What are Africa’s priorities for climate change?

Friday, June 26, 2020

The Alliance for Accelerating Excellence in Science in Africa (AESA), a platform of the African Academy of Sciences and African Union Development Agency (AU-NEPAD) is implementing the African Science Technology and Innovation (STI) Priority Setting programme, which is engaging Africa’s science leaders, policy stakeholders and partners to identify top scientific priorities that, if addressed, offer the highest return on investment for Africa’s sustainable development. Over a five-year period, the programme will be developing, publishing and disseminating a set of position papers on STI priorities for Africa. In this Q&A, AAS Senior Programme Manager for the Postdoctoral Programmes, Dr Judy Omumbo, details the process for setting Research and Development priorities for climate change and why African scientists should take a front seat in tackling this global phenomenon.

Why should Africa prioritise climate change?

Africa contributes least to global greenhouse gas emissions at only 4% yet is hardest hit by the impacts of climate change. United Nations Environment Programme (UNEP) projections for 2020 suggested that between 75 and 250 million people in Africa are exposed to increased water stress while yields from rain-fed agriculture are probably reduced by up to 50% in some countries because of climate change. There is a paucity of peer reviewed research outputs on climate change in Africa compared with the rest of the world. Periodic assessments of the state of the world’s climate conducted by the Inter-governmental Panel on Climate Change (IPCC) rely on peer reviewed data and therefore have very limited input from African scientists. The AAS aims to collate evidence that can feed into these global discussions and processes and 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 mitigation for the benefit of African people.
Global policy on climate change is based on empirical evidence collated by the IPCC. The research is not conducted by the IPCC but through partnerships with the scientific community and policymakers. It identifies the agreement in opinions and current thinking on issues of climate change. Based on the areas of consensus, recommendations are made by the global body on priorities or gaps in knowledge and advice on adaptation and mitigation options is provided. There is an urgent need to include more of Africa's climate change researchers and evidence from Africa in these IPCC assessment processes.

Given the importance of global warming, the IPCC published a Special Report on Global Warming of 1.5°C (SR15) 8 October 2018. SR15 gives stark warnings on the impacts of global warming of 1.5°C above pre-industrial levels with serious implications for Africa where this level of warming has already occurred. This is a call for African scientists to set priorities for our continent to address the threat of climate change and protect Africa's sustainable development. The AAS aims to transform lives through science and identifies climate change and the environment as a strategic focus area and priority for Africa.

The AAS also participates in regional and global climate change decision-making fora including the World Meteorological Organization (WMO) Scientific Advisory Committee and the WMO Research Board for WMO Region I, Africa. The AAS promotes Africa's climate change research agenda through postdoctoral fellowship schemes. To date 121 African postdoctoral fellows have been supported to conduct research in climate change in Africa. Through a partnership with the United Nations Economic Commission for Africa (UNECA) and African Climate Policy Centre (ACPC), the AAS is managing postdoctoral research grants on behalf of the Climate Research for Development Initiative (CR4D) which was an outcome of the African Climate Conference 2013 (ACC-2013). CR4D is strengthening links between climate science research and climate information needs in support of development planning in Africa. It is an African-led initiative supported by partnership between ACPC of UNECA, African Ministerial Conference on Meteorology (AMCOMET), WMO, and Global Framework for Climate Services (GFCS). The AAS is the current chair of the CR4D Institutional Collaboration Platform.

Fellows of the AAS including Africa's top scientists in this field, IPCC reviewers and authors, are keen advocates protecting our continent from climate change impacts. Further, the AAS collaborates with African organizations or institutions with similar interests in climate change. In July 2019, the AAS Fellows and Affiliates collaborated with the United Nations University, Institute for Natural Resource in Africa (UNU-INRA) based at the University of Ghana, to host an IPCC outreach event for Africa. The AAS also partnered in the steering committee for the Africa Climate Risks Conference held in Addis Ababa in October 2019.

What is the process of defining climate change priority areas and why is it important?

An inaugural meeting of the AAS Environment and Climate Change Working Group was held on 24 July 2019 in Accra at the University of Ghana. This working group engaged in priority setting for pertinent climate change issues for Africa with a view to advising policy on actionable items based on the latest evidence from climate change research. About 30 of the AAS climate change researchers including our postdoctoral researchers/rising research leaders fed into discussions on areas of global and continental significance that the AAS should prioritise to strengthen Africa's response to the challenge of climate change. The priorities are aligned to the African Union Agenda 2063 (AUAG-2063) and the African Climate Policy Centre (ACPC) of the Economic Commission for Africa (UNECA) and the African Climate and Development Initiative (ACDI). CR4D is strengthening links between climate science research and climate information needs in support of development planning in Africa. It is an African-led initiative supported by partnerships between ACPC of UNECA, African Ministerial Conference on Meteorology (AMCOMET), WMO, and Global Framework for Climate Services (GFCS). The AAS is the current chair of the CR4D Institutional Collaboration Platform.

Fellows of the AAS including Africa's top scientists in this field, IPCC reviewers and authors, are keen advocates protecting our continent from climate change impacts. Further, the AAS collaborates with African organizations or institutions with similar interests in climate change. In July 2019, the AAS Fellows and Affiliates collaborated with the United Nations University, Institute for Natural Resource in Africa (UNU-INRA) based at the University of Ghana, to host an IPCC outreach event for Africa. The AAS also partnered in the steering committee for the Africa Climate Risks Conference held in Addis Ababa in October 2019.

How will these priority support areas define AAS' approach to tackling climate change in Africa?

The identified priority support areas are African climate research capacity building, using climate change research to engage in policy dialogue and ensuring that our efforts are in line with the African Union Agenda 2063. The AU Agenda 2063, Africa's over-arching strategic development framework recognizes that addressing climate change and its impacts is fundamental to achieving sustainable development. Africa will need to set a clear agenda for adaptation and mitigation to climate change and ensuring a future of low-carbon emissions.

One of the strengths of the AAS is its convening power to bring together Africa's leading scientists and stakeholders. The priority setting exercise led by the Fellows will
What are Africa’s priorities for climate change?

The AAS

real time of IPCC discussions and priorities. Through the research generated by our climate grantees, we would like to see a growth in quality peer reviewed research on climate change to add to the evidence feeding into the IPCC processes. Africa’s response to climate change needs to be led by its scientists and to be supported by locally generated evidence.

The goal of this exercise is to address a key component of Africa’s sustainable development by using the best science at our disposal.