



# Drought impacts and community adaptation: perspectives on the 2020-2023 drought in East Africa



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## Introduction

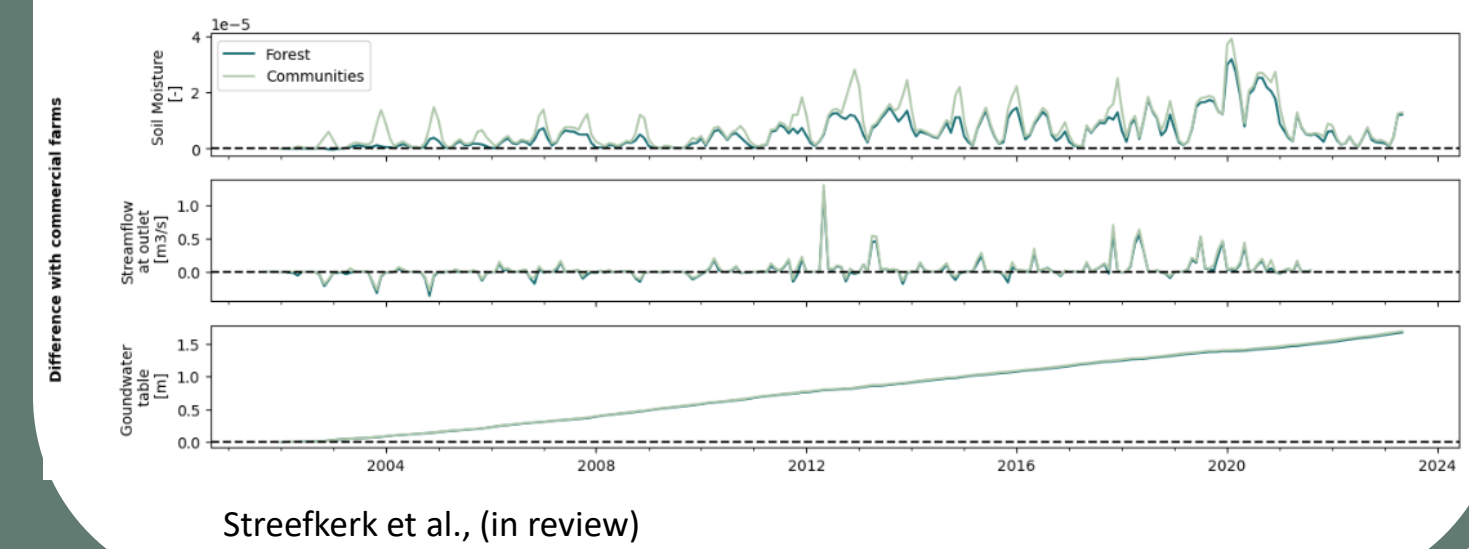
The latest multi-year 2020-2023 drought revealed that significant gaps remain in understanding the links between climate variables and water scarcity, and their impacts on livelihoods. We have analysed **impacts and responses** during the latest 2020-23 drought in Somaliland and Kenya. We used a **mixed methods** approach including community surveys, drought impact data analysis, and (agent-based) modelling. These findings not only increase our knowledge on how **community impacts** develop, but also how these can best be **mitigated**. This is crucial information to improve drought adaptation **policies and warning services**, to be better **prepared for droughts** in future.

## Upstream influences downstream

Special attention to up-downstream interactions should be considered for investments into water allocation (permits and monitoring) and infrastructure (water harvesting, irrigation schemes). If water is stored upstream during drought, less water is available downstream.

## Protect water sources

Water sources should be protected. In the Ewaso Ng'iro catchment (Kenya) commercial farms are located at upstream catchment sources. If there would be forest (or communities) instead, more water would be available.



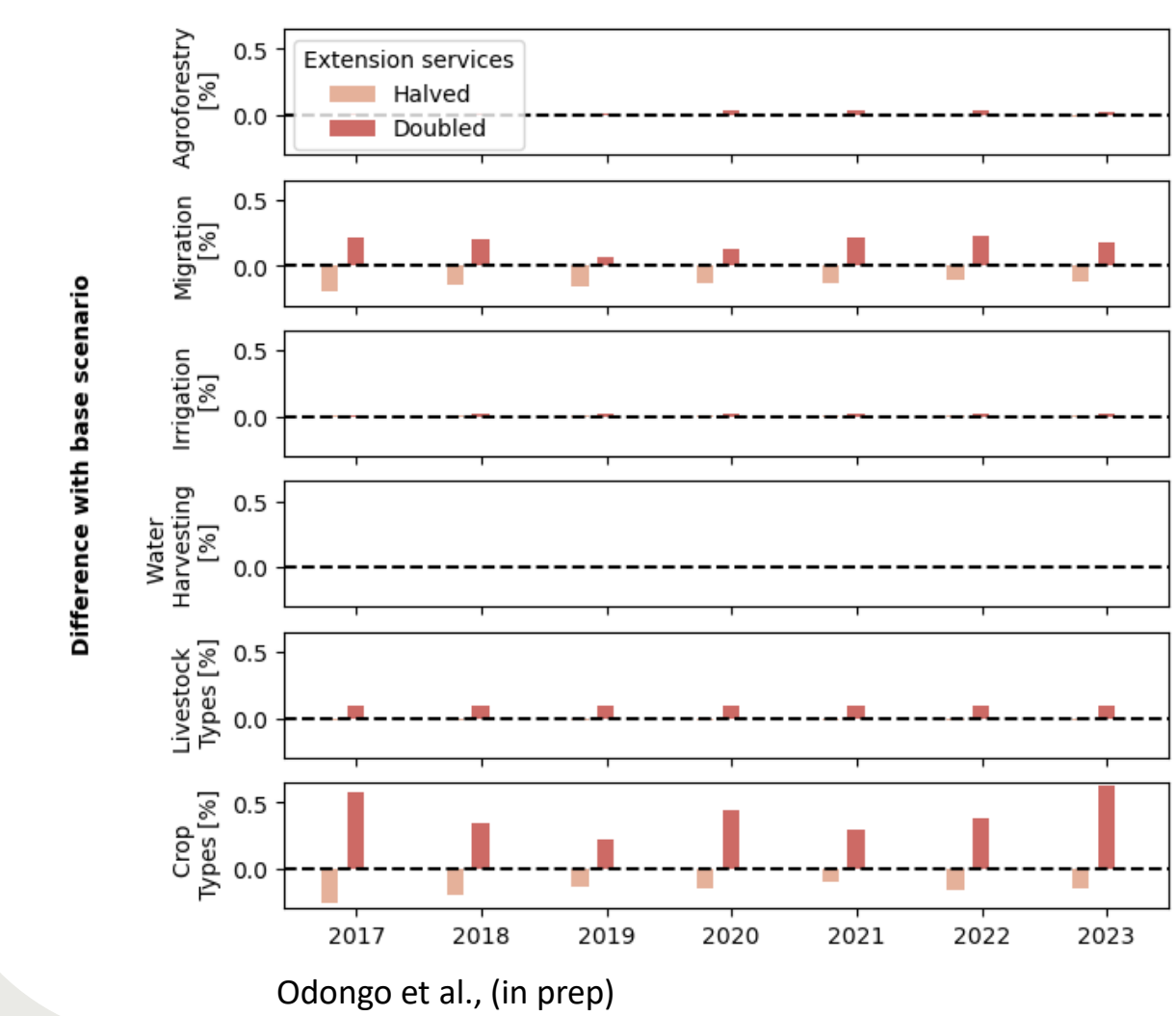
Streefkerk et al., (in review)

## Community vulnerability

It is important to invest in sustained and scalable interventions to build community resilience. Financial resource allocation should be based on specific county needs, ensuring that areas and groups with higher vulnerability receive more attention, in particularly women and girls.

## Adaptation

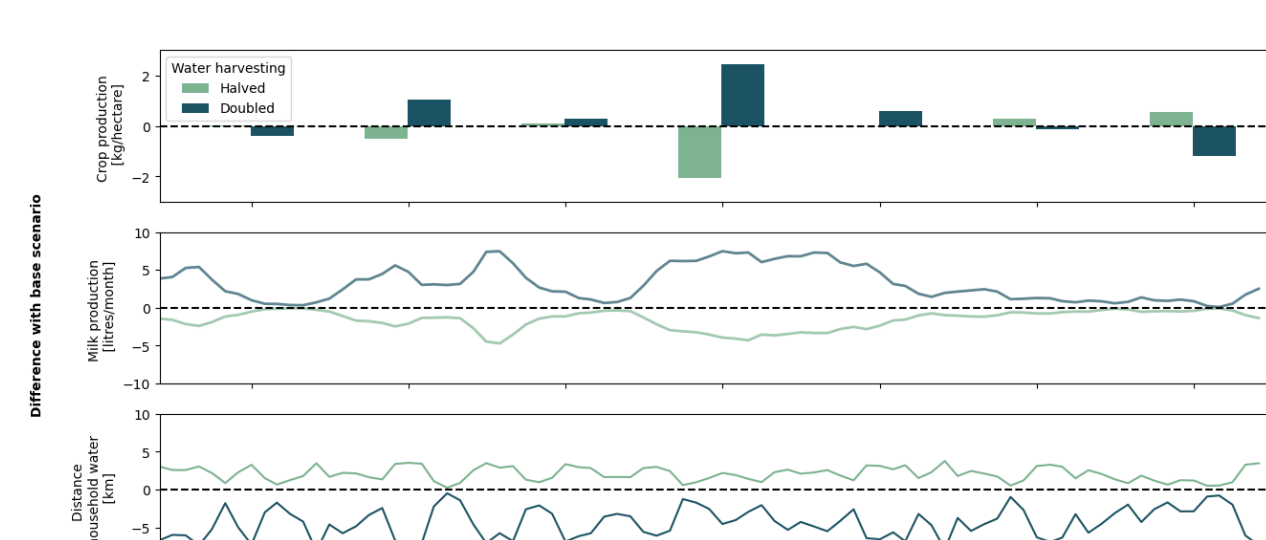
Important barriers to community adaptation uptake are lack of financial resources and knowledge. However, only focusing on increasing adaptation knowledge is not sufficient. Improved access to credit and training and information can remove these barriers.



Odongo et al., (in prep)

## Water infrastructure

Additional water harvesting structures can improve milk production and decrease the distance to water. However, it does not necessarily result in an increase in crop production during drought. Special attention should be given to upstream-downstream links.



Odongo et al., (in prep)