



'Advancing human security through knowledge-based approaches to reducing vulnerability and environmental risks'

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Subject: UNU-EHS Submission to Workshop 4 under the Glasgow – Sharm el-Sheik work programme on the global goal on adaptation

The United Nations University, Institute for Environment and Human Security (UNU-EHS) welcomes the opportunity to submit views on the workshops towards the Glasgow – Sharm el-Sheik work programme (GlaSS) on the global goal on adaptation (GGA).

The United Nations University (UNU) is the academic arm of the United Nations. The Institute for Environment and Human Security (UNU-EHS) works on risks and adaptation related to environmental hazards and global change. As such, we are committed to helping progress the Global Goal on Adaptation (GGA) through concept development as well as empirical evidence.

With this submission, UNU-EHS aims to give a reflection on the progress under the GlaSS programme and specifically on Workshop 4 on "Communicating and reporting on adaptation priorities" (objectives e and h of the GlaSS work programme). In its subsequent sections the submission treats (i) Conclusions and Recommendations for Workshop 4, (ii) Adaptation priorities, (iii) Communicating and reporting on adaptation priorities, and (iv) Progress under the GlaSS, relevant for workshop 4.

Summary: Conclusions and Recommendations for Workshop 4

- The GGA can build on the adaptation priorities and needs identified by countries in existing reporting mechanisms and documents like the NDR.
- Justice, environment, finance, and interconnectedness are suitable as core priorities for the GGA in order to channel resources and efforts to the most vulnerable communities, the protection of ecosystems and delivering shared adaptation benefits.
- In addition, the GGA could include the priority to address gaps in human and technical capacities for reporting and communication.
- The GlaSS programme has successfully brought together global expertise on adaptation practices and needs. Important elements, such as the scope of adaptation under the programme and the relation of the programme to other UNFCCC workstreams (e.g. the global stocktake and the goal on climate finance), still remain to be clarified. Summarizing programme outputs under the questions proposed by the secretariat during each workshop would provide a strong basis for future discussions.

Adaptation priorities and outcomes

Countries currently report their adaptation efforts and needs through several mechanisms, including NAPs, NDCs, and ADCOMS. The Needs Determination Report (NDR), published in 2021, identified commonalities and priorities within such mechanisms for developing countries. Capacity building was the most common request on 8 of the 9 reporting mechanisms assessed. Regarding sectors, the countries identified adaptation needs in agriculture and water with the highest frequency, followed by disaster prevention and preparedness¹. UNU-EHS would like to add the dimensions of justice, environment, finance, and interconnectedness to these priorities.

¹ UNFCCC. (2021). Executive summary by the Standing Committee on Finance on the first report on the determination of the needs of developing country Parties related to implementing the Convention and the Paris Agreement. Retrieved from UNFCCC [link](#)

First, the GGA should prioritise needs of the most vulnerable and empower their voices for decision-making. For example, setting targets that lead to the formation and strengthening of local committees and youth groups for adaptation while leveraging knowledge diversity and inclusion would enable local action and can reduce the potential of maladaptation.

Second, the environment is both an ally against and a victim of climate change. The GGA should include targets that increase assessments of the current status of ecosystems and ecosystem services, as well as the existing efforts for restoration and protection. These assessments would inform targets such as conserving green cover and water bodies, retaining keystone species and ecosystem functions, and increasing nature-based solutions ².

Third, finance is a primary enabler for adaptation. Sustained and predictable access to funding is necessary for risk assessments, selecting and implementing adaptation measures, monitoring and evaluation and capacity building. Ensuring timely access to resources reduces impacts of extreme events, minimizes losses and damages and improves response and recovery. The GGA benefits from time-bound targets that tie financial resources to the priorities discussed before, namely vulnerable groups and ecosystems, aligned with the needs collected by the NDR ³.

Fourth, climate risks are interconnected, and adaptation has cross-scale effects and trade-offs that must be taken into consideration. The GGA is a success when its operationalization encourages new coalitions to emerge that account for system interconnectivity and mutual support for adaptation priorities ⁴.

Communication and reporting

UNU-EHS recommends that the fourth workshop of the GlaSS presents the work of the Adaptation Committee on 'supplementary guidance on adaptation communication' and opens the floor for discussions on the benefits and limitations of the existing mechanisms ⁵. We also recommend assessing the requirements and accessibility of technical and human capacities for adequate communication.

Additionally, and in line with our submission for the third workshop (here include in the Annex), UNU-EHS reiterates the call for the GGA to set targets that increase the capacities of developing countries and LDCs in regard to risk data and analytics, prioritization of adaptation measures and stakeholder engagement. These three elements, in particular, would improve decision-making and reporting abilities, contributing to communication efforts. Several parties underlined the conflict between additional reporting requirements and their limited capacities during the third workshop.

There is an opportunity for the fourth workshop to showcase case studies of open-source solutions and initiatives that are reducing burden and increasing capacities for adaptation assessment, implementation, and monitoring. The Global Risk Modelling Alliance (GRMA), for example, offers expert support for filling critical modeling and data gaps and using open-source risk platforms, which can significantly improve the capacity of developing countries. UNU-EHS has worked with the CLIMADA modeling platform, which underpins the Economics of Climate Adaptation (ECA) Framework. The reports, results, and models are open source and can be accessible at eca-network.org. Investing in similar initiatives and expanding the opportunities for collaboration of academics, NGOs, and the private and public sectors will enable more active and equitable participation of countries in the GGA.

² Walz, Y., Janzen, S., Narvaez, L., Ortiz-Vargas, A., Woelki, J., Doswald, N., & Sebesvari, Z. (2021). Disaster-related losses of ecosystems and their services. Why and how do losses matter for disaster risk reduction? International Journal of Disaster Risk Reduction. Retrieved from [link](#)

³ Hirsch, T., Kreft, S., & Mirwald, M. (2022). Outside the Box: Rethinking the Climate and Disaster Finance Agenda. Retrieved from [link](#)

⁴ UNU-EHS. (2022). Retrieved from <https://interconnectedrisks.org/download>

⁵ Adaptation Committee - UNFCCC. (2021). Draft supplementary guidance for voluntary use by Parties in communicating information in accordance with the possible elements of an adaptation communication. Retrieved from [link](#)

Progress under the GlaSS, relevant for Workshop 4

Coming to the end of the first half of the GlaSS program, we reflect on the progress, using the guiding questions, offered in the opening presentation of the third workshop by the Secretariat. We feel that these questions also help set the stage for workshop 4.

- *What are the characteristics of a resilient and well-adapted country and global community?*

A resilient and well-adapted community can cope with, recover from, and adapt to the impacts of climate change without compromising its well-being. This understanding can be scaled to national and global levels. However, the conditions for being 'well-adapted' are context-specific, time-bound and interconnected. Inequality is a major hurdle for a global approach. Agency, capacities and access to finance are unequally distributed worldwide, with important differences between regions and within countries and communities themselves. The goal of reaching global, long-term and sustainable adaptation should include strengthening agency, capacity and access to finance while reducing inequalities.

- *What will indicate that the GGA has been achieved?*

Adaptation is an iterative process. UNU-EHS recommends that the GGA set dynamic targets that are periodically revised to reflect the actual understanding of what it means 'to be well-adapted'. As much as there is great value for the GGA in articulating an ambitious and meaningful goal, this is also hard in a context of high uncertainty. The GGA's greater immediate value may be in its success in steering resources and efforts toward strengthening capacities and coalitions, and lowering vulnerability and inequality.

- *How can indicators, targets, and metrics be identified to enable a self-assessment process that also takes account of differences in national circumstances?*

Adaptation needs are not universal and can vary substantially even within different social groups in the same territory. However, there are principles that would enable people to better adjust their livelihoods, practices and infrastructure to rapidly changing (climatic) conditions. These principles include enhancing capacities to aspire and act upon climate change, access to finance, improving the management of natural resources and ecosystems, increasing stakeholder and international collaboration, reducing poverty, inequality, and marginalization, and strengthening governance and local leadership. Monitoring these principles at different scales would appropriately inform global and national adaptation.

- *What would need to be believed regarding the future state of the world in order to achieve the GGA? What are the major assumptions about the future state of the world?*

Adaptation has limits, and the warmer the world gets, the less we can do to reduce risk and cope with other impacts of climate change. The first assumption, therefore, should be that adaptation will still be possible and meaningful in and for the future. This and other assumptions can be explored in future scenarios, for which the Shared Socioeconomic Pathways (SSPs) proposed by the IPCC provide a baseline. Scenarios, development pathways and limits to adaptation could be reassessed as part of a periodical revision of the progress and adequacy of the GGA.

- *How can adaptation ambition be increased, for example, by using the [four-tiered approach](#)?*

UNU-EHS finds the four-tier approach useful for setting targets across different scales and appropriate for monitoring changes throughout time. Requesting countries to assess the resources related to fulfilling each tier could inform feasibility and enable support.

A concerted effort to move the current adaptation frameworks from a reactive basis towards placing human-nature wellbeing as its priority would enable a mindset of inclusive prosperity. This plurality of perspectives and intellectual diversity of different knowledge systems and worldviews on human development and wellbeing will catalyze new thinking and social innovation. The ambition of adaptation is raised by addressing the crises of inequity, climate change and environmental degradation to reclaim a desirable future not only for some over others, but for all.

We look forward to future cooperation to further the Global Goal on Adaptation. Thank you

Annex: Submission of UNU-EHS to Workshop 3

(This submission is included here for reference)

With this submission, UNU-EHS aims to give a short reflection on the progress under the GlaSS programme towards the GGA and specifically on Workshop 3 on methodologies, indicators, data and metrics, monitoring and evaluation (objectives b and f of the GlaSS work programme). The submission treats these topics in its subsequent sections and closes with a synthesis.

1. Architecture of the global goal on adaptation

Listening to the workshops and the interventions of the parties at the recent SB56 meeting (June 2022), we observe a diversity of contributions. This diversity is not addressed yet, which can give rise to confusion and eroding trust. At the same time, these contributions flag complementary views on the GGA that do not need to be mutually exclusive. In our view there is a need and opportunity to address the architecture of the global goal on adaptation. By which we mean: to identify what are complementary 'building blocks' of the GGA, which can be elaborated together.

For consideration: Mitigation work is guided by temperature targets, as well as (among others) goals on emission reductions, mitigation action, and Nationally Determined Contribution. Different roles and processes exist, ranging from the individual to the international level and from target setting to review. Similarly, the GGA can consist of different building blocks, so that we can capture more, and comprehensively connect to Monitoring, Evaluation & Learning (MEL) and the Global Stocktake. It does not have to be a global target OR a bottom up multi-actor process. Such building blocks start to emerge. It could be very useful to identify them in order to structure discussions on the GGA.

In the context of Workshop 3 this is important as (i) methodologies, indicators, data and metrics, and monitoring and evaluation can best be discussed in the context of their specific purpose, and (ii) trade-offs and challenges surrounding methodologies, indicators, data and metrics, and monitoring and evaluation can be addressed, and possibly resolved, when acknowledging different purposes and building blocks for the GGA. A technical paper by the Adaptation Committee gives reflections on approaches and challenges in this respect ⁶.

For inspiration, and as a potential start to the identification of building blocks, we observed the following clusters of contributions:

1. *The global goal: enhancing adaptive capacity, strengthening resilience and reducing vulnerability* (here in particular contributions stressed the need for bottom up community driven processes and methodologies)
2. *Common target(s)* (suggestions were made for global aggregate 'measurable' targets)
3. *Adaptation support* (contributions stressed financial and other support along with the need for commitments, monitoring and reporting. Reference was made to work on adequacy and effectiveness of adaptation and support)
4. *Adaptation action* (contributions called for attention to adaptation action including trade-offs, maladaptation, transformation, addressing transboundary impacts and capacity strengthening)
5. *Adaptation plans and policies* (contributions referred to links between the GGA and the national adaptation plans (NAP) and adaptation policies of different actors and actor groups)

2. Methodologies

Ahead of the third workshop of the GlaSS work program, UNU-EHS would like to draw attention to the conflict between the scale and complexity of the global adaptation challenge that needs to be reflected in the GGA on one hand and a limited access to climate analytics in several low and middle-income nations on the other. We recommend that all methodologies, data, metrics and indicators

⁶ Adaptation Committee, 2021. Approaches to reviewing the overall progress made in achieving the global goal on adaptation, Technical paper by the Adaptation Committee. United Nations Framework Convention on Climate Change, Bonn, Germany. unfccc.int/sites/default/files/resource/AC_TP_GlobalGoalOnAdaptation.pdf

proposed during the workshop are also assessed in light of their accessibility level, particularly for least developed countries. For methodologies, data, metrics and indicators that are considered essential, the GGA could set specific goals to build capacities so that they are implementable in all countries. These goals can themselves be used to assess progress towards the GGA.

Access to climate analytics that enables governments to quantify and qualify climate risks and identify the resources needed to implement and track progress on adaptation options is necessary for the GGA. Out of the first session of the second workshop on "*Enhancing adaptation action and support*", an important takeaway from the discussion on *adaptation needs and setting targets* was how challenging some governments find it to quantify their climate risks and select appropriate measures. These are data-intensive processes that require high levels of expertise and technical capacities and should be replicated at local, regional, national, and often transnational scales. As raised by Mrs. Funanani Muremi, UNFCCC Adaptation Committee member, thorough assessments consider different climate scenarios and time frames and include historical data analysis and expert opinions, socio-economic and physical models, and bottom-up costing. Achieving this quality in assessments is an expensive endeavor that many developing and least developed countries cannot afford without the international community's support.

Another point raised during the second workshop was the need to use climate analytics in conjunction with stakeholder engagement methods. This point was made in the discussions on *governance and engaging non-Party stakeholders* and on the *adequacy and effectiveness of adaptation support, including approaches, metrics, and links with the Enhanced Transparency Framework*. The benefits of combining technical approaches with consultations were highlighted through case studies, such as in Uruguay, Paraguay, and the Republic of Marshall Islands. This combination was also reported to make assessing adaptation needs more resource-intensive and time-consuming. Challenges were found with diverse climate literacy levels among consulted stakeholders, particularly those in remote areas, and with balancing conflicting agendas

A solution explored by UNU-EHS is an open source tool named the [Economics of Climate Adaptation \(ECA\) framework](#). Applied in more than 20 countries, ECA provides access to state-of-the-art modeling and stakeholder engagement methods and is linked to a community of practice that shares lessons learned and success stories that can guide risk managers worldwide. This framework allows for the flexible identification of cost-effective climate change adaptation measures (including risk transfer) and ensures a fully integrated process, from climate-risk assessment to the feasibility of concrete adaptation measures and decision-making on climate investment. ECA can also help quantify the protection gap for selected countries or regions by estimating expected annual damages from extreme weather events in economic terms and by quantifying the potential for insurance (e.g., sovereign, index, or indemnity) with and without implementing other adaptation measures. UNU-EHS will be happy to share this experience. *For more information, see: <https://eca-network.org/> and Rojas et al. (2021)*⁷.

3. Indicators and metrics

In line with the discussions during the first and second workshops under the GlaSS work program and with the submissions for the third workshop from WRI, the Australian Government and UNDRR, UNU-EHS recommends that the GGA builds on existing indicators from other global processes. This effort will avoid duplication of work and reduce the reporting burdens of the Parties. Relevant indicators could be taken from the SDGs, the Sendai Framework, and self-assessments like the NDCs and NAPs.

A point we should highlight when discussing ongoing global processes concerns the overlap between indicators and lessons from their application. The key example in the context of the GGA are SDG Indicators 1.5.1 and 1.5.2, which also exist as Sendai Framework Indicator A-1 to C-1 (SDG Goal 1 No poverty, Target 1.5 *By 2030, build the resilience of the poor and those in vulnerable*

⁷ Rojas, Alvaro, D. Daou, F. Waldschmidt, E. Behre, Z. Sebesvari, S. Kreft, and M. Souvignet (2021). Executive Summary: San Pedro Sula - Honduras Urban Flood Risk. United Nations University – Institute for Environment and Human Security (UNU-EHS) & Frankfurt School of Finance & Management

situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters. Indicators 1.5.1 and 1.5.2 quantify affected people and casualties, and economic losses. The same indicators can be found in the Sendai Framework in A-1 to C-1). However, neither of them directly quantify enhanced resilience for low-income groups. This issue could be improved upon in the GGA.

Another example are indicators shared between the NDCs and SDGs. In the NDCs and NAPs, several countries have submitted assessments of risks and needs affecting food security, water, nature and the environment. The SDGs reference these same topics in Goals 2, 6, and 15, respectively. The indicators related to these goals are not directly linked to risk reduction or enhanced adaptive capacities, but there is an opportunity to define indicators that will also inform the reporting on the SDGs.

UNU-EHS recommends identifying relevant and overlapping indicators from global frameworks ahead of the workshop, including those from the submissions, and discuss these for their merits during the workshop.

4. Data

Mandated by the Technical Expert Group on Comprehensive Risk Management (TEG-CRM), UNU-EHS organized a series of discussions during the 2021 Regional Climate Weeks on the challenges and opportunities of climate risk-related data in low and middle income countries. The series included scientists, practitioners, financial organizations, and government representatives from Africa, Latin America and the Caribbean, and the Asia Pacific. We would like to share the key takeaways from those discussions, which fall into the three categories of data collection, data management and data use. We suggest organizers consider these categories when framing the third workshop under the GlaSS work program.

Data collection: Despite technological progress, such as advancements in satellite imagery, artificial intelligence, and big data, producing and accessing downscaled data of both physical and socio-economic risk-factors is a major challenge, as this requires infrastructure that is particularly scarce in lower income countries. This is important as data must be inclusive and representative to reflect diverse climates and people's perspectives, especially marginalized groups and those who are most vulnerable⁸. Without this data, difficulties arise in, among others, monitoring the effectiveness of investments in adaptation, which is key to evaluating and learning to inform future decision-making.

Data management: Considering that climate risk is transboundary and interconnected, many countries, sectors and stakeholders face similar adaptation challenges. Therefore, the standardization of data will be important for high-quality, comparable, and comprehensive tracking of progress for the GGA. Agreeing on such standards for data management can be facilitated by the GGA process itself. It is important that data management is co-developed and agreed upon by countries, as seen in, for example, the Sendai Framework and the SDGs. Partnerships between stakeholders are necessary to develop unified standards and share data, which can be facilitated by monitoring and evaluation processes. Moreover, the ability of countries and communities to uphold these standards is in itself a sign of capacities to engage with adaptation and the GGA.

Data Use: Data is only as good as its usability. Therefore, it is important that support, including sharing of data and financial assistance, is provided for countries to build capacity for adaptation planning and tracking. This investment in data infrastructure will strengthen coordination for the GGA. Furthermore, clear, understandable and concise data leads to effective communication of the benefits and importance of adaptation. Communication is important to engage policy-makers, funding agencies, civil society, the private sector and communities, who are key partners and should directly benefit from available data. Where possible, efforts should be made so communities can access data that provides support for resilience services in response to climate change and extreme events. Community ownership can support these efforts, including in the provision of data through

⁸ van der Geest, K. and M. Schindler (2017). Handbook for assessing loss and damage in vulnerable communities. Bonn: UNU-EHS. ([link](#))

citizen science approaches, and it is important to train communities on using outputs and climate indicators to incorporate them into their day-by-day activities.

Investments in data collection, management and use, as outlined above, can be a major contribution to the GGA. Connecting global ambitions to local benefits in terms of risk understanding, adaptation and monitoring through improvements in data would justify the additional efforts needed from governments to strengthen coordination and cooperation for the GGA.

5. Monitoring and evaluation

Here we want to share examples of how monitoring and evaluation (M&E) can support progress towards the GGA. We feel that dialogue around two themes (i) ensuring gender, social inclusion and diverse perspectives are integrated into M&E for the GGA, and (ii) including a 'learning' component in monitoring, evaluation and learning (MEL) frameworks for adaptation, is beneficial for the upcoming third workshop of the GlaSS work program.

Gender, social inclusion and diverse perspectives: Effective M&E is an inherently collaborative process, requiring various levels of stakeholder engagement that reflects the realities of multiple perspectives from different groups. While there are many challenges with a 'one size fits all' M&E framework that can work across different contexts and scales to track adaptation, it is possible to develop cross-cutting, standardized M&E guidance that facilitates understanding of how adaptation is affecting marginalized groups and women. This guidance could, for example, come in the form of a set of learning questions for stakeholders who are developing context specific M&E frameworks for adaptation. It is important for this guidance to be developed in a bottom up manner, and to be mutually agreed upon and adopted so that analysis of marginalized and (often) excluded groups is standardized across nations. Furthermore, transferring knowledge on effective mechanisms through sharing best practice (including on indicator guidance, data and metrics) can bring in diverse perspectives and enhance collaboration among sectors and stakeholders and across borders. This is particularly important at the sub-national level and in the private sector, where useful lessons can be learned, but more coordination is needed to facilitate collaboration.

Monitoring, evaluation and learning: Trade-offs exist between the need to evaluate and the importance of learning from and for adaptation. Adaptive capacity and resilience are dynamic and moving targets under climate change, the result of which makes adaptation a cyclical and iterative process. This continual re-adjustment requires cyclical and iterative learning in both process-and-outcome oriented M&E. For this, we want to draw attention to systems approaches that incorporate flexibility and learning into M&E. We believe that flexibility across scales will be needed for structured learning of progress towards the GGA. One such example that we applied in the context of adaptation is outcome mapping⁹. For the workshop we suggest taking lessons from outcome mapping and other flexible, system oriented Monitoring, Evaluation and Learning (MEL) approaches. A relevant example of active co-design of MEL with the aim to learn from adaptation processes, is the establishment of the tracking, learning and sharing (TLS) work stream of the Adaptation Research Alliance. The Adaptation Research Alliance is a global collaborative focusing on action-orientated research to inform effective adaptation¹⁰.

6. Synthesis

In sum, in our view opportunity lies in identifying complementary building blocks of the GGA. This would also help structure and focus the discussions during the third and later workshops under the GlaSS (see Table 1 for examples). We recommend that all methodologies, data, metrics and indicators proposed during the third workshop are also assessed for their accessibility level, particularly for least developed countries. UNU-EHS endorses that the GGA builds on existing

⁹ Earl, S., Carden, F., Smutylo, T., 2001. Outcome Mapping: Building Learning and Reflection into Development Programs. Ottawa: International Development Research Centre. International Development Research Centre, Ottawa, Canada, p. 154.

¹⁰ <https://southsouthnorth.org/what-we-do-ara/>

indicators from other global processes. UNU-EHS recommends identifying key examples of these processes and overlaps ahead of the workshop to inspire the discussion. We suggest organizers consider data collection, management, and use when framing the sessions for the third workshop of the GlaSS work program. For monitoring and evaluation we recommend dialogue around (i) ensuring gender, social inclusion and diverse perspectives, and (ii) how the GGA can benefit from the ‘learning’ component in monitoring, evaluation and learning (MEL) frameworks. For methodologies, data, metrics and indicators that will be considered essential, the GGA could set specific goals to build capacities so that they are implementable in all countries. These goals can themselves be used to assess progress towards the GGA.

Table 1: Reflection on methodologies, indicators, data and metrics, and monitoring and evaluation in relation to potential GGA building blocks

Potential GGA building block	Reflection on methodologies, indicators, data and metrics, and monitoring and evaluation
<i>The Global Goal: enhancing adaptive capacity, strengthening resilience and reducing vulnerability</i>	There remains conceptual ambiguity and overlap between the three elements: adaptive capacity, resilience and vulnerability. Many approaches, indicators and metrics exist. Yet there is lack of agreement on their relative merits, and none of the existing indices has been endorsed in the context of UNFCCC. There are clear calls and opportunities for participatory community-driven approaches, with a strong focus on monitoring, evaluation and learning.
<i>Common target(s)</i>	Potential to learn from work under other global frameworks such as SDGs and the Sendai Framework. Emphasis on capacities to collect, quantify and aggregate data and indicators.
<i>Adaptation support</i>	No agreements on metrics, yet indicators exist and are being monitored. Also addressed in other work streams under the UNFCCC. Review is part of the Global Stocktake.
<i>Adaptation action</i>	Many approaches, indicators and metrics exist for review and new ones are proposed. A dynamic domain under the GGA and the Global Stocktake. Would benefit from transparent monitoring, evaluation and learning (MEL) frameworks.
<i>Adaptation plans and policies</i>	Well documented, incl methods, indicators and metrics. Reviewed in various work streams under the UNFCCC and other frameworks and assessments.