Submission of input to the UNFCCC Technical Paper on the Belém Adaptation Indicators

by the World Health Organization and The Lancet Countdown on Health and Climate Change as Co-leads of the Task Team on Indicators of the Alliance for Transformative Action on Climate and Health (ATACH)[1]

Executive summary

The ATACH Task Team on Climate Change and Health Indicators recently discussed country testing of the eight health-related Belém Adaptation Indicators included under paragraph 5 of the annex to decision 12/CMA.7, for measuring progress achieved towards the target referred to in paragraph 9(c) of decision 2/CMA.5. The discussions highlighted strong country interest in testing and operationalizing the health-related Belém Adaptation Indicators, while also revealing a number of common challenges, providing valuable input to the UNFCCC technical paper on the targets of the UAE Framework for Global Climate Resilience and the Belém Adaptation Indicators.

Countries reported that the health, climate and adaptation data needed to monitor health adaptation progress are often not available, or do not align directly with the indicators as currently defined. No country reported having data that fully captures all indicators in their entirety, raising important questions about how existing data can be used for reporting and what level of alignment should be considered sufficient. Significant variation in national data systems, methodologies, capacities and resources also suggests differing levels of readiness for implementation.

The most frequently identified challenge was the need for greater conceptual clarity and guidance for the operationalization of the indicators. Countries highlighted uncertainties relating to key concepts as mentioned in the indicators, including climate-related hazards, climate-sensitive health outcomes, vulnerable populations, adaptation outcomes, and climate-resilient health systems and facilities. In addition, countries emphasized the need for methodological guidance, support for data mapping and integration, capacity strengthening, opportunities for peer learning and technical exchange,.

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[1] The Alliance for Transformative Action on Climate and Health (ATACH) is a WHO-hosted initiative that works to realize the ambition set at COP26 to build climate-resilient and low-carbon sustainable health systems, using the collective power of WHO Member States and other stakeholders to drive this agenda forward at pace and scale and to promote the integration of the climate change and health nexus into national, regional, and global plans. Currently comprising 107 countries/areas and 127 partner organizations, ATACH works to accelerate the implementation of related commitments and initiatives at country level. Within ATACH, the Task Team on Climate Change and Health Indicators, co-led by WHO and The Lancet Countdown on Health and Climate Change, brings together countries and partners to share information on indicator initiatives and advance alignment of monitoring and reporting mechanisms. *For further information: https://www.who.int/initiatives/alliance-for-transformative-action-on-climate-and-health*.

Countries also identified important opportunities to build on existing health, climate, adaptation and disaster risk reduction monitoring systems, including WHO, UNFCCC and Sendai Framework reporting processes, in order to reduce reporting burdens and improve coherence. In response, the ATACH Task Team will support continued country testing through a survey of member countries, facilitation of technical exchange, and development of knowledge products documenting lessons learned and available resources. Emerging priorities include strengthening definitions and technical metadata, documenting country experience, enhancing alignment with existing monitoring systems, facilitating peer learning, and supporting collaboration among countries and technical partners while maintaining the voluntary, country-driven and non-comparative nature of the Belém Adaptation Indicators.

Country experience and lessons learned

On 10 July 2026, the ATACH Task Team on Climate Change and Health Indicators convened a discussion on country experiences in testing and operationalizing the health-related Belém Adaptation Indicators. Participating countries shared progress, challenges and lessons emerging from early consideration and testing efforts, providing valuable insights into the practical realities of implementing the indicators in different national contexts. Despite differences in national circumstances, some common themes emerged across country interventions.

First, countries generally reported that relevant health, climate and adaptation data are available to some extent; however, available datasets do not always align directly with the health-related Belém Adaptation Indicators as currently defined. While countries were often able to identify existing data sources that could serve as proxies for, or contribute to, indicator reporting, no country reported having data that fully captured every indicator in its entirety as described in CMA.7. This raised important questions regarding the requirements for each indicator, the level of alignment required for reporting, and when available data can be considered sufficiently robust and relevant to support an indicator. Substantial heterogeneity across countries in data systems, methodologies, and levels of readiness, is likely to result in differing capacities to report against the indicators.

Second, countries called for greater clarity regarding key concepts (such as counterfactual scenarios and attribution) and terminology. Participants frequently noted that before testing can be expanded, there is a need for shared understanding of what it is that the indicators are meant to measure and how they should be interpreted in differing national contexts.

Third, countries emphasized the need for targeted technical and institutional support to advance indicator testing and reporting. Key priorities included methodological guidance, data mapping, capacity strengthening, and opportunities for peer learning and technical exchange. Several countries also highlighted the importance of linking indicator implementation to broader technical and financial support mechanisms. Discussions suggested that existing data can often contribute to reporting, but additional support is needed to operationalize the indicators in a meaningful way across national contexts.

Key challenges

1. Definitions and conceptual clarity

Across the discussion, the most frequently cited challenge was the need for clearer definitions and operational guidance.

Countries highlighted uncertainty regarding concepts including:

- What constitutes a “climate-related hazard”;
- How “climate-sensitive” health outcomes should be defined;
- How populations “vulnerable to climate change” should be identified;
- What constitutes an “adaptation outcome”;
- What should qualify as “climate-resilient health services”;
- What should qualify as “climate-resilient health facilities”; and
- How resilience itself should be defined and measured.
- How “counterfactuals” should be defined

One country emphasized the need for clearer definitions and guidance to improve consistency and feasibility of reporting. Another similarly highlighted the need for greater clarity around concepts such as adaptation outcomes and resilience, while another stressed the importance of practical guidance to support country application of indicators within existing national systems.

Many countries noted that the immediate need is therefore not necessarily more sophisticated analytical methods, but rather clearer operational definitions and metadata that explain what indicators are intended to capture and how countries may interpret them in practice.

2. Data integration and mapping

Countries reported that some relevant data exist, but that these data are often dispersed across multiple institutions. Countries highlighted fragmented data systems, the involvement of multiple responsible institutions, and limited interoperability between health, climate and other sectoral datasets. Participants also noted the absence of well-established methodologies for linking adaptation actions to observed outcomes, as well as difficulties in mapping existing national monitoring and information systems to the specific requirements of the health-related Belém Adaptation Indicators.

One country in particular noted that substantial amounts of climate and health information already exist and that a key challenge lies in translating those data into the structure of the Belém Adaptation Indicators while maintaining national relevance and international coherence.

3. Attribution to climate change and adaptation measures

Some indicators require assessment of climate-related mortality, morbidity and infectious disease incidence relative to counterfactual conditions. Countries and researchers highlighted the continuing scientific challenges associated with data collection efforts to capture these impacts, and with attributing observed health outcomes both to anthropogenic climate change or to specific adaptation interventions.

4. Institutional coordination and capacity

Implementation of the indicators requires coordination among health authorities, environment ministries, meteorological agencies, disaster risk reduction institutions and national statistical systems.

Countries noted that successful implementation will depend on strengthening governance arrangements for adaptation monitoring and ensuring that reporting requirements can be integrated within existing institutional processes wherever possible.

Opportunities to build on existing data and monitoring systems

A substantial amount of relevant health, climate and adaptation data is already being collected through existing national and international monitoring processes. While in some cases this data can support the monitoring of the health-related Belém Adaptation Indicators at least partially, in other cases they are less aligned with the indicators as defined, but can provide a foundation for indicator testing and reporting. Several countries identified opportunities to draw on data and reporting mechanisms associated with the WHO climate-resilient and low-carbon health system monitoring framework, the WHO Global Survey on Health and Climate Change, the WHO Global Action Plan on Climate Change and Health monitoring framework, WHO GPW14 monitoring processes, National Adaptation Plans (NAPs), Nationally Determined Contributions (NDCs), Biennial Transparency Reports (BTRs), and Sendai Framework reporting systems.

Discussions highlighted that many of the underlying data needed for indicator reporting are already being generated through these processes and are increasingly becoming part of routine monitoring activities. Building on established monitoring mechanisms was widely seen as an opportunity to reduce reporting burden, improve efficiency, and support greater consistency in the operationalization of the health-related Belém Adaptation Indicators.

Role of the ATACH Task Team on Indicators in supporting operationalization of the Belém Adaptation Indicators

The ATACH Task Team on Indicators was established to support countries in the use and development of climate and health indicators, promote learning across countries, and help improve coherence across the various global monitoring frameworks relevant to climate change and health. Recent discussions within the Task Team have reinforced the value of a platform where

countries can share expertise and experience in the implementation of the health-related Belém Adaptation Indicators, and the importance of supporting countries in the practical testing of the Indicators and in identifying approaches that are nationally relevant, feasible and policy-relevant. Experiences shared through ATACH suggest that the most useful role for international organizations may therefore be to support common understanding of concepts and facilitate exchange of experience, rather than to standardize approaches across all countries.

Building on discussions held during the Task Team meeting in July 2026, the Task Team will undertake a programme of work focused on documenting country experiences with indicator testing and facilitating peer-to-peer learning.

Country survey on testing of the Belém Health Indicators

As an initial step, the Task Team will conduct a survey of ATACH member countries to better understand experiences with testing the health-related Belém Adaptation Indicators. The survey will gather information on:

- Activities currently being undertaken to test the indicators, including governance arrangements, stakeholder engagement, data mapping and feasibility assessments;
- Which of the health indicators are being tested or prioritized for future testing;
- Challenges encountered during testing and operationalization;
- Data availability and data sources; and
- Technical, institutional and capacity-building support needs identified by countries.

The survey is intended to generate a clearer understanding of the current state of implementation across countries and to identify common challenges and opportunities for collaboration. Importantly, it is not intended to assess country performance, but rather to support collective learning and technical exchange in line with the voluntary, country-driven nature of the Belém Adaptation Indicators.

Facilitating exchange of experience and expertise

Based on the findings of the survey, the Task Team will organize a series of technical exchanges and discussion sessions in the coming months. These exchanges are expected to focus on issues identified by countries as priorities, including:

- Interpretation and operational definitions for key indicator concepts;
- Approaches to indicator testing and feasibility assessment;
- Data sources and monitoring systems;
- Experiences from countries already piloting indicators;
- Opportunities for alignment with existing national, WHO and other international reporting processes; and
- Emerging technical issues related to indicator implementation.

The discussions in the Task Team meeting highlighted a strong demand from countries for greater clarity around definitions and concepts. Accordingly, facilitating dialogue and shared understanding around these issues will be a key area of work going forward.

Development of knowledge products and resources

To support countries and contribute to broader discussions on indicator operationalization, the Task Team will produce:

1. **A summary report on country experiences in testing the health-related Belém Adaptation Indicators**, synthesizing lessons learned, common challenges and examples of good practice; and
2. **A consolidated resource repository**, bringing together existing guidance, data sources, indicator frameworks, methodological resources and relevant initiatives that may support countries in the implementation and monitoring of the indicators.

These products are intended to support implementation while avoiding unnecessary duplication of effort and reporting burden for countries.

Ongoing support to countries

The Task Team will continue to provide a platform for collaboration among countries, WHO, technical experts and partner organizations on climate and health indicators. Going forward, the Task Team will support countries in testing, monitoring and operationalizing the indicators through continued knowledge exchange, identification of technical resources and dissemination of lessons emerging from country experience.

Emerging priorities for operationalization of the Belém Adaptation Indicators included under paragraph 5 of the annex to decision 12/CMA.7, for measuring progress achieved towards the target referred to in paragraph 9(c) of decision 2/CMA.5

Preliminary country experiences with testing the health-related Belém Adaptation Indicators highlighted several recurring priorities for future work. These priorities are expected to guide the activities of the ATACH Task Team on Climate Change and Health Indicators and provide relevant input to broader discussions on indicator operationalization, including the UNFCCC technical paper. While a primary purpose of this work is to facilitate country learning and operationalization of the indicators in line with paragraph 25 of 12/CMA.7 given the urgency and interest from countries in moving forward, it may also serve as a useful technical resource and input for any future UNFCCC technical work on metadata and methodologies such as the technical taskforce once established.

1. **Document lessons from countries voluntarily testing** the indicators, and build on these experiences to inform future operationalization.

2. **Support countries in the technical and operational development** of the health indicators, including through guidance, clarification of concepts such as climate-related hazards, vulnerable populations, adaptation outcomes and climate-resilient health systems.
3. **Promote shared understanding of indicator concepts** while recognizing that countries may apply different methodologies and implementation approaches according to national circumstances.
4. **Identify opportunities for, and support alignment with existing health, adaptation and disaster risk reduction monitoring systems** to minimize reporting burdens and maximize usability.
5. **Facilitate peer learning and technical exchange between countries** on solutions to bypass practical implementation challenges, including governance arrangements, metadata development, data mapping and indicator testing.
6. **Support continued collaboration between Parties, UN agencies, research institutions and technical partners** to strengthen the operationalization of the indicators while fully respecting the voluntary, country-driven and non-comparative nature of the framework.