Beyond Housing Damage: The Social Dynamics of Flood-Related Mobility

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Understanding the Drivers of Flood Mobility

Research Objectives:

- Investigate local dynamics.
- Support EWS and decision-making.
- Improve mobility modeling accuracy.

Sudan

Mozambique

Fieldwork in Mozambique

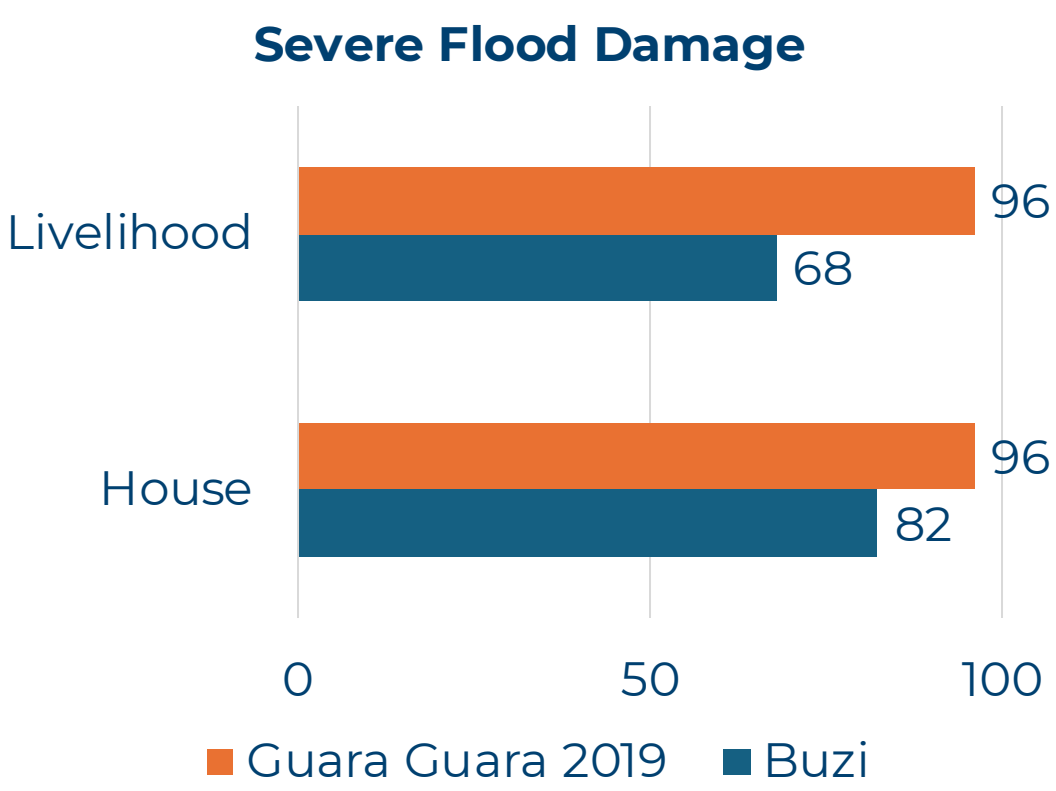
Data collection:

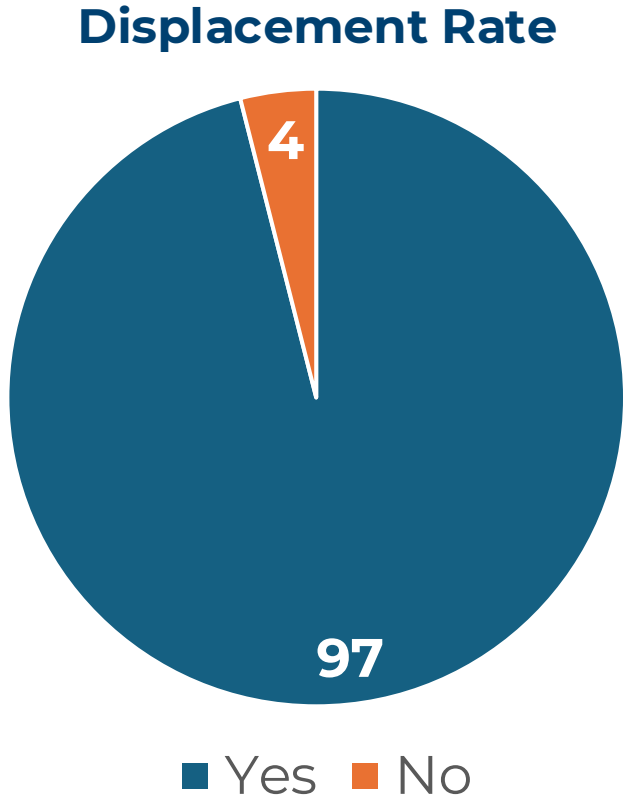
- July 2025.
- Buzi & Guara Guara.
- 428 household surveys.
- 6 local enumerators.

Data analysis:

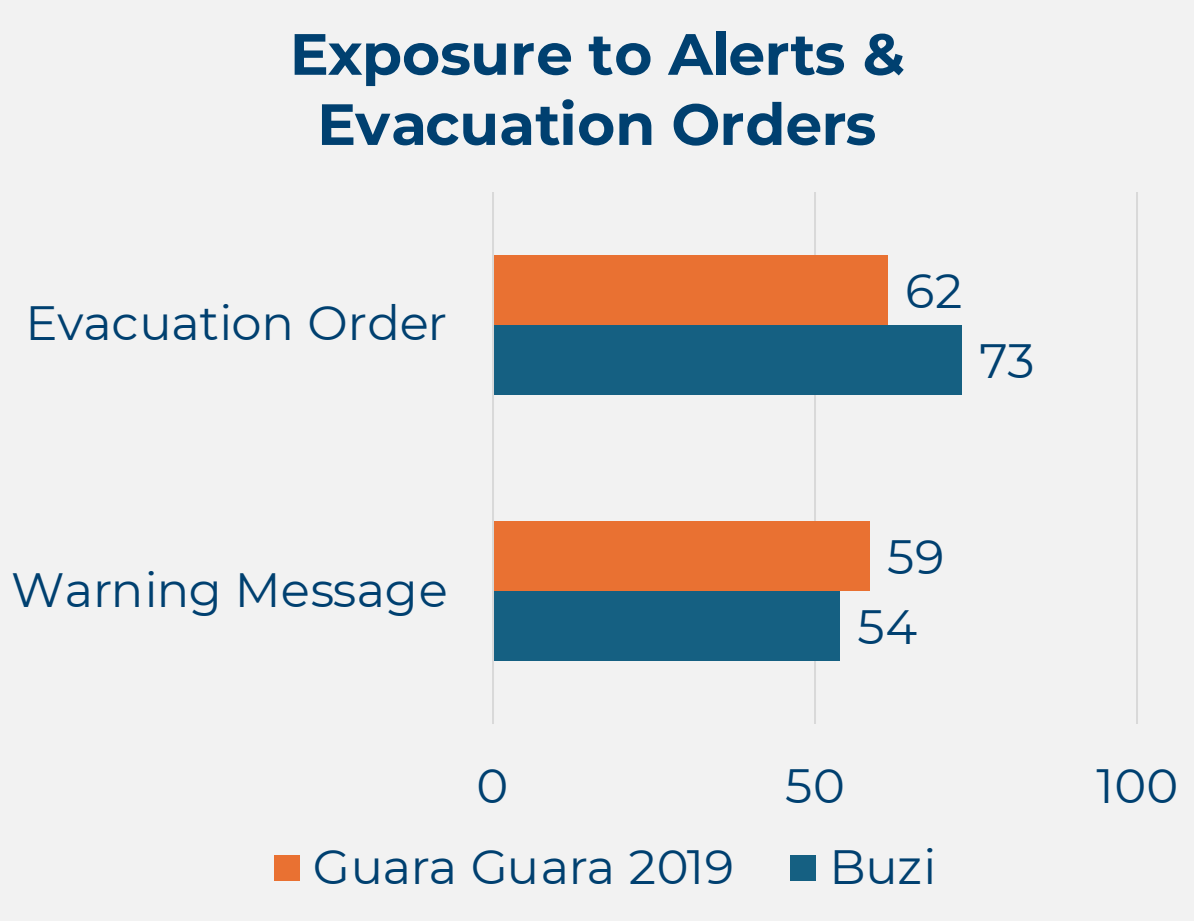
- Reconstruction of 2019 flood event (Cyclone Idai).
- Households' characteristics and mobility dynamics.
- Improving EWS (local & national).
- Comparative analysis with Sudan.

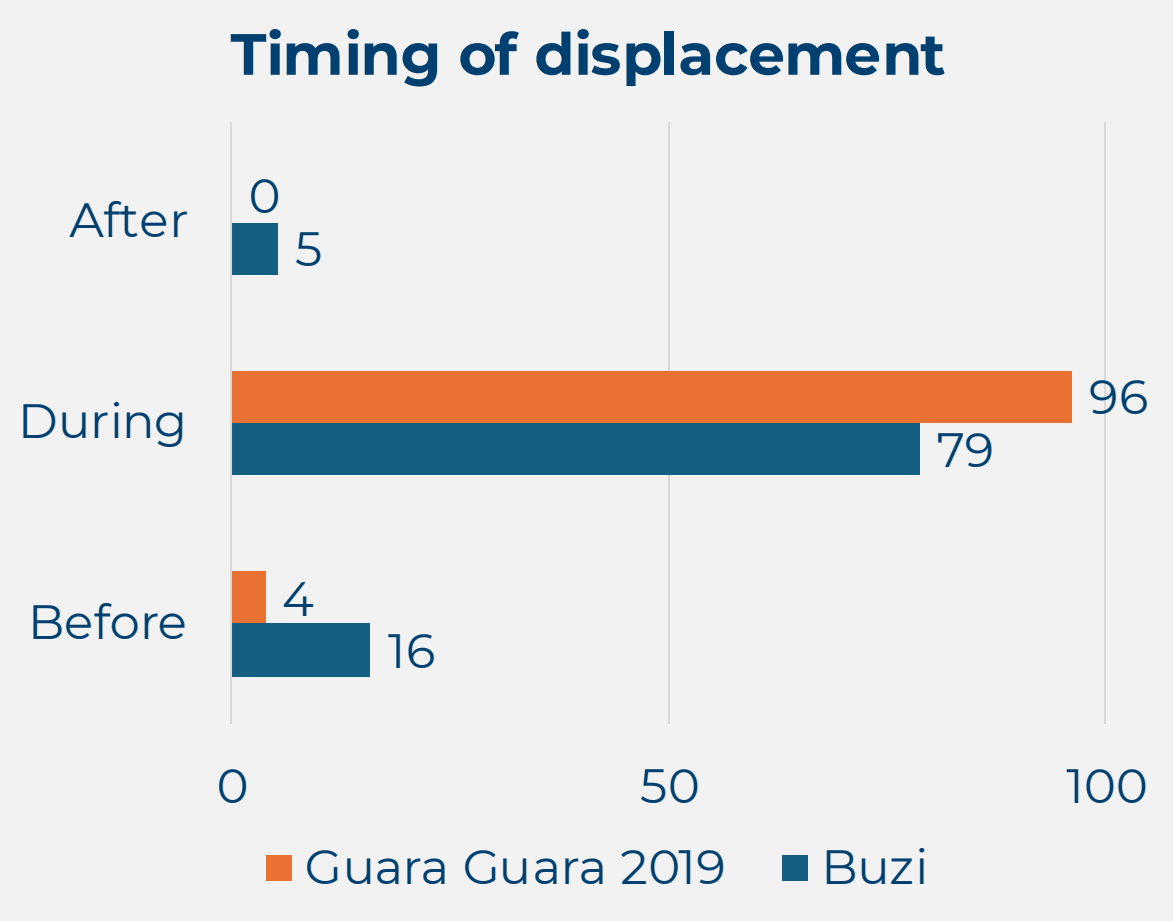
Preliminary Findings: Damage and Displacement



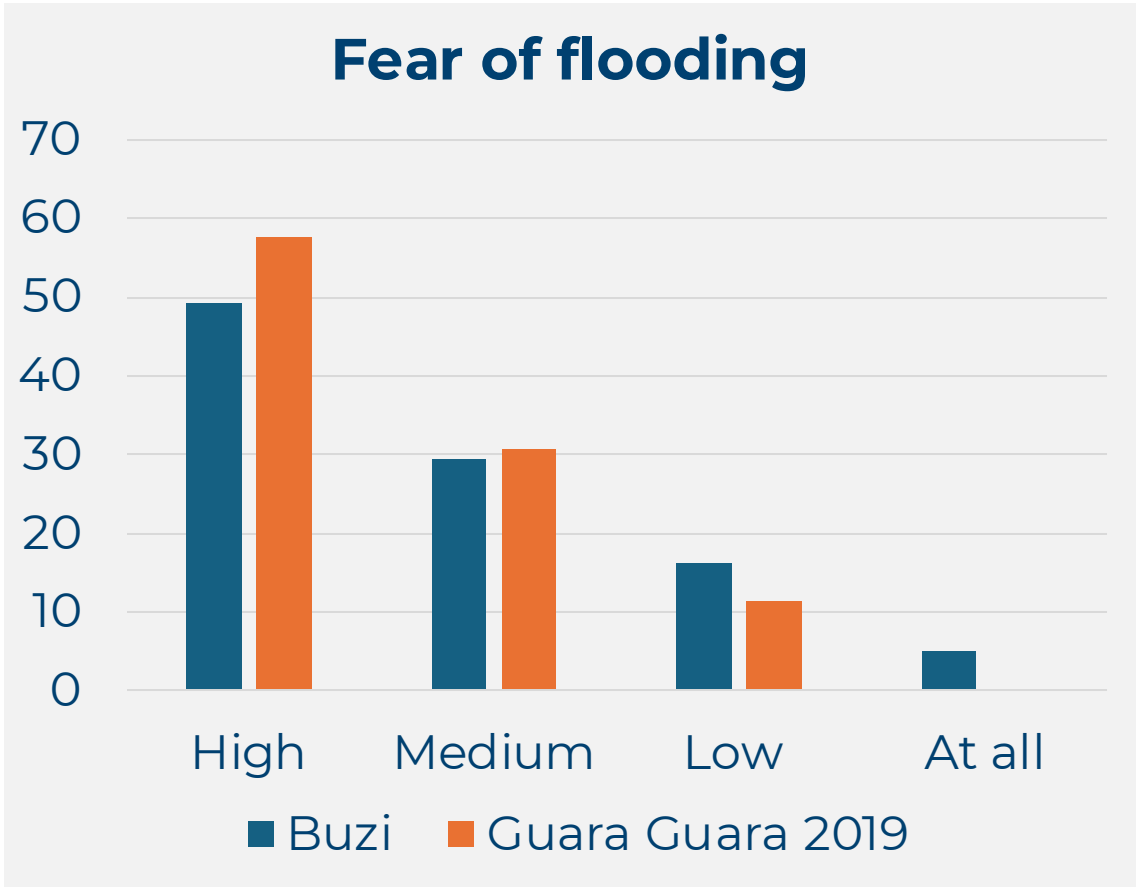


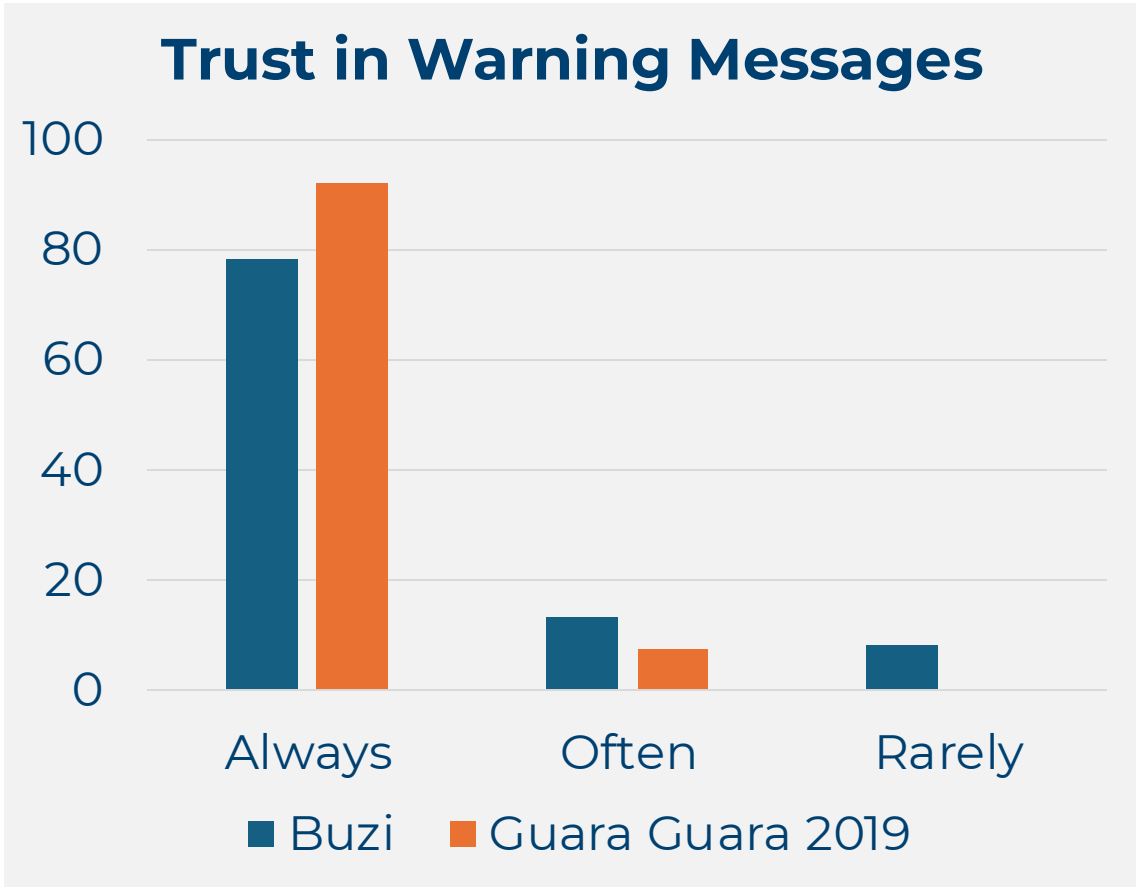
Preliminary Findings: Warnings and Displacement



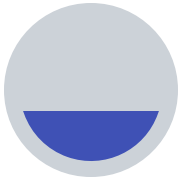


Preliminary Findings: Fear and Trust





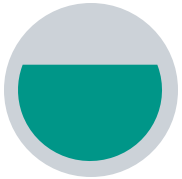
Further steps: From Local Insights to Global Models



Complete data analysis

Full statistical analysis of population clusters.

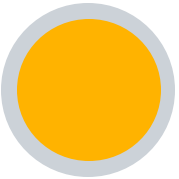
Community restitution



Comparative analysis

Similarities and differences between Sudan & Mozambique.

Policy insights



Model enhancement

ABM and probabilistic model calibration

More detailed frameworks

Thank you for the attention!

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