



Pan-African and Transdisciplinary Lens on the Margins: Tackling the Risks of Extreme Events

OVERVIEW

Climate extremes (droughts, floods, and heat waves) are a threat in Africa due to their destructive socio-economic impacts.

The PALM-TREEs project aims to study the impacts of these extreme events as experienced by people in six sub-Saharan countries.

It considers that the impacts and risks associated with extreme events are modulated by geographies, gender, and intersecting social identities as well as current norms, policies, and practices which force people to live 'on the margins'.

This project is Pan-African and trans-disciplinary, with social and physical researchers partnered with impact stakeholders - working with communities and policy-makers to develop climate-resilient solutions.

RESEARCH PROGRESS

CAMEROON

- Agriculture and Climate Extremes in Cameroon: Vulnerability Analysis among Onion (North-Cameroon) and Tomato (West-Cameroon) Producers **(ECR Zibi Obe Marie Eglantine)**

- Rainfall Formation and Extreme Event Risk Assessment in Central Africa: Evaluation of the Role of Soil-Atmosphere Interaction, Convection and Entrainment **(ECR Stella Tikeng Songwe)**

- A Multi-Variate Climate Index for Assessing the Risks of Compound Climate Extremes in Central Africa **(ECR Giresse Kuete Gouandjo)**

DEM.REP.CONGO

- Climate Extremes in Question in the Democratic Republic of Congo: Analysis of Gender Vulnerabilities in Cassava Production in Kinshasa and Central Congo **(ECR Pascal Nyam)**

GHANA

- Climate-induced Heat Waves and Heat Stress Impact on Women in Accra **(ECR Rachel Yeboah)**

- Hydro-Meteorological Extremes in the White Volta Basin: Unravelling the Impacts of Flood and Building Resilience for Marginalized Communities **(ECR Samuel Owusu Ansah)**

- Integrated Assessment of Droughts Impact on Marginalized Communities in the White Volta Basin of Ghana: Exploring the Effects of Natural and Anthropogenic Activities on Drought **(ECR Joshua Asamoah)**

KENYA

- Socio-Economic Effects of Climate Variability on Marginalized Communities in Turkana County and Policy Options to Enhance Resilience **(ECR Leah Murkomen)**

- Climate Variability, Adaptation Practices and Health Effects among Older Persons in Kitui County, Kenya **(ECR Margaret Mwaila)**

- Enhancing Seasonal Forecast Skill in East Africa through Statistical Learning Procedures **(ECR Herbert Misiani)**

- Multi-hazard Occurrence and their Future over East Africa: Case Study of Flashfloods and Drought in Turkana and Kitui **(ECR Oscar Lino)**

NIGERIA

- Understanding the Vulnerability of Rural Women's Livelihoods to Climate Extremes Northern Nigeria: A Case Study Of Kwara State **(ECR Deborah Sobanke)**

- Assessment of the Impact of Climate Change Extremes on the Livelihoods in the Middle Belt of Nigeria **(ECR Bello Adedoyin)**

SOUTH AFRICA

- The Physical Drivers and Social Impacts of Weather and Extreme Climatic Events on Indigenous Communities' Livelihoods in the Limpopo Basin, South Africa **(ECR Angela Chekoe Serole)**

- The Role of Heat Stress Risk in Contributing to the Perceived Impacts of Heat Stress in the South Durban Industrial Basin **(ECR Mabel Ndlovu)**

- Social Research investigating the Impacts of Drought on the Livelihoods or Rural Basin **(ECR Tsakani Germina Selomo)**

- Understanding the Influence of the Agulhas Current System on Cut-off Low Induced Floods in KwaZulu-Natal, South Africa **(ECR Akintunde Makinde)**

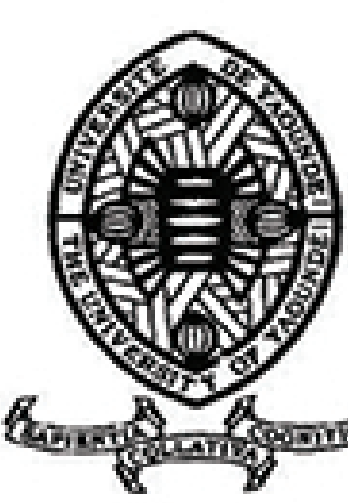
OUTCOMES

- **Characterizing Climate Extreme Drivers:** The project delivers a deeper understanding of drivers of extreme weather events, enabling informed decisions about climate risk.
- **Strengthening Community Resilience:** The project enhances community resilience to extreme events by integrating local knowledge and implementing inclusive measures like ecosystem-based adaptations and early warning systems.
- **Reducing Inequalities:** PALM-TREEs addresses inequalities by focusing on the varying impacts of extreme events based on gender and social identities, specifically supporting marginalized groups.
- **Informing Planning and Decision-Making:** The project provides valuable research findings to inform adaptation planning and decision-making for policy-makers and practitioners.
- **Capacity-building:** Workshops will be conducted to build the capacity of local stakeholders, enabling them to effectively use research findings to tackle extreme event challenges.

IMPLEMENTING ORGANISATIONS



UNIVERSITY OF OXFORD



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<https://clareprogramme.org/palm-trees>