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IDDRI

The potential of expert judgment assessments on adaptation to feed GST series

Efforts and urgent needs towards enhancing adaptation policy, implementation and finance are recognized at all levels, but there is a growing consensus that the necessary shift in the scale of adaptation has not yet happened. Among other challenges, assessing and measuring adaptation actions and tracking progress is one major obstacle.

At the global level, the climate negotiation arena considers "adequacy" (i.e. whether various instruments and interventions match the adaptation needs identified by countries) and "effectiveness" (i.e. outcomes of such instruments or interventions). This note argues that understanding the adequacy and effectiveness of current adaptation strategies and interventions globally involves more than reviewing policy instruments and financing tools, but also requires the consideration of a broader range of information at multiple scales. This, however, raises numerous methodological questions. First, adaptation goals, baselines, and targets are not always defined or quantified. Second, there are challenges with identifying sets of both quantitative and qualitative indicators and metrics that capture adaptation in a more comprehensive way; are relevant across countries and scales; can be informed with reliable data; are validated (e.g. on scientific bases); and can be tracked over time for monitoring and evaluating progress. Existing approaches (see some highlighted in recent reports by the Adaptataion Committee and OECD-IEA[1]) often face similar challenges in terms of defining the "right" indicators and accessing reliable data. Alternative approaches based on expert judgement methods are emerging that help overcome such issues and have the potential to facilitate the rapid delivery of results to the international policy community, especially in the perspective of the Global Stocktake (GST) process. This note discusses the potential of such approaches to inform the GST process as a whole, and formulates 3 recommendations.

1. Examples of existing tools

The **Global Adaptation progress Tracker** (GAP-Track)[2] has been developed to overcome some of the current barriers to tracking adaptation. It uses an expert judgement method supported by a scoring system and that is framed by six overarching questions reflecting core components of adaptation: knowledge, planning, actions, capacities, evidence and forecasting (Fig. 1 at the end of this note). These components can help us understand the adequacy and effectiveness of different types of adaptation efforts in various systems, such as socio-ecological territories, sectors or (groups of) populations. A global-scale application focussing on one key adaptation challenge (i.e. coastal adaptation) is under development; results are expected by Fall 2023.

The World Bank developed a **whole-of-economy adaptation and resilience (A&R) diagnostic tool and scoring system** to assess countries' readiness for adaptation and resilience. The diagnostic is based on six

[1] Adaptation Committee (2021). *Approaches to reviewing the overall progress made in achieving the global goal on adaptation - Technical paper*. UNFCCC, https://unfccc.int/sites/default/files/resource/AC_TP_GlobalGoalOnAdaptation.pdf. And: OECD-IEA (2022). *Adaptation in the global stocktake: options to deliver on its mandate.* Climate Change Expert Group, paper No. 2022(4). https://issuu.com/oecd.publishing/docs/adaptation-in-the-gst-ccxg.

[2] https://www.iddri.org/en/project/assessing-global-progress-climate-adaptation-gap-track-2021. Methodological report (2021): https://www.iddri.org/sites/default/files/PDF/Projets/GAP-Track_Methodological%20report%20(D1)_September%202021.pdf. Final Results Report (2021): https://www.iddri.org/en/publications-and-events/report/global-adaptation-progress-tracker-gap-track-pilot-study-report-2021.

Adaptation Principles[3] (Figure 2, panel A) and the assessment uses a mix of quantitative and qualitative indicators and comprehensively evaluates gaps and progress ((Figure 2, panel B). The tool has been applied in several new World Bank Country Climate and Development Reports (CCDRs) with the potential to help countries establish baselines, identify gaps, prioritize actions, and monitor progress towards making adaptation an integral part of development strategies.[4]

Complementary to the country- and system-level assessments discussed above, a number of assessment frameworks and metrics have been developed to evaluate adaptation and resilience at investment or project level to create incentives for more and better adaptation through enhanced transparency and simplified disclosure. One example is the World Bank **Resilience Rating System** (RRS.[5] that provides guidance and specific criteria to assess resilience along two complementary dimensions (Fig. 3):

(i) *Resilience of* the project rates the confidence that expected investment outcomes will be achieved, based on whether a project has considered climate and disaster risks in its design, incorporated adaptation measures, and demonstrated economic viability despite climate risks;

(ii) *Resilience through* the project rates a project's contribution to adaptive development pathways based on whether investments are targeted at increasing climate resilience in the broader community or sector.

RRS provides a rating from C through to A+ in each dimension that offers a way to "label" projects and serves as a guide for investors and decision-makers to prioritize resilience investments.

2. Lessons learnt and usefulness for the GST process

2.1. Bringing together multiple types and sources of information

Recommendation #1
We encourage the international climate community to call for more applications of expert judgment-based assessments in order to complement the classical quantitative methods, and bring new knowledge — including local and traditional knowledge— that is to date hard to highlight and integrate from a purely quantitative perspective. As already stated by the UNFCCC Adaptation Committee, building on complementary approaches and information is vital for understanding the multiple dimensions of climate adaptation, and thus for a successful GST process.

Because expert judgement approaches rely on scoring systems, they allow to assemble of multiple types of information, including quantitative and qualitative, scientific and grey literature, from official documents and indigenous knowledge, expert experience though time, etc. Scoring systems indeed allow to create a common metric (e.g. 0-4 scale in GAP-Track, a trafic light system/1-3 scale in A&R diagnostic tool, C-A+ scale in RRS) between multiple parameters as well as across very diversified sources of information. In the context of the classical quantitative bottlenecks mentioned in the introduction, multi-information approches based on expert judgment methods can therefore add value. There is increasing evidence of that: take the example of risk assessments in IPCC reports where the "burning embers" result from expert judgment exercises.

As a counterpart, expert judgment-based approaches are limited in providing purely quantified information, for example on the precise number of people at risk of being affected by marine flooding. This can be seen as a weakness from the perspective of comparing outcomes across countries and conducting regular assessments to "track" progress/gaps over time. On the other hand, however, when dealing with the global scale especially, focusing on a purely quantitative approach often means relying on national averages that are known to not well reflect the wide diversity of local situations. This does not mean that more quantitative approaches are useless, but rather that complementary ones are also needed to allow for the world to get the full picture of adaptation progress. In fact, compared to assessments that include multiple sources of information and expert judgement, purely relying on quantitative data or statistics can provide a different

[3] Hallegatte S., Rentschler J., Rozenberg, J. (2020). Adaptation Principles : A Guide for Designing Strategies for Climate Change Adaptation and Resilience. World Bank: Washington, DC. https://openknowledge.worldbank.org/handle/10986/34780

[4] https://blogs.worldbank.org/climatechange/climate-change-adaptation-diagnostic-tool-helps-prioritize-action

[5] https://openknowledge.worldbank.org/handle/10986/35039.

picture of adaptation gaps and areas for priority actions, which needs to be interpreted with caution. What we therefore argue here is that tools such as the GAP-Track and the A&R Diagnostic Tool can help providing alternative views, based on their scoring system approach and multi-scale applicability (see section 2.2).

2.2. Application across scales

Recommendation #2
We recommend the GST process to call for more applications of cross-scale analytical tools in order to allow for adaptation to be framed, and possibly assessed, consistently across scales. One major outcome would be to help scaling up knowledge on adaptation efforts on comparable and more robust bases, which will in turn benefit the global-scale information collection under the GST process.

Expert judgment approaches, such as the GAP-Track, the A&R Diagnostic Tool and the RRS, are often framed to be applicable at multiple scales, not only the global one, and applications have already been tested for various types of systems at various scales. There are two main benefits of such a cross-scale perspective:

(i) It shows that adaptation can be framed and assessed in a consistent way across scales, which will benefit future aggregations of information, from the national level (e.g. Adaptation Communications based on sub-national information) to the global one (comparable information between countries).

(ii) It allows to inform global-scale adaptation efforts based on not only country-level information, but also on local-level and project-level perspectives. Given that adaptation is often described as primarily a local-scale issue, better reflecting what is happening on the ground represents a major improvement compared to assessment frameworks that rely only on national-level statistics or policy documents.

The above calls for new databases to be developed and may require time to be completed. However, both the GAP-Track, the A&R Diagnostic Tool and the RRS, among others, show that a lot of information are already available. The scientific literature on adaptation is also sharply growing and offers a major source of local-scale information that can be synthetized through initiatives such as the Global Adaptation Mapping Initiative[6]. While some level of coordination is needed[7], the point right now is that we miss high-level comprehensive information on adaptation efforts, while some information actually exist but are scattered.

2.3. Discussing the "right" level of information needed

Recommendation #3
We suggest for the international climate community to clarify which level of information is needed to inform the GST, and on this basis, further support both ambitious and pragmatic discussions on adaptation progress.

Expert judgment approaches such as the GAP-Track, the A&R Diagnostic Tool and the RRS advocate that the lack of systematic, detailed and quantified information on the multiple dimensions of adaptation (knowledge on risk drivers, implementation level of planning instruments, stocktake of adaptation-related actions happening on the ground, evidence of risk reduction, etc.) should not prevent robust decisions to be taken. The general tendency however remains on looking for increasingly detailed adaptation tracking methodologies; the issue being that this often leads to a vicious cycle: decisions are postponed because of a lack of information, while seeking for more information often delays decisions. Yet, central questions are usually missing from the debate, such as: what level of information do we really need to support robust decisions on adaptation, for example to advance discussions under the UNFCCC Glasgow-Sharm-el-Sheikh work programme on the Global Goal on Adaptation, and especially in view of the upcoming first GST?

[6] https://globaladaptation.github.io/.

[7] Magnan A.K., Anisimov A., Duvat V.K.E., 2022. Strengthen climate adaptation research globally. *Science*, 376: 1398-1400. https://www.science.org/doi/10.1126/science.abq0737.

Figure 1. The "GAP-Track flower": assessment matrix of the Global Adaptation Progress Tracker.

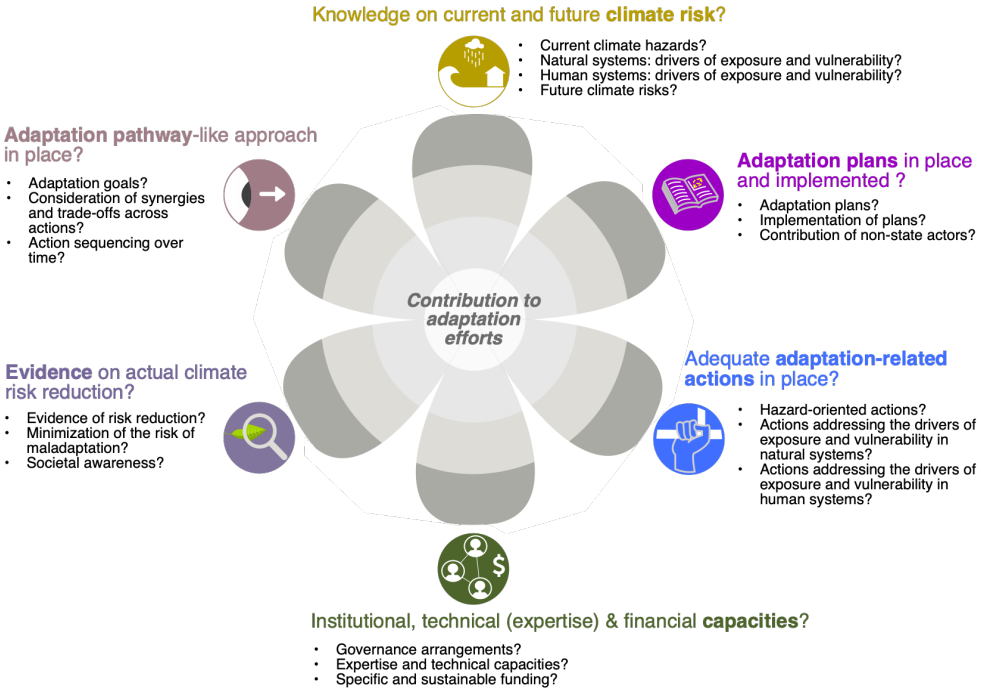
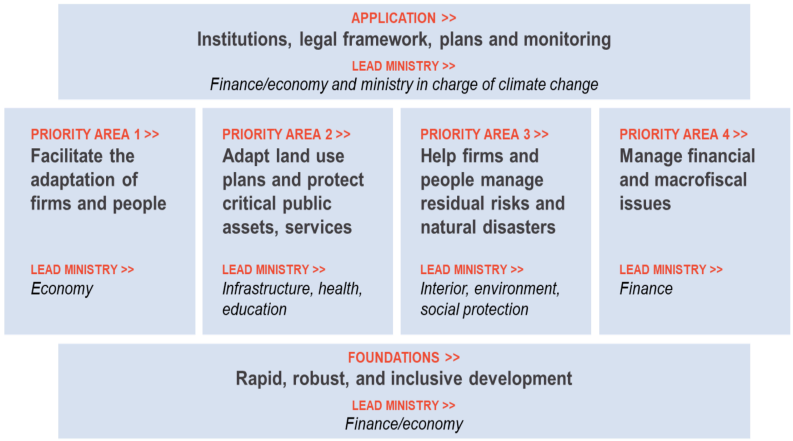
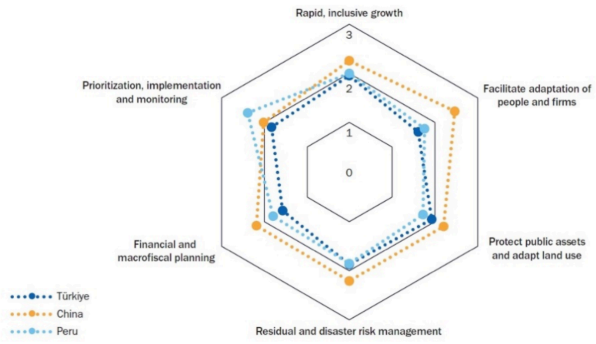


Figure 2. Whole-of-society adaptation and resilience diagnostic framework (Panel A), and an example of application (Panel B).

Panel A.



Panel B.



Note: For each pillar, a set of indicators is assessed with a score between 1 to 3 (1=nascent, 2=emerging, and 3=established) for each indicator. Aggregating the scores (with equal weight) gives the score for each pillar

Figure 3. The Resilience Rating System: an overview.