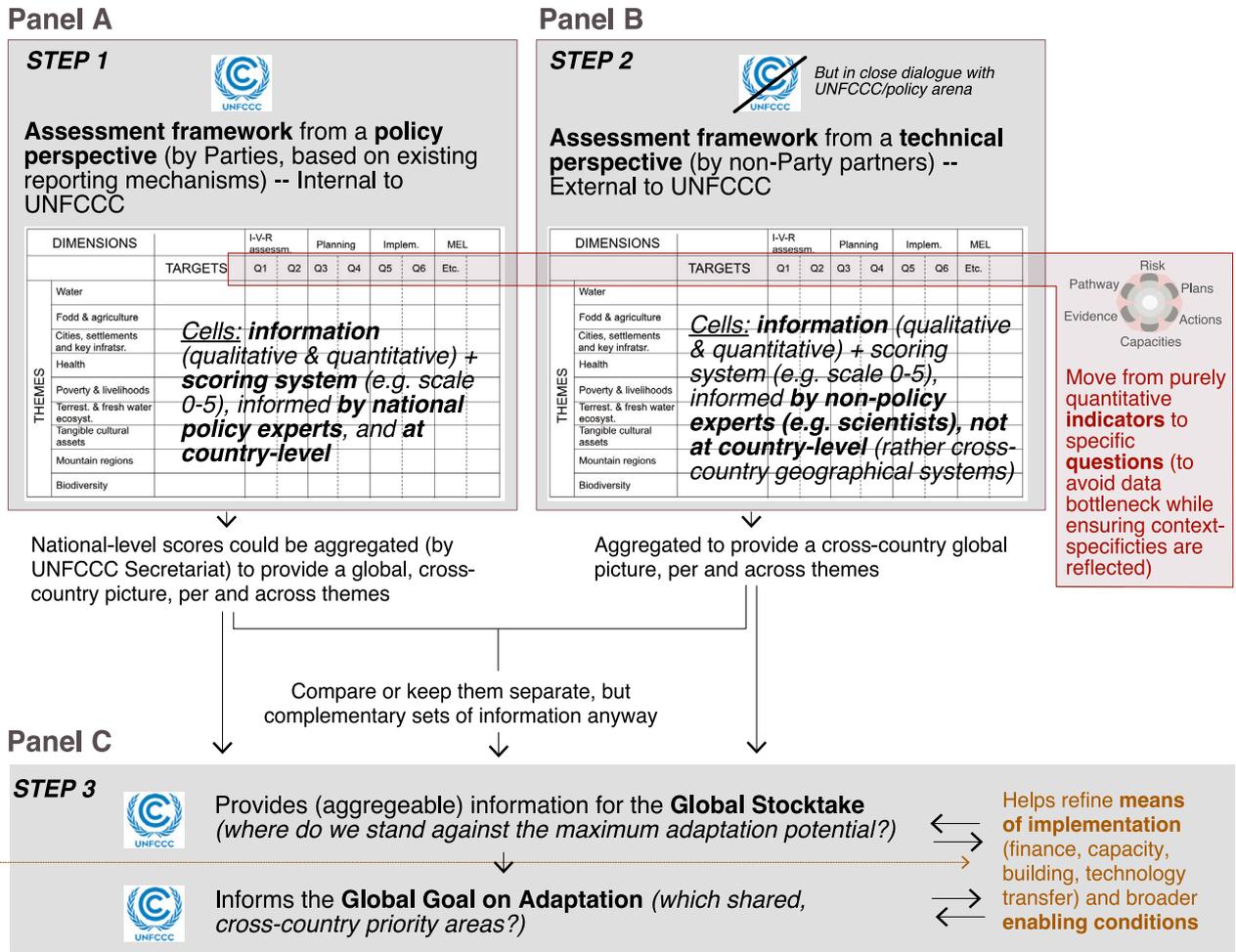
4. PROPOSAL: A *MODUS OPERANDI* FOR FRAMING THE GGA AND INFORMING THE GST

This section proposes a *modus operandi* to operationalise the GGA framework at the crossroads of the above policy and scientific insights, and hence structure and support the GST series. This *modus operandi* relies on a three-fold approach (Figure 2): a policy expert judgment by the Parties (step 1), a parallel scientific expert judgment by external-to-UNFCCC partners (step 2), and the combination of these two visions into a multi-perspective understanding of global adaptation efforts (step 3).

9   Magnan, A. K. *et al.* (2023). Status of global coastal adaptation. *Nature Climate Change*, 13: 1213-1221. Free-access read-only version: https://rdcu.be/doZ4k.

10 Ibid.

FIGURE 2. Potential modus operandi for the GGA framework.

Overview

The GAP-Track suggests that instead of systematically searching for quantitative indicators to be applicable to all Parties, a more manageable approach consists in:

1. **Answering questions** rather than informing indicators, as illustrated in Table 1. Such questions need to be designed in connection with the identification, by the Parties, of "overarching" and "specific" targets, as named under the GlaSS. While the latter have not yet been clarified, Table 1 proposes driving questions that are used here only for an illustrative purpose;

2. With **textual, qualitative information** supported by quantitative information when possible;

3. Then **translating this information into scores**, for each of the blank cells in Figure 1 Panel A, in order to locate the level of adaptation efforts along a scale going from very limited to high levels (e.g. scores 0 to 5). This approach requires that each score category for each specific assessment question is precisely described, in order to ensure some common understanding and consistency among Parties, among external scientific experts, and across the policy and science assessments (steps 1, 2 and 3 respectively);

4. Using the scoring system for both nationally-determined policy and independent scientific assessments allows for these latter to be combined, therefore supporting **a multi-perspective approach** of adaptation efforts and progress under the GST and towards the GGA.

TABLE 1. Assessment questions for the GGA framework (inspired by the LDC Group's framework proposal).

Dimensions	Questions instead of indicators (inspired from Figure 1 Panel B)	Information (see below Table 1)
Impacts, Vulnerability and Risk Assessments	*What do we know about current and future climate risks (drivers and levels)?*	*Narrative + 0-5 score*
Planning	*Short/medium-term perspective — What do we know about planning instruments in place?*	*Narrative + 0-5 score*
	Long-term perspective — Are long-term sequencing of policies and actions envisaged (I.e. "adaptation pathways")?	*Narrative + 0-5 score*
Implementation	*What level of implementation of existing policy instruments?*	*Narrative + 0-5 score*
	Are adequate institutional arrangements in place to support design, implementation and monitoring and evaluation?	*Narrative + 0-5 score*
	Are actions developed on the ground adequately address the main climate risks?	*Narrative + 0-5 score*
	Do we have grounded evidence on climate risk reduction (relates to the effectiveness of policies/projects/actions)	*Narrative + 0-5 score*
MEL	*Are adequate human capacities in place to support design, implementation and monitoring and evaluation?*	*Narrative + 0-5 score*
	Is funding available to support design, implementation and monitoring and evaluation?	*Narrative + 0-5 score*

Step 1 — Nationally-determined policy assessment (Figure 2 Panel A)

First sub-step — The framework table is **informed by Parties** based on the textual information that they already plan to report on in their official policy documents (e.g. NAPs, AdComs, NDCs, Biennial Transparency Reports). This, in line with requests by several (groups of) Parties,[11] minimises extra burden to the need of organising this material according to the GlaSS *structural dimensions* and *critical themes*. Parties then translate this textual information into scores, based on guidance (e.g. precise score descriptions) from the UNFCCC for example. This way, Parties remain free to reflect their national circumstances, while at the same time use a metric that is common across the *structural dimensions*, the *critical themes* and Parties. While moving from textual information to scores represents some extra-work, and based on the GAP-Track experience, this extra-burden is estimated minimal compared to informing new quantitative databases with hundreds of indicators.

Second sub-step — Given that each country is expected to fill one assessment table, the use of a scoring system will substantially ease the work of the UNFCCC Secretariat in terms of global aggregation. While Parties' scores could be aggregated by *structural dimension* and *critical theme,* as well as across *dimensions* and *themes*, the score aggregation method remains to be discussed. Median scores, for example,[12] can help reflect the distribution of scores and Parties' national circumstances.

Step 2 — Externally-driven scientific assessment (Figure 2 Panel B)

While transparent self-reporting by Parties is key to the negotiations process, having similar information developed outside of the UNFCCC context is also critical to reflect another perspective on global adaptation efforts. This view matches the regular calls from the international policy community to rely on multiple approaches rather than focusing on any single one.[13] With that respect, Step 2 consists in applying the exact same framing as in Step 1, but here **implemented by scientists and technical people through an independent international initiative** reflecting a cross-country perspective rather than any country in particular. The GAP-Track demonstrator study[14] offers an illustration of such a process.

Third sub-step — The framework described in Step 1 is applied to each GlaSS *critical theme* by one dedicated expert group informing the various *structural dimensions* and *assessment questions* (Table 1). Each score is accompanied with a precise textual narrative to allow for transparency, therefore mirroring the policy outcomes in Step 1. Regarding the scores, and as done with the GAP-Track,[15] the assessment would rely on the development of local case studies to then be aggregated into a global assessment, e.g. based on aggregated median scores for each of the *assessment questions* (and hence reflecting the above-mentioned overarching/specific global targets). Ultimately, each expert group provides information to fulfill a specific row (i.e. a *critical theme*) in the final, global-scale table.

11 See LDC (2023). Submission by the Republic of Senegal on behalf of the Least Developed Countries Group (LDCs) on the 7th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202307122209---LDC%20Submission_GGA_7th%20Workshop.pdf, and EU (2023). Submission by Sweden and the European Commission on behalf of the European Union on the 6th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202305111433---SE-2023-05-11%20EU%20submission%20on%20the%206th%20GlaSS%20workshop.pdf

12 Magnan, A. K. *et al.* (2023). Status of global coastal adaptation. *Nature Climate Change*, 13: 1213-1221. Free-access read-only version: https://rdcu.be/doZ4k.

13 UNFCCC (2023). Synthesis report by the co-facilitators on the technical dialogue of the global stocktake. Advance version, FCCC/SB/2023/9. https://unfccc.int/documents/631600

14 Magnan, A. K. *et al.* (2023). Status of global coastal adaptation. *Nature Climate Change*, 13: 1213-1221. Free-access read-only version: https://rdcu.be/doZ4k.

15 Ibid.

Fourth sub-step — The scores developed by several expert groups are aggregated across the *critical themes* and into a global and comprehensive assessment of adaptation efforts. At this stage, the same information as in policy Step 1 is available, but from a complementary lens (scientific + locally-based *vs.* policy + country-level).

Step 3 — Bring the policy and science perspectives together *(Figure 2 Panel C)*

Steps 1 and 2 allow to rely on both qualitative and quantitative information from multiple sources: quantitative information when it exists, but also policy and scientific experts' own experience, policy documents, locally-led unpublished material, etc. In addition, by using a common metric (i.e. scores), they allow to bring the internal policy and external scientific perspectives together, without losing too much granularity in terms of policy expectations, national circumstances and local realities. On the substance, three main negotiation-oriented outcomes are to be expected from the *modus operandi* proposed in this paper:

— Given that the assessment results are expressed in round values (e.g. median aggregated scores) and then possibly in % along the scoring scale, they could help **move towards a more concrete formulation of the GGA** (see example in Box 1);

— The results can help **highlight global shared adaptation priorities** across both countries and *critical themes*, henceforth embodying the high-level political messages/ overarching targets and specific targets of the post-GlaS GGA framework. On coastal adaptation, for example, the GAP-Track[16] highlights cross-case study priorities around the needs to bridge the implementation gap in local planning; support a longer-term perspective in local decision-making; and develop guidelines for funders, decision-makers and practitioners to assess the effectiveness of their actions to reduce climate risk and minimize maladaptation. Highlighting global shared adaptation priorities at the crossroads of the policy and scientific perspectives is critical to further discuss the foundations of global cooperation on climate adaptation, and especially means of support (finance, capacity building, technology transfer);[17]

— If implemented on a regular basis, the approach could help highlight trends per and across the *critical themes* and *structural dimensions* and, this way, **allow for tracking global progress and gaps** towards achieving the GGA overarching and specific targets.

16 Ibid.

17 Magnan, A.K. (2023). Robust framework for Global Goal on Adaptation needed, no time to waste. *IISD SDG Knowledge Hub*, Oct. 11. https://sdg.iisd.org/commentary/guest-articles/robust-framework-for-global-goal-on-adaptation-needed-no-time-to-waste/

BOX 1. AN ILLUSTRATION OF A MORE TARGETED GGA

The LDC Group states[18] that *"it is crucial to have a well-defined, overarching target that embodies the global goal on adaptation. Such a target is instrumental in mobilising the necessary political commitment as it provides a holistic view of global climate adaptation, and sets a clear direction for all Parties. The overarching target needs to go beyond generalities to detail the specific, measurable, achievable, relevant, and time-bound outcomes we collectively seek to achieve by a particular date"*. Some key results of the GAP-Track coastal study[19] help operationalise such a view.

The study shows that (i) today's global coastal adaptation is half way to the full theoretical adaptation potential, meaning a 50% gap; (ii) the adaptation imprint across the assessment questions (Figure 1 Panel B) is unbalanced; (iii) although urban areas tend to show higher adaptation levels than rural ones, no systematic correlation can be established locally between the level of adaptation efforts and neither the population number nor the development status. While conclusion (iii) illustrates the need for all Parties to be involved in the reporting of their adaptation efforts,[20] regardless their level of development, conclusions (i) and (ii) suggest that identifying semi-quantifying GGA targets and more specific global priorities is doable based on the 3-step assessment process proposed in this *Policy Brief*. Now, imagine the above conclusions result not only from the GAP-Track coastal study, but from the combination of the policy and scientific assessments illustrated in Figure 2; inspired by the LDC proposal, this could lead to the following formulation of the GGA:

By 20XX and in the perspective of reaching the 1.5-degree target, our global goal is to reduce vulnerability and enhance long-term effective resilience and adaptive capacity through increasing adaptation efforts across countries and critical themes from an aggregated global adaptation estimate of X% today to Y%, meaning a XX% increase in XX years.

This global, cross-theme goal is to be achieved through the following series of theme-specific targets at the global level: [here, for each of the study critical themes, include 1-2 key objectives described in quantitative terms based on the outcomes of the 3-step assessment process]. These theme-specific global targets constitute Shared Adaptation Goals around which to organise collective action and support.

18 LDC (2023). Submission by the Republic of Senegal on behalf of the Least Developed Countries Group (LDCs) on the 7th workshop of the GlaSS. https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202307122209---LDC%20Submission_GGA_7th%20Workshop.pdf

19 Magnan, A. K. *et al.* (2023). Status of global coastal adaptation. *Nature Climate Change*, 13: 1213-1221. Free-access read-only version: https://rdcu.be/doZ4k.

20 See UNFCCC (2023). Synthesis report by the co-facilitators on the technical dialogue of the global stocktake. Advance version, FCCC/SB/2023/9. https://unfccc.int/documents/631600; and Magnan, A.K. (2023). Robust framework for Global Goal on Adaptation needed, no time to waste. *IISD SDG Knowledge Hub*, Oct. 11. https://sdg.iisd.org/commentary/guest-articles/robust-framework-for-global-goal-on-adaptation-needed-no-time-to-waste/

5. THE ROADMAP

In essence, **GST#1 will set the scene for the full implementation of the GGA framework, in order to allow GST#2 to set the baseline for tracking global adaptation progress/gaps over the GST cycle**.[21] This means that the international climate policy community has a <5-year window to agree on (a) high-level political messages/overarching targets and specific targets (to refine the currently too vague definition of the GGA); (b) a metric system to track adaptation progress/gaps over time; (c) guidance for countries to implement the GGA framework; (d) the role of non-UNFCCC stakeholders in supporting the process, e.g. through externally-driven assessments; (e) an efficient reporting system; (f) the modalities for synthesising information; and (g) a clear and doable roadmap to GST#2 including the revision and fully implementation of the GGA framework.

Given the time left to COP28, step (a) should be given the highest priority[22] together with a first go at step (g), while steps (b) to (f) cannot take longer than 2 years from now. This implies the following timing for the approach proposed in this *Policy Brief*:

— In 2023, at GST#1/COP28: to formally acknowledge the added-value of the above *modus operandi*, together with advancing decisions on the overarching and specific targets of the GGA framework—see (a) above.

— Over 2024, ahead of COP29:
  • to settle the expert judgment method bases (questions, scoring system) and develop guidance for countries (by or in close collaboration with the UNFCCC Subsidiary bodies/Secretariat)—see (b) and (c); this can be inspired by the scientific framework established in the GAP-Track study;[23]
  • to identify a scientific partner/consortium to coordinate Step 2—see (d).

— Between 2025 and 2027: implement steps 1, 2 and 3 of the above *modus operandi* to present intermediary and synthesis results at COPs and review the GGA framework—see (g):
  • in terms of global shared priorities, e.g. per *structural dimension* and across the *critical themes*;
  • in relation with other negotiation agenda items, e.g. finance and Loss & Damage;
  • and in terms of refining the definition of the GGA and assess progress towards it (see Box 1).

— Over 2028: feed GST#2 with the results.

21 UNFCCC (2023). Synthesis report by the co-facilitators on the technical dialogue of the global stocktake. Advance version, FCCC/SB/2023/9. https://unfccc.int/documents/631600

22 Magnan, A.K. (2023). Robust framework for Global Goal on Adaptation needed, no time to waste. *IISD SDG Knowledge Hub*, Oct. 11. https://sdg.iisd.org/commentary/guest-articles/robust-framework-for-global-goal-on-adaptation-needed-no-time-to-waste/

23 Magnan, A. K. *et al.* (2023). Status of global coastal adaptation. *Nature Climate Change*, 13: 1213-1221. Free-access read-only version: https://rdcu.be/doZ4k.

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