

SINCERE Flagship Action for Africa:

Towards a joint African-European call on innovative climate change research for the African regions

Online Survey – Concept Paper A

Option A: African Assessment Report on Climate Change and Impact Studies by African Regions

Context and rationale

Through partnerships with the scientific community and policymakers, the IPCC assesses peer reviewed research outputs to provide policy makers and society an overview of the current knowledge on climate change. Through this process, research priorities (gaps in knowledge) are identified, and information on adaptation and mitigation options is provided. **There is a paucity of peer reviewed research outputs on climate change in Africa** compared with the rest of the world and therefore an urgent need to strengthen the scientific capacities in African research centres.

SINCERE aims to strengthen Africa's role and influence in international negotiations on climate change to ensure a response to this challenge that will address continental priorities, ensuring effective climate change action for the benefit of African people. The inclusion of all relevant existing African climate studies in IPCC assessment processes is crucial in the further development of climate impact research and the development of regional and national mitigation and adaptation policy and measures.

The IPCC's Special Report on Climate Change and Land – What's in it for Africa? (2019; the Climate & Development Knowledge Network (CDKN); ODI, SSN)) summarizes the main findings of the IPCC Special Report on Climate Change and Land for the African Regions, and offers guidance for decision makers across Africa. ¹CDKN has produced a similar report focused on Africa, synthesising the findings from the IPCC's Special Report on the Ocean and Cryosphere in a Changing Climate. Despite the wealth of scientific outputs from Africa's climate change scientists, synthesized studies for Africa developed by CDKN to distil the key messages of the IPCC special reports, do not incorporate non-peer reviewed studies and available grey literature with the result that **there is limited scientific evidence to advise African policy on climate change action.**

¹ The IPCC special report on Land assessed the science on how greenhouse gases are released and absorbed by land-based ecosystems, land use and sustainable land management in relation to climate change adaptation and mitigation, desertification, land degradation and food security.



There remains a need for existing African non-peer-reviewed scientific studies (or grey literature) on climate change and impact studies to be collected and reviewed systematically, and then published in an assessment report and in a peer-reviewed systematic review paper. These would increase the evidence base to support the IPCC assessments and decision making and in addition, strengthen the development of regional mitigation and adaptation measures in order to build climate resilient and sustainable societies.

The Analysis of this Assessment Report will furthermore reveal gaps in climate change and impact research, science-based applications, data and application tools. The Assessment Report could act as a connecting-link for non-peer-reviewed African studies and will provide the full picture of climate change and impact research by African Regions.

In the Sixth Assessment Cycle, an Office has been set up in Durban, South Africa, to support the work of the IPCC WGII Co-Chair. The Office has also been involved in disseminating information about the IPCC in Africa and strengthening the capacity of African scientists and policymakers to foster African participation in the IPCC processes. The report should therefore be closely coordinated with the IPCC WGII TSU based in South Africa.

Objectives

- To promote and provide systematic approaches and tools for a review and analysis of existing climate change and impact studies, including credible grey literature sources.
- Collate peer reviewed and credible non-peer reviewed studies thorough Africa's climate change research and practice networks.
- Review and analyse existing African climate change and impact studies, including studies from credible grey literature sources.
- To develop strong and well cross-linked regional trans-disciplinary consortia to develop these systematic review approaches and tools, including a peer review publication for the dissemination of the results.
- To develop applied methodologies for identifying gaps in climate research, science-based applications, data and tools.

Overall this approach requires a strong central coordinating unit that would match and compile the different thematic areas on climate change and impact studies into an overall African Climate Change and Impact Studies Assessment Report based on a systematic review of both peer reviewed and non-peer reviewed African studies.