



Background

The Glasgow to Sharm el-Sheikh work programme on the Global Goal on Adaptation was one of the significant outcomes of COP26 and represents a turning point in the shared journey to make and measure progress towards this. It aims to reduce vulnerability, strengthen resilience and increase the capacity of people and the planet to adapt to the impacts of climate change. COP27 aims to confirm what was agreed on in Paris and further elaborated in the Glasgow Climate Pact, placing adaptation at the forefront of global action.

In the lead up to COP27 in Sharm El-Sheikh, Egypt, the Met Office hosted a webinar to explore the impacts of climate change on the African continent, a region disproportionately affected by our changing climate. We were joined by speakers from the UK's Foreign, Commonwealth and Development Office (FCDO) and the Red Cross Red Crescent Climate Centre.

Key webinar talking points

Climate change

In recent years, we've seen a shift in the way we talk about climate change; it's increasingly something we talk about in the present day, not just something for the future. The Intergovernmental Panel on Climate Change (IPCC) has told us with high confidence what has been observed and what is predicted, and this communicates the fact that there's going to be increased frequency and intensity of the impacts that we've witnessed in Africa.

2021 was the third or fourth warmest year on record for Africa, and this year we've seen the droughts in East Africa worsen as the region faces its fifth 'failed' season over the coming months. At the same time, many parts of Northern Africa have experienced extreme heat and wildfires. Climate related hazards have continued to be a major driver of humanitarian disasters and new displacement in Africa.

Future Climate for Africa (FCFA) was FCDO's flagship climate research programme from 2014-2022 that aimed to support world-leading research to enhance both scientific understanding and prediction of extreme weather and climate in sub-Saharan Africa. This work resulted in major scientific advances in understanding African climate, particularly in understanding the frequency and intensity of extreme rainfall, of dry spells and other high impact weather events, and how those might change in future. This has improved our understanding of the processes that influence Africa's climate, narrowed global model uncertainty over Africa and has helped to predict the impacts of climate change in Africa.

There are, however, still significant research gaps that are inhibiting our understanding of Africa's climate. Some of those gaps include understanding the water cycle, and in particular the degree of future change, and looking at other high impact weather events such as hail and fog. There are also research gaps on the feedbacks between the land and surface temperatures and soil moisture, as well as understanding the direct and indirect impact of atmospheric aerosols.

For climate science, the challenge is to continue to improve knowledge of the climate of Africa now and in the future. But critically, to ensure that this research has utility to provide early warning of extremes for humanitarian action, and also to inform long term development investment to adapt to the new climate future we face. According to the recent Sixth Assessment Report from the IPCC, funding for African climate research is less than 4% of global climate-related research spend and most of this goes to institutions that are based in Europe and the USA. FCDO's Climate Adaptation and Resilience (CLARE) research programme, launched at COP26, is a £110 million research programme with the aim of enabling socially inclusive and sustainable action to build resilience to climate change and natural hazards for at least 5 million people across the Global South, with half of the funding to be spent in Africa.



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Dr Kirsty Lewis
Met Office

Adaptation and locally-led action

In a continent that includes some of the most climate vulnerable populations in the world, the adaptation challenge, even at 1.5°C, is substantial. African nations made a proposal for a global goal on adaptation, because to Africa, adaptation has not just been a question but a priority. At the beginning of this year, the African Union heads of state approved the African Union Climate Change and Resilient Development Strategy and Action. The vision is for a climate resilient Africa, but some of the priorities that

have been highlighted in this ten-year strategy and action plan include the need for anticipatory governance, the need to scale up climate information services, and to give priority to early warning and early action.

The FCFA programme worked with African stakeholders and researchers to bring the scientific advances into use in informing effective adaptation to climate change. It took novel and collaborative approaches that emphasised co-production and trans-disciplinarity, bringing together the physical and social sciences, and working together with stakeholders on the ground to co-produce the research questions and the adaptation solutions. FCFA helped to build the climate resilience of cities across southern Africa through the FRACTAL project; improved flood risk management in West Africa; water, sanitation and hygiene in East Africa; and delivered climate resilient agricultural innovations and enhanced rural livelihoods.

The challenge for the research community is how it can go beyond pilot studies such as those in FCFA, to providing actionable information at scale that will enable people, communities, businesses and governments to make climate resilient decisions, plans and investments. We need to shift our approach, to make co-production the norm and to change the way that we are tackling research projects to make them much more action orientated. Beyond fostering that collaboration between the climate scientists, projects also need to promote interdisciplinarity and trans-disciplinarity across experts, decision makers and stakeholders, to ensure that climate information is relevant and usable. It's vital that we dedicate continued investments in climate research across Africa to improve the scientists' ability to deliver relevant information that can aid adaptation and development planning.

The Adaptation Research Alliance (ARA) is a new global coalition that's bringing together researchers, funders, policymakers and development bodies across the research action spectrum and is committed to action prioritisation. The ARA has co-developed a set of principles to ensure that research is locally relevant, solution-oriented and needs driven. The aim is that these principles will drive a transformative approach to research and action.

Decision-making needs to be developed at a very local level with a flexible approach to finance for these communities. We also need to ensure that the capacity for action within communities is addressed and strengthened, empowering them to take action and ensuring that any investment is of benefit to the local people.



Anticipatory action

Since 2014, the Red Cross movement has spearheaded a forecast-based financing approach – an anticipatory action approach through which early warning enables low-cost interventions to be instigated to prevent or reduce potential disaster impacts. This has seen a shift in humanitarian action from being reactionary to being more anticipatory.

Many communities in Africa face immediate challenges, but we need to get a balance between meeting the needs of today whilst also focusing on the future. We need to address this now before the situation worsens, building back better so that communities are less exposed next time around. Climate and development communities need to work together to build long term resilience.

Final summary

Balance is needed between meeting the immediate priorities of communities with the longer-term issues, and some countries still need help to develop forecasting capabilities to support early warnings. Key priorities are around action-orientated research and evidence-based action, shifting our approach so that we're tackling climate change in order to be able to deliver climate resilient development at scale. Decisions made now need to hold under a climate that is largely more hostile than the one that we've become used to.

Increased financing is needed to ensure that early warning and early action are sustainable, and projects need to focus on local adaptation priorities with communities at the centre. We must be embedding climate resilient development and climate resilient thinking into all future planning and investments. We must be much more collaborative and coordinated in addressing those user-centred priority research questions to provide practical solutions that genuinely reduce the risks for the most vulnerable.

