

**Fifteenth meeting of the Adaptation Committee
Bonn, Germany, 19 to 21 March 2019**

**Technical paper on countries' needs and solutions in relation to accessing,
developing and using data systems for planning
and implementing adaptation action**

Concept note

Recommended action by the Adaptation Committee

The Adaptation Committee (AC), at its 15th meeting, may wish to consider the concept note, to agree on the approach to and the scope of the technical paper, and to provide any revision to the suggested outline as needed.

1. Background

1. The AC agreed to prepare, in the second half of 2019, a technical paper on countries' needs and solutions in relation to accessing, developing and using data systems for planning and implementing adaptation action. This paper is included in the AC's 2019-2021 workplan under workstream A "Providing technical support and guidance to the Parties on adaptation action," and specifically under its objective "to provide guidance to Parties on planning and implementing adaptation action".
2. In its workplan the AC noted that the paper would be prepared in collaboration with a range of expert organizations and the AC's task force on National Adaptation Plans (NAPs) agreed to contribute to the paper

2. Possible approach

3. The preparation of this technical paper could build on previous and ongoing work under the Convention. This includes activities, gaps and challenges in accessing, developing and using data systems identified under a number of workstreams including, but not limited to:¹
 - a) The Nairobi work programme on impacts, vulnerability and adaptation to climate change (NWP) and its Lima Adaptation Knowledge Initiative (LAKI). To date, workshops have been held under the LAKI to identify data and information gaps in the following six subregions: Andean, West Africa/Gulf Cooperation Council, Southern Africa, Hindu Kush Himalayan, Indian Ocean islands subregion and North Africa;²

¹ While some of the work undertaken so far has had a regional focus, the AC will use the outcomes to address the topic in all regions.

² <https://www4.unfccc.int/sites/NWPStaging/Pages/laki.aspx>

- b) The work of the Least developed countries expert group (LEG) and experience in preparing and implementing NAPs;³
- c) The Technical Examination Process on Adaptation (TEP-A),⁴ including its technical expert meetings; as well as the Adaptation Forum,⁵ which have noted that the availability and resolution of data, including climate and socioeconomic data, remains a challenge, especially in Africa;
- d) The research and systematic observation (RSO) agenda item under the Subsidiary Body for Scientific and Technological Advice (SBSTA)⁶ and its Research Dialogue, which is mandated to identify research, research capacity-building and data gaps and Parties' needs under the UNFCCC.⁷

4. The AC may wish to develop the technical paper in close collaboration with expert organizations, including those supporting the workstreams in paragraph 3 above to take advantage of existing expertise in line with countries' needs. The collaboration partners may vary depending on the scope and primary focus of the paper

3. Proposed outline for the technical paper

5. The anticipated length of the technical paper could be between 20-30 pages and the outline could be as follows:

3.1. Background and scope

6. The background and scope will provide an overview of growing data needs of Parties for adaptation planning and implementation, including under Article 7 of the Paris Agreement and highlight existing mandates on data under the UNFCCC.

3.2. Types of data required for adaptation

7. This section will provide an overview of the different types of data required for adaptation planning and implementation, including: historical and observed climate, biophysical and socio-economic data; climate projections and models; downscaling and reanalysis; socio-economic scenarios; data for decision support; and hazard and vulnerability data.

3.3. Data providers and resources

8. The technical paper will conduct a mapping exercise of adaptation data providers, resources and products identified by:

- i) Existing work and relevant documents from constituted bodies and other workstreams under the UNFCCC; such as NDCs, NAPs, the TEP, the LAKI, and research dialogues under the SBSTA's research and systematic observation agenda item;
- ii) Key stakeholders (as identified in the AC's workplan and others providing information as listed in section 3.2) such as the Intergovernmental Panel on Climate Change (IPCC), the NAP global network, the World Climate Programme (WCP) (which includes the World Climate Research Programme (WCRP), the World Climate Services Programme (WCSP) and its Global Framework for climate services (GFCS) and the World Adaptation Science Programme

³ For example, see a presentation held by the LEG at the 2017 Research Dialogue

https://unfccc.int/files/science/application/pdf/leg_sbsta_research_dialogue_10may2017.pdf

⁴ For example, see the technical papers developed in the context of the TEP-A in 2017

http://unfccc.int/files/adaptation/groups_committees/adaptation_committee/application/pdf/techpaper_adaptation.pdf and 2018 https://unfccc.int/sites/default/files/resource/TP2018_3.pdf

⁵ For example, see presentation on data management and interpretation at the 5th Adaptation Forum

<https://unfccc.int/event/fifth-adaptation-forum>

⁶ <https://unfccc.int/topics/science/workstreams/systematic-observation>

⁷ <https://unfccc.int/topics/science/workstreams/research/research-dialogue>

(WASP)), the Global climate observing system (GCOS), the World Meteorological Organization (WMO), and the Group on Earth Observation (GEO).

iii) Other relevant providers of adaptation-relevant climate and socio-economic data

9. Depending on the size and level of detail of the mapping exercise, a part of this section could be included as an annex to the technical paper.

3.4. Data challenges

10. This section will provide a summary of the challenges in accessing and using data for adaptation as identified from the UNFCCC process and key partners. This could include, but may not be limited to:

- a) Accessing: Observations, monitoring, management, rescue, digitization, analysis, open and full sharing, exchange, meta-data, capacity building;
- b) Using: Regional, national, sub-national needs and challenges; prioritizing different types of data;
- c) Integrating and modelling different types of data for planning and implementation;
- d) Technology development and its evolving challenges such as the use of big data.

3.5. Data solutions to support adaptation

11. This section will present case studies and lessons learned from existing initiatives and programmes to identify the opportunities for using adaptation data systems in different circumstances.

12. Case studies and initiatives could include detailed examples from NAPs and the LEG, those identified by NWP partners.

3.6. Future recommendations and solutions

13. Based on the information and analysis contained in the previous chapters, this section could propose recommendations to the Conference of the Parties and to Parties for actionable solutions to data needs for adaptation.

4. Next steps

14. The AC will be invited to:

- a) Consider the information contained in this concept note and agree on the outline and content of the technical paper;
- b) Consider whether and how it wishes to engage the RSO community through the SBSTA Research Dialogue in order to benefit from further expert input;
- c) Establish a working group to provide guidance to the secretariat in developing the technical paper, including identifying partners for input