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FOCUS-Africa Newsletter

Issue 4 - May 2024



Project overview Editorial by Roberta Boscolo, WMO

As the FOCUS-Africa project enters its final year, this message marks my last communication through this channel. It's with a blend of emotions that I pen this closing editorial. I feel a profound sense of achievement; our efforts over the last three years have been substantial and transformative. The dedication of our consortium and every individual involved has propelled this project to exceed all expectations. This exceptional teamwork and the achievements we've realized have earned recognition from our funder, the European Commission, during routine evaluations. However, the upcoming conclusion of FOCUS-Africa brings a touch of melancholy, as I have cherished every moment of our collaboration and learned immensely from all participants. This journey has been remarkable, fuelled by Africa's splendour and driven by the continent's urgent need to bolster its climate resilience.

The WorkPackage 2 led by CSIR completed their work on user engagement for prioritizing development needs and identify realistic adaptation options. Such efforts emphasized that understanding the local social, economic, political, and cultural contexts for assessing climate risk and vulnerability, is essential for achieving impacts on increasing climate resilience. One of their final deliverables focused on the assessment of climate risks to the Water-Energy-Food (WEF) nexus, emphasizing the growing issues of water scarcity, high population growth, and energy demand. The growing demands from high population growth, irrigation-dependent agriculture, and hydroelectric power stress the region's water resources. These factors underscore the urgent need for improved water security to support agriculture, energy production, and industrial development. Additionally, despite potential for hydropower, challenges like energy access and affordability persist, with countries like Malawi seeing around 90% of households without electricity. Food security is also under threat, with limited water and energy resources impacting agricultural productivity and increasing costs. The report suggests that these climate risks provide an opportunity for systematic positive change through evidence-based climate adaptation strategies, aiming to secure a sustainable future for water, energy, and food systems in the region.

The WorkPackage 4 led by BSC also completed their work on developing methods and tools for: 1) improving the understanding of the seasonal predictability of the Essential

Climate Variables (ECV) and indicators needed for the proposed climate services; 2) improving the reliability of the forecasts through the application of bias correction approaches, including novel techniques such as ML (Machine Learning); 3) coordinating and assessing the added value of novel multi-model approaches at seasonal, decadal and climate projection scales from the recent public repositories available; 4) assessing the long-term influences of climate in the areas of the case studies; and 5) identifying the best downscaling methodologies to regionalize the information of GCMs to the studied areas.

READ THE FULL EDITO



We are excited to announce the final event with our sister projects—**Down2Earth and CONFER**—taking place from June 18 to 20, 2024, in Brussels. This exclusive gathering will bring together leading experts and stakeholders to share insights and discuss the future of climate services in Africa.

Some Agenda Highlights:

- Day 1 (June 18): Preparing for the Policy Event Expert Group Workshops on Best Practices and Lessons Learned
- Day 2 (June 19): Workshops on Just Transition and Policy Recommendations Policy Recommendations for the EU Audience
- Day 3 (June 20): Sessions on Socio-Economic Value, Impact-Based Forecasting, and Coproduction in Climate Services Research-to-Policy World Café with esteemed stakeholders

This event is by invitation only, ensuring focused and impactful discussions. We look forward to your participation in shaping the future of climate services in Africa.

IN THE SPOTLIGHT



The Fourth Stakeholder Workshop in Mozambique

The fourth FOCUS-Africa Stakeholder Workshop took take place in Mozambique in May 2023 in presential mode. The main focus was on case study 3, specifically on food security in Mozambique, even if part of the discussion was broadened to neighbouring Malawi and Tanzania, for which analogous case studies, 2 and 4 respectively, are being developed. The workshop brought together the consortium members, close partners, an advisory board (AB) member, and local stakeholders in Mozambique to share current project case study developments and understand how results can be further improved to target local needs and requirements. The workshop reviewed users' requirements, perspectives, and strategies for climate services delivery in Mozambique, and the broader South African regional context, also providing opportunities to test early versions of trial climate service delivery.

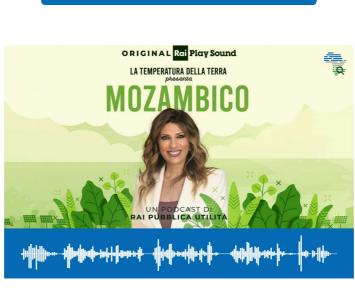


Enhancing Climate Services Capacity in the SADC Region: insights from the FOCUS-Africa Training Workshop

Climate variability and change present significant challenges across sectors, requiring tailored climate services for informed decision-making. To address this, the FOCUS Africa capacity development training program began on April 11, 2024, aiming to enhance the skills of climate experts in the Southern African Development Community (SADC).

Stemming from the 2009 World Climate Conference-3, which established the Global Framework for Climate Services, FOCUS Africa focuses on bridging the gap between climate science and practical information for key sectors. The program includes a three-stage training process: an online foundational course, in-person practical sessions, and application of skills during the Southern Africa Regional Climate Outlook Forum (SARCOF) and Climate Expert Meeting (CEM).

Participants cover topics from data management to climate model interpretation, emphasizing the need for accurate forecasting, user engagement, and capacity building. The program underscores the importance of collaboration, innovation, and responsible research in addressing climate-related risks.



Read the article

La Temperatura della Terra - Speciale Mozambico

The project was featured in the <u>Rai - Radiotelevisione Italiana</u> podcast series, produced by <u>Claudia Adamo</u>. She recounts a week in Mozambique and what <u>Food</u> Secuirty means in Africa.

Listen to the Podcast



Optimizing Climate Resilience: Impactful Mission to Tanzania

The Full Value Chain Optimized Climate User Centric Services for Southern Africa (FOCUS-Africa) project develops tailored climate services in the Southern African Development Community (SADC) region. The full value chain of climate services is being demonstrated by piloting eight case studies in five countries (Tanzania, Mozambique, Malawi, Mauritius and South Africa), involving a wide range of stakeholders including climate scientists, sectoral service providers, and end-users. In Tanzania FOCUS-Africa project implements climate services for food security, Infrastructure and energy which are case study 4, 5 and 6 respectively.

Read the article



Advancing Climate Resilience and Food Security

Arriving in Dar es Salaam under the strong tropical rain was a brand-new experience of Tanzania for the European part of the FOCUS-Africa team. We arrived just in time for the onset of the rainy season, which was at the core of our discussions on food security, considering that the amount and timeliness of the rain is one of the most important determinants of the success of yield. The CS4 team has been working on developing a new method of calculating the onset and the duration of the rainy season. While in Tanzania, we were able to test the new prototype climate service – the Teal Tool's onset forecast.

Read more about the mission



Climate Resilience in the Heart of Malawi

Sunny weather, beautiful landscapes and smiley faces welcomed us in the Warm Heart of Africa. The CS2 team, made up of DCCMS, BSC, WEMC, and LGI set out from Blantyre to the historical village of Zomba. Here, in this inspiring environment, we engaged with local farmers and extension officers, facilitated by NASFAM – the National Association of Smallholder Farmers of Malawi, our key service partner, who also helped us organise the workshop and invite the participants.



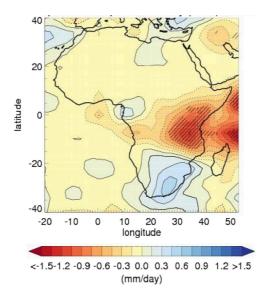
Early Warnings for All in Africa: implementation of the African Multi-hazards Early Warning and Early Action System

WORLD METEOROLOGICAL FOCUS-AFRICA COP28UAE
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EARLY WARNINGS FOR ALL IN AFRICA: IMPLEMENTATION OF THE AFRICAN MULTIHAZARDS EARLY WARNING AND EARLY ACTION SYSTEM
6 Dec 2023 18:15-19:15 (UTC+4) Science for Climate Action Pavilion

Discover the operations of the MultiHazards Advisory Centre at the African Center of Meteorological Application for Development (ACMAD). This center annually supports the state of climate for Africa, develops training materials for forecasting weather and climate impacts, issues warnings for meteorological services personnel, and aids the AUC situation room with disaster reports and continental watches to minimize impacts in Africa.

Watch the recording

Publication: Important drivers of East African monsoon variability and improving rainy season onset prediction, Indrani Roy, Meshack Mliwa, Alberto Troccoli



Monsoon rain and its year-to-year variability have a profound influence on Africa's socio-economic structure by heavily impacting sectors such as agricultural and energy. This study focuses on major drivers of the east African monsoon during October-November-December (OND) which is the standard time window for the onset of the rainy season, be it unimodal or bimodal.



Publication: Seasonal forecasts of the rainy season onset over Africa: Preliminary results from the FOCUS-Africa project,

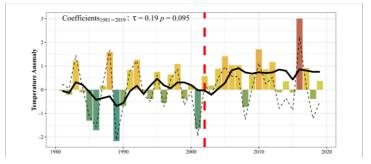
Matteo Zampieri, Andrea Toreti, Michele Meroni, Dragana Bojovic

Precipitation seasonality is the main factor controlling vegetation phenology in many tropical and subtropical regions. Anticipating the rain onset is of paramount importance for field preparation and seeding. This is of particular importance in various African countries that rely on agriculture as a main source of food, subsistence and income. In such countries, skilful and accurate onset forecasts could also inform early warning and early actions, such as aids logistics planning, for food security.

Read the paper

Publication: Atmospheric drivers affect crop yields in Mozambique,

Robel Takele, Roberto Buizza, Matteo Dell'Acqua



Climate change has been inducing variations in the statistics of both the large- scale weather patterns and the local weather in many regions of the world, and these

variations have been affecting several human activities, including agriculture. In this study, we look at the links between large-scale weather patterns and local weather as well as agriculture, with a specific regional focus on Mozambique between 1981 and 2019.

Read the paper

The FOCUS-Africa project is featured on LEAP-RE platform



LEAP-RE is a Horizon 2020 EU-funded project addressing the urgent need for sustainable and clean energy amid climate change. Aligned with the UN's 2030 Agenda, it focuses on Goal 7, ensuring affordable, reliable, and modern energy access for all. The project leverages the EU Green Deal and AU's Agenda 2063 to promote renewable energy as vital for Africa's sustainable development.

Despite challenges, LEAP-RE aims to shift the energy paradigm through a five-year program (2020-2025). By fostering Africa-Europe cooperation and a quadruple helix approach, it seeks to empower local research, drive innovation, and create a unified framework for impactful, region-specific solutions.

You can join the online community for networking, online training, ideation, and matchmaking: <u>https://leap-re.app/</u>

This community building will maximise the network effect, enable clustering by thematic areas, defend a common vision and understanding of AU-EU collaboration in Renewable Energy in the research and innovation sector, and mutualise lessons learned and experience feedback.

Visit LEAP-RE Portfolio

💼 RESOURCES 📠



- Acces our <u>media center</u> resources
- Learn more about our case studies
- Read our project results and partners publications <u>here</u>

Follow our sister projects

CONFER

The CONFER project focuses on East Africa and aims to facilitate climate adaptation through co-production of Climate Services in the Region for the water, energy and food security sectors.



DOWN2EARTH



The DOWN2EARTH project focuses on the Horn of Africa Drylands and aims at translating climate information into multilevel decision support for social adaptation, policy development, and resilience to water scarcity.

IN PROJECT PARTNERS IN PROJECT PARTNERS



We are a team of strategists, researchers, scientists and industry leaders from 16 different organisations based in Africa & Europe.

Get to know our project partners





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