Progress Report from the Water Expert Group

06 November 2024

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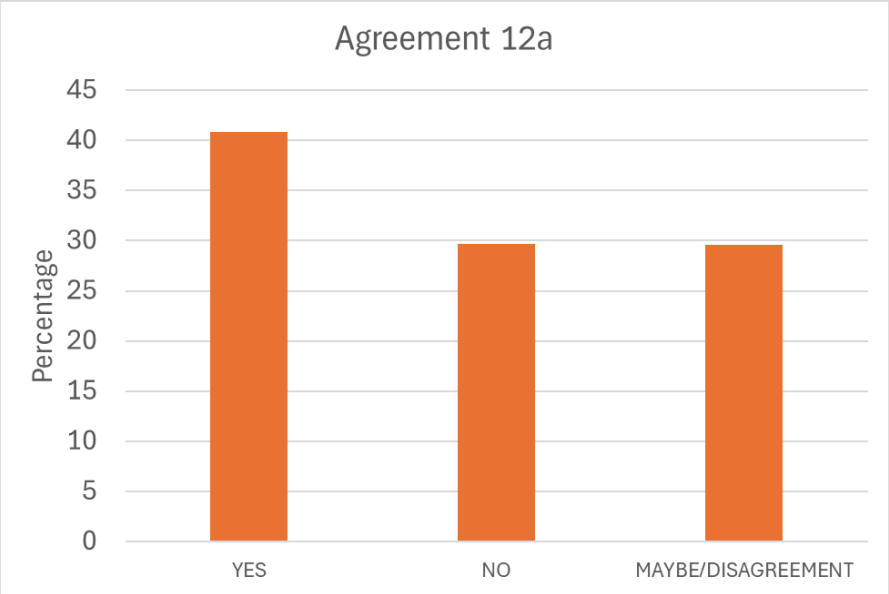
Progress to date

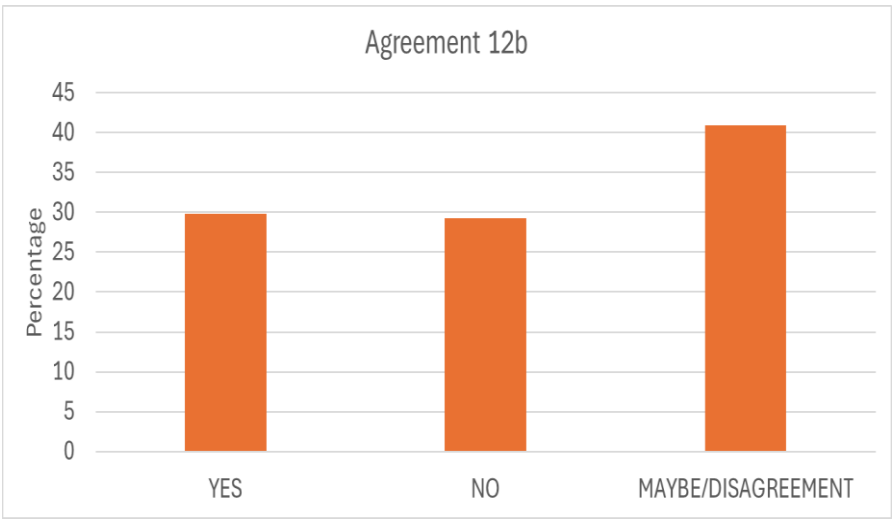
- Water expert group met weekly from 17 October to coordinate the review and discuss relevant topics
- Water expert group completed review of indicators based on their relevance to 12(a) and to 12(b) (YES, NO, MAYBE)
    - *12(a) The relevance of the indicators to measuring progress towards one or more of the targets referred to in paragraphs 9–10 of decision 2/CMA.5;*
    - *12(b) The specific relevance of the indicators to adaptation, including enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change*
- At least two water experts were supposed to review each one of the 656 indicators which were initially mapped to the water target by the GGA secretariat in September, but due to the tight deadline that objective was not achieved. Each indicator was assessed by at least one expert, sometimes up to 3.
- At least one water expert reviewed each one of the 390 indicators from the Adaptation Committee which were added to the list by the GGA secretariat in October
- Results were consolidated and any discrepancies between reviewers classed as MAYBE

Key findings

- Reviewed in total 1,046 indicators which had been mapped to the water thematic target 9a)
    - 656 from the call for submissions to GGA secretariat
    - 390 from the mapping conducted by Adaptation Committee (AC)
    - The relevance of an indicator is classified 'YES' if all reviewers agree that it is relevant, 'NO' if all reviewers agree that it is not relevant, and MAYBE/DISAGREEMENT if all reviewers agree that it is neither NO nor YES (i.e. MAYBE) or if the experts disagree on the evaluation
- Numbers categorized as Yes/No/Maybe for 12a and 12b are as follows:
    - 12(a):
        - YES: 427 (41%)
        - NO: 310 (30%)
        - MAYBE/DISAGREEMENT: 309 (30%)



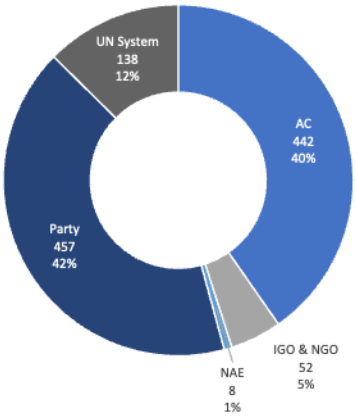
    - 12(b):
        - YES: 312 (30%)
        - NO: 306 (29%)
        - MAYBE/DISAGREEMENT: 428 (40%)



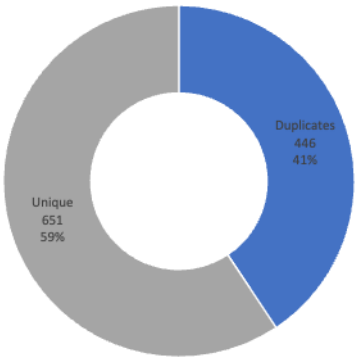
Additional high-level observations of the latest list

- **Total count** - in the final list, 1046 indicators were related to target 9a, including 656 from previous submissions and 390 from the Adaptation Committee
- **Duplicates** - among the 1046 indicators, 446 have duplicates
- **Dimensional targets** - Only 373 (34% of the total) indicators have been mapped to dimensional targets: 49 (13% of those mapped) related to 10a, 55 (15%) related to 10b, 224 (60%) related to 10c, and 45 (12%) related to 10d
- **Type of indicators** - Only 202 (18% of the total) indicators have been classified by type: 2 (1% of those classified) input indicators, 33 (16%) outcome, 141 (70%) output, and 26 (13%) process
- **Reporting level** - 184 indicators have been classified by reporting level, including 100 can be reported at multiple levels and 73 at national level
- **Nature of indicator** - 291 (27% of the total) indicators have been classified as qualitative or quantitative: 34 (12% of those classified) are qualitative, 217 (75%) are quantitative, and 40 (14%) are combined
- **Existing vs new** - 603 indicators are identified as existing indicators, 21 new indicators, and the rest (473) unclassified yet
- **Data readiness** - Only 86 indicators have been assessed, 73 of which are classified as yes / high / Tier I. However 1,011 indicators (92%) have no information on data readiness.
- **Data sources** - at least 614 (56%) indicators are from NAPs or NDCs (including those in the AC list). 76 (7%) are from UN agencies and 28 (3%) are already used for monitoring SDG6. However, there are still 274 indicators with no information on the data source.

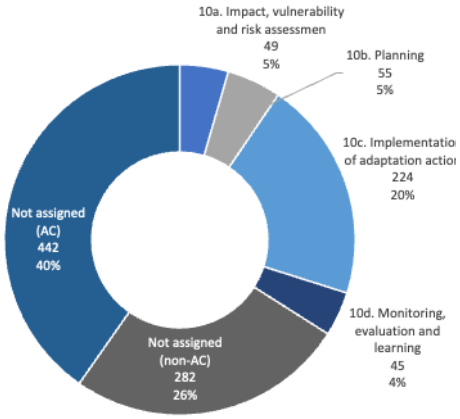
By Submission Provider



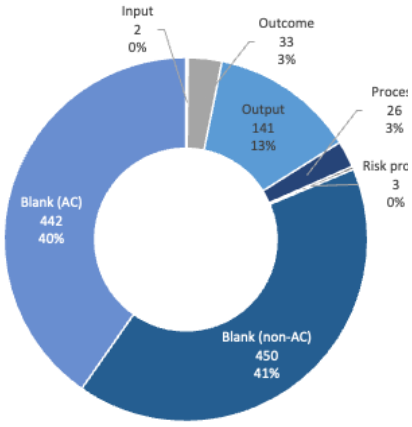
By Duplication



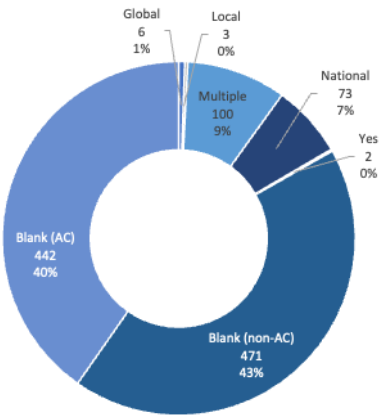
By Dimensional Targets



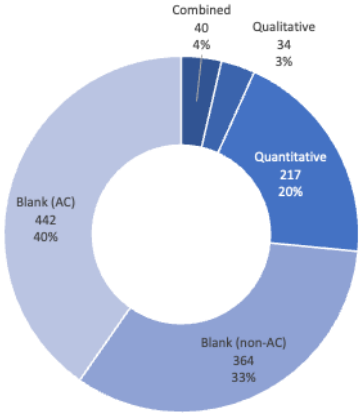
By Indicator Type



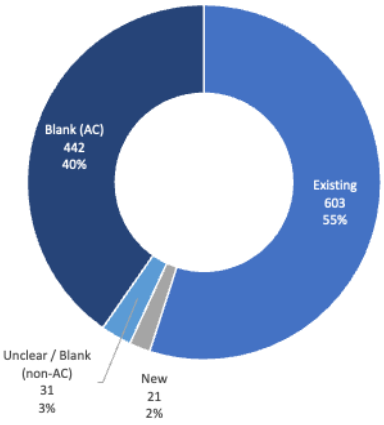
By Reporting Level



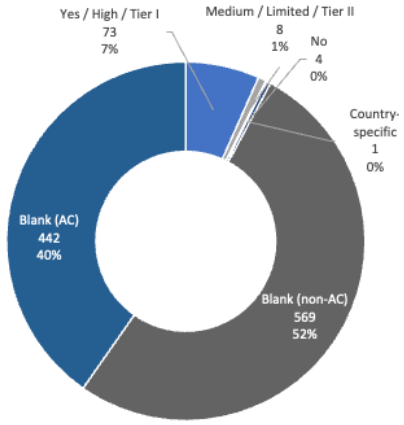
By Nature of Indicator



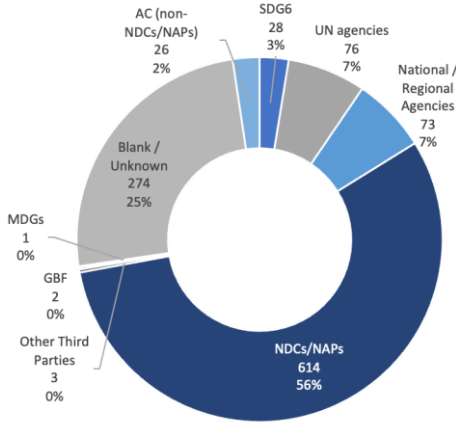
By Existing Usage



By Data Readiness



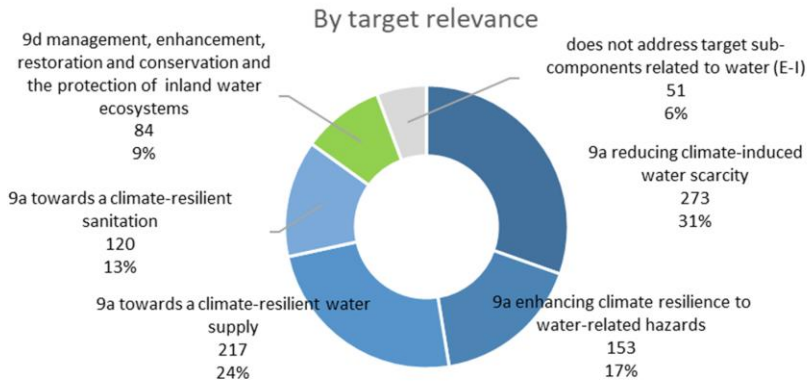
By Data Source



Relevance to sub-components of Target 9a

The water expert group's preliminary review of indicators compiled by the GGA secretariat assessed the relevance of indicators to sub-components of Target 9a (does not include AC indicators which were added later)

- 31% relate to reducing climate-induced water scarcity
- 17% relate to enhancing climate resilience to water-related hazards
- 24% relate to climate resilient water supply
- 13% relate to climate resilient sanitation
- 9% could be relevant for monitoring 9d management, enhancement, restoration and conservation and the protection of inland water ecosystems
- 6% do not address any of the above target sub-components related to water



Common reasons for deciding relevance in relation to 12a and 12b

Indicators were assessed as YES, NO, MAYBE/DISAGREEMENT separately for 12a and 12b. A large number of indicators were considered relevant to monitoring one or more sub-components of Target 9a (YES=41%) and a smaller number were considered relevant for monitoring adaptation (YES=30%). A similarly large number of indicators were deemed non-relevant for Target 9a (NO=30%) and Target 9b (NO=29%), which may reflect challenges in the selection process by parties or issues with the formulation of potentially relevant indicators. This discrepancy highlights possible limitations in aligning chosen indicators with the specific objectives of each target, either due to inconsistencies in indicator suitability or gaps in addressing the intended monitoring focus. Evaluators were unsure of the relevance, or disagreed on the relevance to Target 9a for 30% of the indicators, indicating some level of ambiguity or differing perspectives among reviewers on their applicability. For Target 9b, 40% of the indicators were similarly classified as MAYBE/DISAGREEMENT, reflecting even greater uncertainty or disagreement in their relevance assessment. It was noted that the latter requires further discussion as there is no general agreement between the different expert groups on how adaptation should be defined and measured.

Those considered "YES"

- 12a indicators considered potentially relevant for monitoring progress towards one or more sub-components of the global goal for adaptation target for water (target 9a) i.e. reducing climate-induced water scarcity, enhancing climate resilience to water-related hazards, towards a climate-resilient sanitation.
- However it was noted that further discussion will be required to establish general agreement between the different expert groups on the definition of commonly used terms such as 'climate-induced' and 'water-related'.
- 12b indicators considered potentially relevant for monitoring one or more sub-components of adaptation i.e. enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change.
- However it was noted that further discussion is required to establish general agreement between the different expert groups on how adaptation should be defined and measured.

Those considered "NO"

- Too broad - some indicators are only measuring the status of water system, development progress or general water use and management practices, and does not show clear linkage with adaptation efforts
- Too specific - some indicators explicitly refer to certain types of projects (e.g. UNICEF funded projects), or a specific country context (e.g. the UK, or the US), which limit their use.
- Relying on forecast rather than observations - some indicators specifically rely on forecast results, which may not be best suited to consistently track progress over the years across countries
- Unclear definition - some indicators appear not having clear definition, for instance, one indicator refers to "water score" without further details on what kind of score and how it will be measured
- Potential mis-categorisation - some indicators do not appear relevant to water (e.g. indicators related to land use), which might be marked relevant for 9a) by mistake
- Relevant to target but not for adaptation - some indicators only measure climate-related risk or hazards and do not directly address adaptation. These were marked YES for 12a but NO for 12b.
- Too general (water management) - frequent mentions of "water management indicator" and "general water management," indicating that certain indicators might be too focused on general water management without directly addressing questions of adaptation and resilience.
- Too general (development) - the term "development indicator" suggests that some evaluators view these indicators as broadly developmental rather than directly addressing climate adaptation and resilience.
- Measurement limitations: - reviewers noted that many indicators "do not measure progress" implying skepticism about whether these indicators could be used to effectively measure progress on adaptation and resilience.

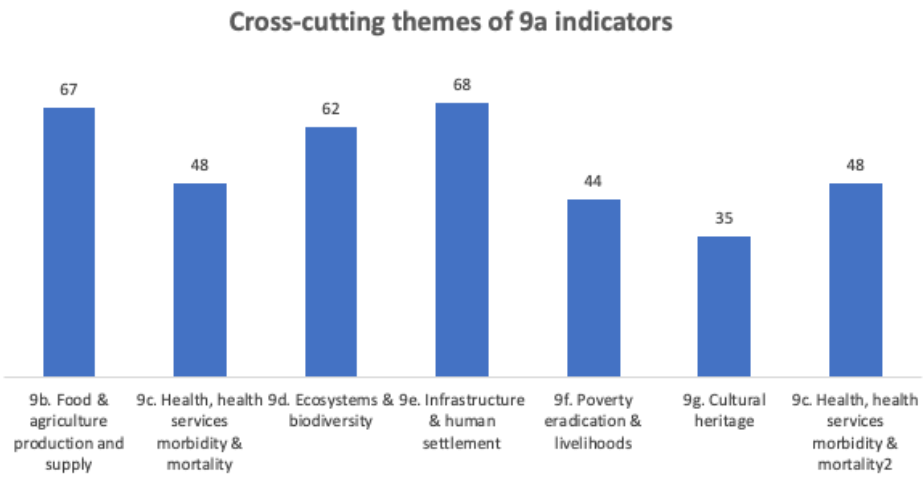
Those considered "MAYBE"

- Too broad - Many indicators were assigned YES or MAYBE and still need clarification or improvement with regards to relevance to climate change and adaptation. Some of them refer to sustainability and are not necessarily linked to climate change.
- Composite indicators - a few proposed indicators are composite indicators that are based on certain methodologies that assess and combine multiple individual indicators. Their suitability for global adoption needs to be further explored.

- Small adjustments needed - Indicators are generally relevant to water-related adaptation, however it would require some adjustments to more easily measure and track progress at different levels - for instance, some indicators, although relevant, are monitoring “number/percentage of countries…” at the global level
- Partially clear definition - Indicators are generally relevant to water-related adaptation, however the descriptions are not clear enough in terms of measurement/metric used, or would require very clear assessment and monitoring guidance for certain concepts (e.g. “climate-smart”)
- Too focused on risk and damage - some indicators monitor recorded disruption or damage from water-related extreme weather events, which is relevant, however they could be slightly adjusted and/or accompanied with assessment guidance to more directly show progress in adaptation and economic resilience
- Not specific enough to track adaptation - common terms like "track progress adaptation" and "indicate progress adaptation" highlight concerns about whether the indicators sufficiently capture adaptation-specific progress.
- Not specific enough to track impact - comments like "does not necessarily track impacts" indicate concerns that certain indicators may not fully capture relevant impacts on adaptation and resilience
- Reformulation needed - the phrase "needs reformulation" suggests that evaluators see a need for clearer, more targeted wording to enhance indicator relevant

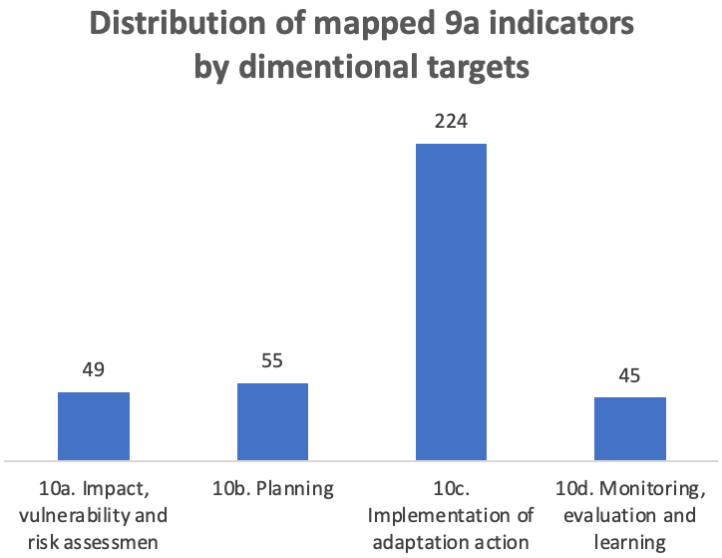
Insights on cross-cutting nature of the target, as well as links between thematic and dimensional targets, including examples

The chart below shows the numbers of indicators mapped to the water thematic target 9a which are also mapped to other thematic targets. It shows that water is a cross-cutting issue with linkages to all other thematic targets. Water was most frequently mapped to targets 9b (food and agriculture), 9d (ecosystems and biodiversity) and infrastructure and human settlements (9e). It was least frequently mapped to 9g (cultural heritage).



As mentioned in the high-level observations above, only 373 (34% of the total 1,097) indicators have been mapped against dimension targets so far:

- 49 indicators (13% of those mapped 373 indicators) are related to 10a
- 55 (15% of those mapped) are related to 10b
- 224 (60% of those mapped) are related to 10c
- 45 (12% of those mapped) are related to 10d



Specific questions arising from the 'maybes' and recommendations for how to address them

- Many indicators currently lack sufficient information to determine relevance to target 9a and/or relevance to monitoring adaptation. In such cases we could either request further information in order to determine relevance or assume that they are not relevant and delete them.

- Many indicators are existing indicators which have been developed for other purposes. Submissions indicate that while they are generally relevant for monitoring target 9a, modifications may be required in order to directly measure adaptation.
- Many indicators include terms for which there is currently no internationally agreed standard definition. Such indicators may be relevant but further guidance is needed to ensure consistent and comparable measurement across countries.
- Many indicators do not specify the level at which indicators are expected to be aggregated for the purpose of monitoring adaptation. Further discussion is required to determine the most relevant unit of measurement and the feasibility of aggregation for the purposes of national and global monitoring.
- Many of the indicators could be relevant if formulated differently, for example by expressing as a relative proportion rather than an absolute number.
- Some of the indicators are composite measures which combine multiple different sub-indicators. Further discussion is required to assess the relevance of these sub-indicators and the suitability of composite measures for tracking change over time.

Suggestions for next steps post-COP and into 2025

Short term suggestions for development of the indicator framework

- Ensure each indicator is evaluated by at least two experts
- Discuss disagreements between evaluations and try to reach a consensus
- Further clarification is required on the purpose of the GGA indicators and how they are expected to be aggregated and used at national, regional and global levels.
- Development of a robust indicator framework to support national and global monitoring of GGA targets will require a series of technical workshops bringing together experts, international agencies and representatives from national statistical offices.
- Further discussion is required to establish general agreement between the different expert groups on how adaptation should be defined and measured.
- Further discussion will be required to establish general agreement between the different expert groups on the definition of commonly used terms such as ‘climate-induced’ and ‘water-related’.
- Expert groups to agree a structured method to group those indicators marked “YES” and “MAYBE” based on additional criteria (e.g. global applicable vs country/ecosystem specific; applicable for multiple themes vs single theme; input, output, process and outcome indicator)
- The majority of indicators marked “YES” and “MAYBE” will need additional metadata and proper methodological documentation in order to conduct a rigorous assessment of “measurability” and “data readiness”.

Long term suggestions for implementation of the indicator framework

- Further clarification is required on the expected roles and responsibilities of national statistical offices, regional statistical bodies and international agencies in supporting national and global monitoring of GGA targets
- Further discussion is required on how to support ongoing methodological development. Many of the proposed indicators will require further development and testing before they can be integrated into national monitoring systems and collected at scale.
- Further discussion is required on how to strengthen capacity. Many countries will require ongoing support to strengthen statistical capacity for routine collection, analysis and reporting of adaptation indicators
- Further discussion is required to define mechanisms for compilation and aggregation of national data for global reporting. The difficulty in extracting the data from parties discussions need to be addressed - maybe submission via forms/database for easy retrieval. Consider developing a submission platform that automates the calculation of indicators based on underlying data (there are more indicators than underlying data sets)

Specific questions for Parties to address at COP 29

- Clarify the purpose of the GGA indicators, the expected total number of indicators, and how they are expected to be aggregated and used at national, regional, and global levels
- Consider supporting a series of technical workshops bringing together experts, international agencies, and NSOs to develop a robust indicator framework to support national and global monitoring of GGA targets by the end of the UAE-Belém work programme.
- Consult with UN statistical division, regional commissions and international agencies responsible for reporting on other global indicator frameworks in order to maximize synergies
- Consider establishing a technical mechanism to coordinate the ongoing development and implementation of the GGA indicator framework following the UAE-Belém work programme.