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**PROPOSALS FOR EXPERT MEETINGS AND WORKSHOPS FOR THE SEVENTH
ASSESSMENT CYCLE**

**Expert Meeting on the Methodologies, Metrics and Indicators for Assessing Climate Change
Impacts and Adaptation**

(Prepared by the Co-Chairs of Working Group II)

(Submitted by the Secretary of the IPCC)

PROPOSALS FOR EXPERT MEETINGS AND WORKSHOPS FOR THE SEVENTH ASSESSMENT CYCLE

Expert Meeting on the Methodologies, Metrics and Indicators for Assessing Climate Change Impacts and Adaptation

Background

As climate change impacts intensify across the world, efforts to adjust to current and projected climate and to moderate and avoid harm have also accelerated. This has led to many advances in the assessment of impacts and the implementation of climate change adaptation actions. However, the evidence and data for these emerging methodologies and their relative effectiveness remain scattered and sporadic. The release of the 1994 IPCC Technical Guidelines for Assessing Climate Change Impacts and Adaptations has been followed up by similar products from various global initiatives, including the UNDP-Global Environmental Facility Adaptation Policy Framework (2004)¹, the Least Developed Countries Expert Group National Adaptation Plan Technical Guidelines² and supplementary guidelines³ and the ISO Guidelines on vulnerability, impacts and risk assessment⁴. They share a common ambition to support structured climate impact assessments, design of climate adaptation plans/strategies, implementation of adaptation programmes, and tracking progress in adaptation implementation.

The intervening period also saw the launch of the United Nations Framework Convention on Climate Change (UNFCCC), Agenda 2030 and the Sustainable Development Goals (SDGs), and the Paris Agreement. Countries are making commitments towards a collective goal to limit warming and increase climate resilience, aided by mechanisms to report on countries' progress on emissions reduction and adaptation.

The earliest IPCC assessments focused on assessing climate change impacts, with limited attention to adaptation. There has been notable progress in the assessment of climate change adaptation as the understanding of climate change impacts evolved and with greater awareness of the need for adaptation. Significant progress has been made in the understanding of risks as a critical concept for integrating exposure, hazards, and vulnerability. Further advances have been made in the incorporation of scenario-based analysis to aid the understanding of climate change impacts under different GHG emissions pathways. There has also been growing attention to the regional impacts of climate change and the importance of developing context-specific responses based on regional differences in vulnerability and adaptive capacities. Despite the progress, assessment of adaptation progress lags behind the assessment of climate change impacts. Gaps remain in assessing the feasibility and effectiveness of adaptation, including options for responding to hard and soft limits of adaptation, as well as enablers and barriers to climate change adaptation. Assessments have also remained fragmented, with limited integration across sectors.

In the Sixth Assessment Report (AR6), Working Group II (WGII) made significant advances in assessing climate change impacts and adaptation, offering a more integrative, comprehensive, and equity-centered analysis. Building on the Fifth Assessment Report (AR5), the AR6 positioned adaptation as a core component of the risk framework, emphasising 'the role of responses in modulating the determinants of risk'⁵. The AR6 also highlighted how adaptation is integrated into

¹ <https://adaptation-undp.org/resources/adaptation-policy-frameworks-climate-change-developing-strategies-policies-and-measures>

² <https://unfccc.int/topics/adaptation-and-resilience/workstreams/national-adaptation-plans-naps/guidelines-for-national-adaptation-plans-naps>

³ UNFCCC, 2024. Supplementary materials to NAP Technical Guidelines, <https://napcentral.org/supplementary-materials-library>

⁴ <https://committee.iso.org/sites/tc207sc7/home/projects/published/adaptation-standards.html>

⁵ https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter01.pdf

broader development processes through climate-resilient pathways, connecting it to sustainable development goals and mitigation. The IPCC Special Report on Global Warming of 1.5°C evaluated the feasibility of mitigation and adaptation, along with their synergies and trade-offs with the SDGs across system transitions⁶. Building on this report, WGII AR6 provided a multidimensional assessment of the feasibility and synergies of mitigation for climate responses and adaptation options—focusing on near-term, global-scale impacts up to 1.5°C of warming⁷. AR6 also made important progress through the Global Adaptation Mapping Initiative (GAMI⁸), which synthesised evidence on the effectiveness of adaptation options. Despite the progress made, AR6 notes that there are still numerous gaps in research and understanding of adaptation actions, their effectiveness, and implementation pathways (including financing).

To enhance decision-making and implementation, countries are embarking on various efforts to develop metrics for measuring the effectiveness of adaptation actions and indicators – impact, outcome and process – that can support monitoring and evaluation of adaptation progress. The UNFCCC agreed on an overarching framework for the Global Goal on Adaptation (GGA) at COP28 in 2023. The GGA framework is developing indicators to guide global adaptation efforts and enhance support for adaptation in developing countries by COP30 in 2025. These global-level indicators are being developed for seven thematic targets (water, food, ecosystems and biodiversity, health, infrastructure, poverty and livelihoods, and cultural heritage). Four targets address the adaptation cycle (climate risk and vulnerability assessments, planning, implementation and monitoring, and evaluation and learning). In light of the GGA work, the IPCC was invited to consider updating its 1994 Technical Guidelines for Assessing Climate Change Impacts and Adaptations⁹ (hereafter referred to as Guidelines) during AR7. At its 60th session¹⁰ the IPCC decided to revise and update the Guidelines in AR7. The updated Technical Guidelines will be scoped, developed, reviewed, and considered for approval and acceptance in conjunction with the Working Group II contribution to the IPCC Seventh Assessment Report (AR7) and published as a separate product.

Given these current developments, an Expert Meeting on Methodologies, Metrics and Indicators for Assessing Climate Change Impacts and Adaptation is timely to determine how the Seventh Assessment can contribute to better assessing the methodologies, metrics and indicators for measuring impact and adaptation in a way that addresses the gaps noted and supports effective adaptation. The Expert Meeting will bring a pool of academic and practice-oriented experts together to facilitate an evaluation of past and ongoing initiatives and to formulate approaches towards a scientific assessment that can support and inform ongoing efforts to understand and track progress in adaptation at different scales, including in the context of implementation.

Objectives of the Expert Meeting

In mid-2025, a WGII author team for the Assessment Report and the Guidelines will be selected by the members of the WGII Bureau, with the First Lead Author Meeting planned for late 2025. An Expert Meeting at the beginning of the assessment process soon after the formation of author teams is expected to:

- Stimulate discussions and provide relevant evidence on approaches, methodologies, metrics and indicators for impact and adaptation assessment and decision-making and tracking adaptation progress;
- Assess existing frameworks and guidelines and identify gaps for improvement;
- Contribute resources to the revision and update of the IPCC Technical Guidelines that support inclusive decision-making and implementation of effective adaptation.

⁶ https://www.ipcc.ch/site/assets/uploads/sites/2/2022/06/SR15_Chapter_4_LR.pdf

⁷ https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_Chapter18.pdf

⁸ <https://globaladaptation.github.io/>

⁹ <https://unfccc.int/documents/626569>

¹⁰ https://www.ipcc.ch/site/assets/uploads/2024/02/IPCC-60_decisions_adopted_by_the_Panel.pdf

Expected Outcomes

The Expert Meeting will produce a guidance paper on impact and adaptation assessment for consideration in WGII AR7 and the Technical Guidelines revision and update. The paper aims to guide authors on assessing, for example, how enhanced monitoring, evaluation and learning can boost adaptation effectiveness, adaptation programming and enhance implementation of national and local adaptation plans. It will contribute to the engagement of policymakers and users of the updated Guidelines and identify input and source material that can contribute to the assessment.

Planning of the Expert Meeting

Steering Group: A Scientific Steering Committee comprising IPCC Bureau members and additional external experts will develop the EM program, prepare a list of invited experts to the Expert Meeting for agreement by the WGII Bureau, and lead in compiling the meeting's output report.

Timing: The Expert Meeting is proposed to take place in the first quarter of 2026, which allows reflection on the initial assessment approach developed by IPCC authors at the First Lead Author Meeting and interpret the outcome of the COP30 discussions on metrics and indicators.

Duration: 2.5 to 3 days

Location: TBD

Participants: About 60 participants in total, with broad international representation. It is proposed that 30 journeys be allocated in the 2026 IPCC Trust Fund budget to support the travel of experts from developing countries and countries with economies in transition. Participants will be drawn from academia as well as from relevant stakeholder and user groups, including practitioners, representatives from the private sector, intergovernmental and non-governmental organisations, and governments. Their expertise includes methodologies to develop indicators for climate change impacts, evaluation of the effectiveness of adaptation measures, development of information or guidelines for adaptation policy planning, and the design and implementation of adaptation policy strategies at national and subnational levels.