

## Engaging local communities to tackle the impact of climate change on HIV in western Kenya

Emerging global threats including climate change and foreign aid disruptions have negatively affected HIV programs in sub-Saharan Africa, threatening to set back global progress in fighting the HIV epidemic. Communities adversely affected by HIV are disproportionately impacted by climate change. Extreme weather events due to climate change, such as floods and drought, increase food insecurity, displace people living with HIV and destroy health facilities, therefore disrupting access and use of essential HIV prevention and treatment services. [ENGAGE](#) project, a collaboration between Keele University School of Medicine and the Tropical Institute of Community Health and Development in Kenya (TICH) and funded by Research England, explores the impact of climate change on HIV and engaged local stakeholders to identify community-led strategies for tackling climate change impact on HIV epidemic in a setting in western Kenya adversely affected by both HIV and climate change. The project is strategically positioned to contribute to Kenya's development blueprint, Vision 2030, which promotes resilience-building through community-led adaptations and the integration of scientific knowledge with indigenous practices to create solutions for climate change. Recent project activities in Kenya include:

- qualitative research with community representatives, including community health workers and people living with HIV (PLHIV) on views and experiences of climate change impact on HIV care/management and outcomes;
- stakeholder /community engagement and consensus workshop to identify community-led sustainable initiatives for tackling climate change impact on HIV in a setting disproportionately affected by both HIV and climate change; and
- capacity building workshop on proposal development to empower local experts to lead the design and development of local research to address the impact of climate change on health.

### Qualitative research with people living with HIV and community representatives

Qualitative research involved individual in-depth interviews with 27 PLHIV, 18 focus group discussions with community representatives, including community health providers, and field observations in Nyando sub-county of Kisumu County, an area of high HIV prevalence and frequent extreme weather events such as floods, droughts, and heatwave. The research explored pathways through which climate change affected HIV prevention and treatment, particularly food insecurity, rising infectious diseases, displacement/migration, and weakened public health infrastructure. The findings highlight the extent to which PLHIV faced heightened risks, extreme weather events driving food and water insecurity, disrupting treatment adherence, and exposing communities to unsustainable coping practices.

#### Impact of climate change - field testimonials and observations

*"From 2023 to 2026, there has been a lot of rain and flooding. ... some are still in the camps".* (Women FGD).

*"I fear taking medication while at the camp because there is no privacy and I don't want people to know my status."* (PLHIV)

*"During food scarcity, ... be given food in exchange for sex ... this will mostly be done with women during food shortage....."* (Men FGD).

*"It is not possible to take medicine on an empty stomach because these drugs are very strong..."* (PLHIV).



**Women FGD in session**



***Water insecurity – drought leading to rivers drying up and difficulties accessing water***



***Food/feed insecurity – crops failing and limited livestock feed due to drought***



***Destruction of homes and livelihoods - frequent due to floods and extreme weather events***



***Displacement due to floods necessitating move to camps/temporary accommodation with limited amenities***

Policy relevant briefs will be drafted from findings and shared with stakeholders to inform policy makers and stakeholders on strategies to enhance the health of PLHIV, reduce vulnerability to risky coping practices, and build climate-resilient health systems. Through active engagement of affected communities and local experts, the project aims to inform the development of sustainable community-led initiatives to mitigate climate change impact on HIV epidemic and improve resilience at the study setting and beyond.

### **Stakeholder /community engagement and consensus workshop – 25 March 2026**

The stakeholder/community engagement, validation and consensus workshop was convened at the study setting with the aim of exploring the interconnectedness of climate change and HIV and identifying effective community-based solutions, following the concluded qualitative research in

Nyando. The workshop brought together a diverse group of key stakeholders, including health officials, NGOs/religious representatives, local HIV and climate change experts/researchers and community leaders/representatives. Participants stressed the importance of involving stakeholders, health assistants, camp managers, and broader community structures in tackling the challenges posed by climate change, which underscored the urgency of building consensus on community solutions and fostering collaboration to ensure sustainable HIV management in the face of environmental disruptions.



**ENGAGE co-principal investigators from Keele and TICH, facilitating the stakeholder/community consensus workshop at the study setting in western Kenya.**



**Stakeholder /community consensus workshop in progress**

The consensus/validation workshop concluded with participants agreeing on overall recommendations, ensuring collective commitment and shared responsibility toward addressing key issues and implementing community-based solutions:

- The need for disaster preparedness plans
- Climate smart agribusiness built on social capital
- Technology-enabled Community Health Promoter (CHP) system
- HIV prevention through behaviour change education, e.g. to address HIV stigma
- Affordable sustainable latrines and preventive methods for communicable diseases
- Camp-based testing and HIV care centres during extreme weather disasters.

## Capacity building workshop on proposal development: 26-27 March 2026

The proposal development workshop was convened at TICH campus in Kisumu to build local researchers' capacity in grant writing, empowering them to lead the design and development of research to address local community problems. The workshop sessions, facilitated by Keele University and TICH, emphasized the importance of equitable partnership/collaboration, skills development, and knowledge translation for impactful and sustainable community-driven initiatives. A total of 33 participants, mainly early career researchers from academic and non-academic institutions in western Kenya, were actively engaged throughout the two-day workshop. Participants' expectations emphasized the desire to gain/strengthen their research skills to enable them to develop competitive grant applications, consistent with the overall aim of the capacity building workshop.



**Capacity building workshop organizers and facilitators from TICH and Keele**



**Capacity building workshop participants**

The workshop covered key elements of a scientific research proposal, from research problem/introduction, objectives to research methodology and potential impact. To effectively prepare for the workshop, participants had been asked to propose potential research ideas of interest, resulting in a list of proposal ideas which were grouped into five broad topics: HIV; reproductive health/abortion; mental health; communicable/infectious diseases; and non-communicable diseases, with climate change and digital/technology-enabled community-based initiatives as cross-cutting themes. These five topics formed the basis for small group discussions, encouraging active participation and enabling participants put into practice skills acquired.



***Capacity building workshop sessions in progress***

The workshop evaluation showed high satisfaction among participants, with many appreciating the clarity, relevance, and facilitation of the sessions. Respondents highlighted gaining practical skills and the majority expressing confidence in applying these skills to their own research and grant applications. They also valued the interactive group work and networking opportunities. Furthermore, participants expressed interest in attending similar follow-up workshops, underscoring the perceived usefulness and impact of the training. Suggestions for improvement centred on extending the training timeline to allow deeper exploration of topics and more practical exercises. Additional comments reflected gratitude and enthusiasm, with participants describing the workshop as informative, engaging, and impactful. Overall, the feedback demonstrates that the workshop successfully built capacity in research proposal and grant writing, while also providing a strong foundation for future, more specialized training.