

Recognizing the adaptation efforts of developing country Parties

Revised concept note

Recommended action by the Adaptation Committee

The Adaptation Committee, at its 28th meeting, may wish to consider the information contained in this document and provide further guidance, as appropriate.

I. Background

1. In line with decision 11/CMA.1, the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) requested the UNFCCC secretariat, under the guidance of the Adaptation Committee (AC) and the Least Developed Countries Expert Group (LEG), and in collaboration with relevant stakeholders, to prepare biennial synthesis reports starting in 2020. These reports are intended to recognize the adaptation efforts of developing country Parties, focusing on specific adaptation themes, lessons learned, and good practices.

2. To date, three synthesis reports have been prepared by the secretariat under the guidance of the AC. The [first synthesis report](#) explored how developing countries are addressing hazards. It provided a comprehensive overview of the strategies and approaches used by developing countries to mitigate the impacts of climate-related hazards. The [second report](#) focused on the efforts of developing countries in assessing and meeting the costs of adaptation, highlighting the approaches employed in assessing adaptation costs and the efforts to meet increasing financial needs. The [third synthesis report](#) focused on institutional arrangements and stakeholder engagement in the context of adaptation in developing countries. It synthesized relevant lessons and good practices related to the four elements of the iterative adaptation cycle risk and vulnerability assessments, planning, implementation, and monitoring, evaluation and learning as well as related enabling factors and cross-cutting issues.

3. At its 27th meeting, the AC considered possible themes for its fourth synthesis report, to be published in 2026, as outlined in document [AC27/CN/12](#). The AC agreed to merge options 3 (Strengthening reporting and data systems for adaptation) and 4 (Advancing adaptation through science, education, and technology collaboration) and additional considerations outlined in the document. It further agreed to refine the theme intersessionally and request the secretariat to prepare an annotated outline for the AC's consideration at its 28th meeting.

II. Objective

4. This document aims to refine the focus of the 2026 synthesis report and presents a draft annotated outline for consideration by the AC. It also outlines the scope, structure and sources of information for the report, reflects relevant guidance provided by the AC at its 27th meeting, and proposes next steps for the preparation of the report.

III. Proposed theme and approach

5. Advancements in science, technology and education present opportunities to support more informed and effective planning and implementation of adaptation actions in developing countries. Examples include the use of early warning systems, earth observation, climate modelling, and open-access data platforms. In parallel, education and capacity-building through formal training, institutional partnerships and research networks can play a complementary role in strengthening national and local adaptation systems.
6. The 2026 report will highlight country-driven efforts to apply scientific knowledge, use data platforms and early warning systems, collaborate with research institutions, and integrate educational and capacity-building initiatives across the elements of the iterative adaptation cycle: risk and vulnerability assessments; planning; implementation; and monitoring, evaluation and learning (MEL).
7. The report will consider, for example the use of climate data and modelling in risk assessments; the integration of geospatial tools and scientific projections in adaptation planning; the application of locally relevant technologies in implementation; and the institutionalization of national monitoring and reporting frameworks, including adaptation indicators and MEL systems. The role of education, training and science-policy linkages in enabling these processes will also be examined, in the context of Article 11 of the Paris Agreement.
8. The report will include a selection of case studies from different regional, sectoral and institutional contexts, highlighting lessons learned, enabling factors and challenges encountered in diverse settings.

IV. Sources of information

9. The report will draw information from the following main types of sources:
 - (a) Country-submitted reports and communications, including national adaptation plans (NAPs), adaptation communications (adcoms), biennial transparency reports (BTRs), and nationally determined contributions (NDCs);
 - (b) Technical papers, knowledge products and data portals developed by the constituted bodies and entities under the Convention and the Paris Agreement, including the [AC's interactive portal on the state of adaptation action by Parties](#);
 - (c) Reports, guidance tools and case studies published by other United Nations entities and relevant international organizations;
 - (d) Peer-reviewed literature and knowledge products from research institutions, universities, innovation hubs and other stakeholders.

V. Draft annotated outline

10. The following presents a draft annotated outline of the 2026 synthesis report:
11. This annotated outline builds on the discussions held at AC 27 and reflects the synthesis report's mandate to present lessons learned and good practices from developing country Parties on a specific adaptation theme (decision 11/CMA.1, para. 13). It is structured to follow the four elements of the iterative adaptation cycle and reflect how science, technology, data systems and education contribute to adaptation planning and implementation.

1. Introduction

12. This section will present the background and purpose of the synthesis report, referencing the mandate from decision 11/CMA.1, para. 13. It will summarize the rationale for selecting the theme on science, education, technology and data systems and explain how

the report builds on the previous synthesis. It will outline the structure of the report and its intended audience (e.g., policymakers, technical experts, development partners).

2. Role of science, technology, education and data systems in adaptation

13. This section will provide a thematic overview of how science and technology collaboration, educational and research initiatives, and robust data and reporting systems contribute to adaptation planning and implementation in developing countries. It will describe the enabling role of:

- National climate information systems, statistical platforms and adaptation indicators;

14. Climate modelling and geospatial tools for risk assessment and planning;

15. University, think tank, and innovation hub engagement in developing context appropriate solutions;

16. Capacity-building initiatives for adaptation practitioners and institutions.

17. This section will serve as a framing chapter and link the theme to the iterative adaptation cycle used in the structure of the report.

3. Contributions across the adaptation cycle

18. This section will be divided into four sub-sections, each corresponding to one of the elements of the iterative adaptation cycle. Each sub-section will present:

- How science, technology, education, and data are being applied in this stage of the cycle;

19. Examples of enabling tools, and methodologies;

- Key barriers and entry points identified across countries.

(a) Risk, impact and vulnerability assessment

20. This sub-section will describe the use of scientific data, climate models, and participatory methods to assess current and future risks. It will also explore how countries integrate traditional and scientific knowledge, use geospatial data, and partner with research institutions.

(b) Adaptation planning

21. This sub-section will focus on how scientific evidence, modelling outputs, and education-based collaborations inform the development of national adaptation plans and sectoral strategies. It will highlight institutional partnerships and platforms supporting evidence-based planning.

(c) Implementation of adaptation actions

22. This sub-section will present examples of how developing countries apply innovations and technologies (e.g. early warning systems, nature-based solutions) to implement adaptation measures. It will also describe how science-policy partnerships and technical training programs support implementation.

(d) Monitoring, evaluation and learning

23. This sub-section will highlight how countries are institutionalizing MEL systems for adaptation using national indicators, databases, and periodic reporting processes. It will describe the role of scientific institutions in building capacity for adaptive learning and how data is used for iterative decision-making.

4. Case studies

24. This section will feature country case studies organized by region and/or adaptation cycle element. Each case will include:

- (a) Description of the enabling environment;

- (b) Role of science, education, technology or data systems;
- (c) Reported results, challenges, and enabling factors;
- (d) Relevance for replication and scalability.

25. Case studies will be drawn from national reports (e.g. NAPs, NDCs, BTRs, adcoms) and the main source of selection of the case studies would be validated country profiles from the [AC's interactive portal on the state of adaptation action by Parties](#). Criteria for selection will reflect regional diversity, sectoral variety, and alignment with the theme.

5. Lessons learned and good practices

26. This section will synthesize findings from across the report. It will identify common enabling factors (e.g. institutional partnerships, open data platforms), challenges (e.g. capacity constraints, limited access to tools), and opportunities for further collaboration and support. The section will also reflect on how strengthening science, technology and data systems supports the goals of the Paris Agreement and contributes to long-term resilience-building in developing countries.

6. Conclusion

27. This final section will provide a high-level summary of the synthesis report, distilling the main findings and thematic highlights from other sections. It will emphasize and reflect on key takeaways related to the role of science, technology and education in advancing adaptation both locally and globally.

VI. Case study selection

28. The AC, at its 27th meeting, agreed to consider the development of criteria to guide the selection of country case studies. For this report, the AC may wish to consider using the following indicative criteria:

- Regional and geographical balance;
- Representation of a range of adaptation approaches and sectors;
- Demonstrated integration of science, data or technology into adaptation planning, implementation or reporting;
- Contribution to national and international adaptation reporting processes;
- Inclusion of diverse actors and knowledge systems.

VII. Alternative option to the proposed theme

29. As an alternative option, the AC may wish to consider focusing the 2026 synthesis report exclusively on the theme of strengthening reporting and data systems for adaptation. This option would examine how developing country Parties are building national statistical systems, adaptation indicators, and data-sharing platforms to support adaptation planning, implementation and reporting. It would also highlight how Parties are using adaptation communications, national adaptation plans, and biennial transparency reports to document and communicate progress. The report would feature illustrative case studies, summarize common challenges and enablers, and conclude with lessons learned and good practices. This theme would allow for a streamlined and evidence-based report, drawing primarily on existing country submissions and centrally available information.

VIII. Next steps

30. The AC may wish to agree on the proposed theme for its 2026 synthesis report and request the secretariat, under the guidance of the thematic working group on this matter, to:

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- (a) Prepare a revised annotated outline of the report for intersessional review by the AC;
- (b) Identify relevant case studies based on country-submitted reports and other sources, in accordance with the criteria to be considered by the AC;
- (c) Prepare a first draft of the synthesis report to be presented for consideration by the AC at its 29th meeting.

Documentation information

<i>Version</i>	<i>Date</i>	<i>Description</i>
0.1.0	2 September 2025	The AC is invited to take note of the update contained in this document and to provide further guidance, as appropriate.

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