Uncertainty reduction in Models for Understanding deveLopment Applications – UMFULA project

IMPROVING CLIMATE INFORMATION FOR DECISION MAKING

http://futureclimateafrica.org/umfula/

UMFULA intends to generate higher quality, more useful information about the future climate and its impacts, and to make climate information more tailored and accessible to planners.

Since our first visits to Tanzania in 2016, the UMFULA team have made further visits in 2017 to continue learning about the specific climate information needs for water resource management and agriculture.

RECENT ACTIVITIES

1. Meetings with key stakeholders representing the tea sector in Tanzania to learn about climate information needs specific to tea.
2. Completion of survey to develop an in depth understanding of the workplace challenges that limit effective service delivery in national and local agencies and identifying opportunities to overcome these barriers
3. Presented our latest insights on the possible impact of climate change on Rufiji flows at the International Association of Hydrological Sciences conference, and at the Rufiji Basin Water Office in Iringa
4. Presented on hydropower challenges under climate change at the IAPS symposium in Dar es Salaam
5. Field visit to the area of the planned Stiegler's Gorge dam to see the surroundings and better understand the possible impacts
6. Publication of a serious of climate information briefs for Tanzania presenting changes in temperature and precipitation based on results from a suite of climate models

PLANNED ACTIVITIES

1. Undertake a country mission in February 2018 to meet with key stakeholders to further discuss the latest climate information, and the impact climate change could have on major development decisions
2. Translate climate change projections into river flow estimates and test if omitting less plausible climate models matters
3. Update socio-economic scenarios to improve future agricultural water demand estimates
4. Evaluate the possible future impact of extreme events, such as the multiple drought years between 2000 and 2003, on hydropower generation and crop production in the Rufiji basin.

ON-GOING CLIMATE SCIENCE

1. New guide on how to understand and interpret global climate models: http://bit.ly/2yRaYi3
2. Improving the understanding of the way in which climate patterns on various scales interact to impact southern African climate
3. Investigating regional climate factors (such as rainfall over the Congo basin and large-scale global air flow patterns) that affect rainfall variability and temperature in Tanzania
4. Determining how well climate models simulate key factors that affect southern African climate to find out which global models are most suitable for the region

Team Tanzania

Prof Declan Conway – London School of Economics and Political Science

Prof Japhet Kashaigili – Sokoine University of Agriculture

Prof Julien Harou – Manchester University

Dr Joanna Pardoe – London School of Economics and Political Science

Dr Christian Siderius – London School of Economics and Political Science

Robel Geressu – University of Manchester

UKaid from the British people | NERC SCIENCE OF THE ENVIRONMENT | FUTURE CLIMATE FOR AFRICA

For more information, contact Professor Kashaigili (jkashaigili@gmail.com; +255 754 207117) or Professor Conway (d.conway@lse.ac.uk)