

## IMPROVING LIVESTOCK INSURANCE TRIGGER MECHANISMS AND GENDER RESPONSIVE PRODUCTS FOR DROUGHT-AFFECTED (AGRO-)PASTORALISTS IN KENYA.

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SCAN ME



## BACKGROUND

Livestock insurance currently relies on the Normalized Difference Vegetation Index (NDVI) – a satellite measure of “greenness” – as a trigger for drought payouts. However, NDVI doesn’t always reflect the actual forage conditions on the ground during droughts. This mismatch, a phenomenon known as basis risk, means herders might not receive payouts even when their animals are starving, leading to community mistrust of insurance schemes. Additionally, cultural and local environmental factors (such as forage types and water access) are not fully accounted for in early products, resulting in many pastoralists feeling the coverage wasn’t suitable for their needs. Early findings reveal a gender gap in how current insurance benefits are distributed. This underscores the need for gender-inclusive insurance models. The BIMA project was launched to address these gaps by developing more inclusive and accurate drought triggers, along with improved insurance solutions.

## OBJECTIVES

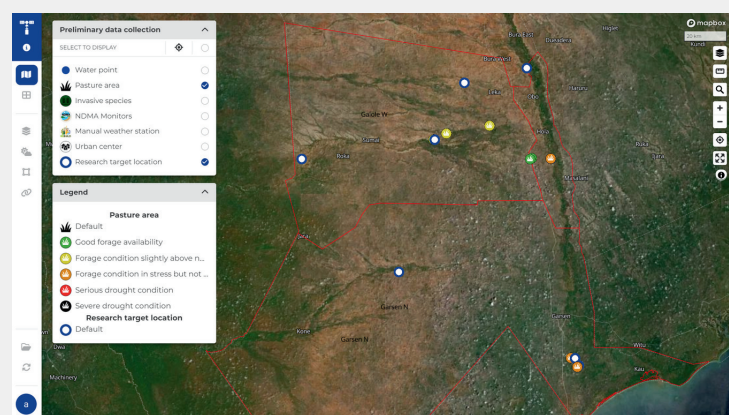
To develop an insurance payout trigger that meaningfully integrates ground conditions and climate data (beyond just satellite NDVI) for more timely, accurate drought.

To create insurance products that intentionally include and benefit women, youth, and other marginalized groups.

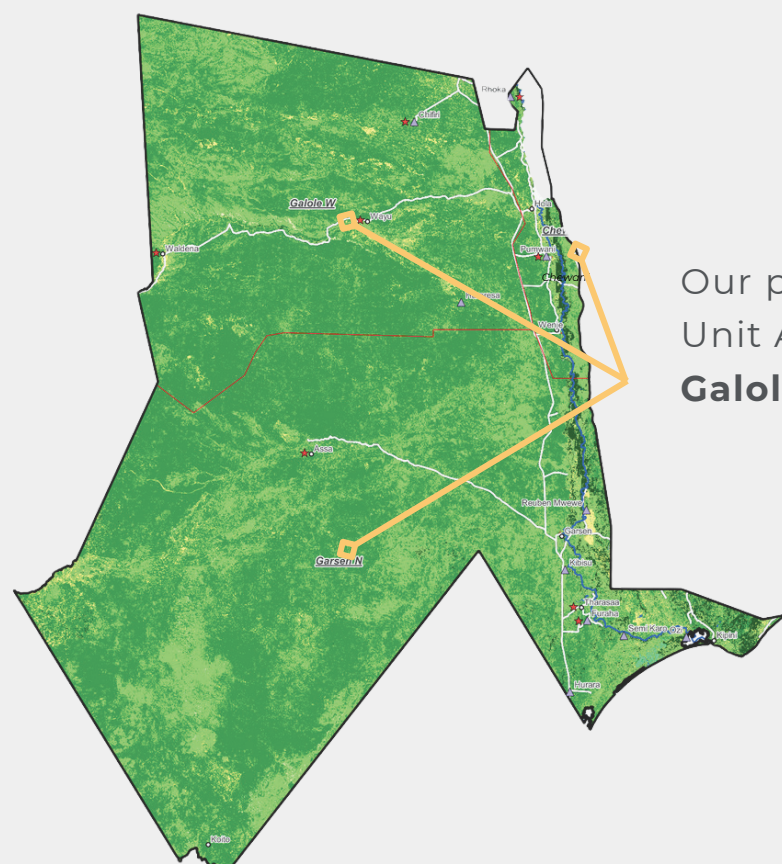
To rebuild community trust in IBLI and boost enrolment by making the insurance more equitable and transparent.

## STUDY AREA

**Tana River County, Kenya**  
a drought-prone region with predominantly pastoral and agro-pastoral communities in Kenya’s coastal arid and semi-arid landscape



3Map visualization

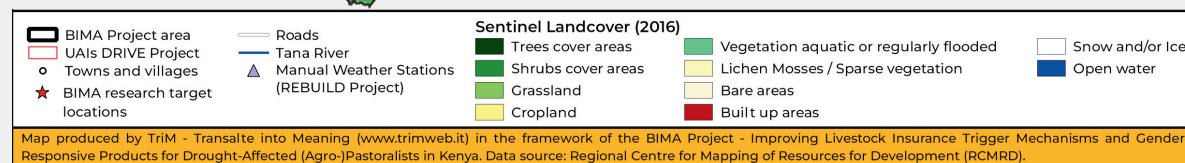


Our project concentrates its field research in three Unit Areas of Insurance (UAIs)  
**Galole West, Chewani, and Garsen North.**

### BIMA Research Target Locations

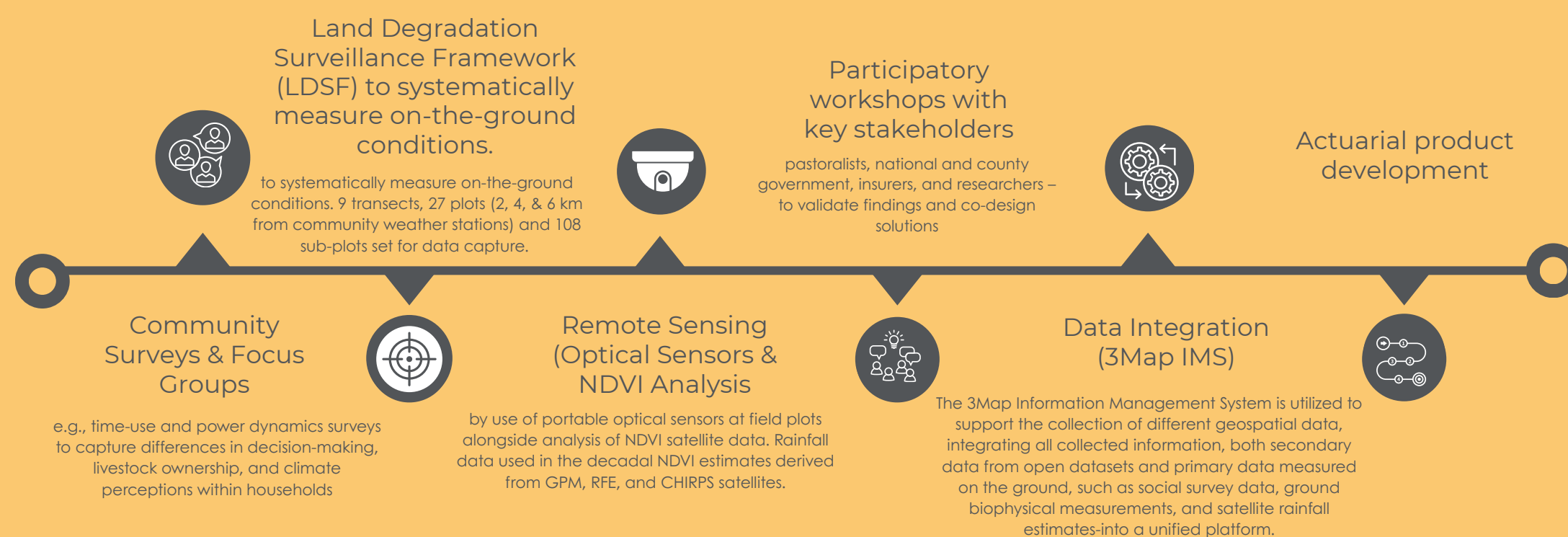
WAYU  
WALDENA  
CHIFIRI  
RHOKA

PUMWANI/GAFURU  
ASSA  
TARASAA



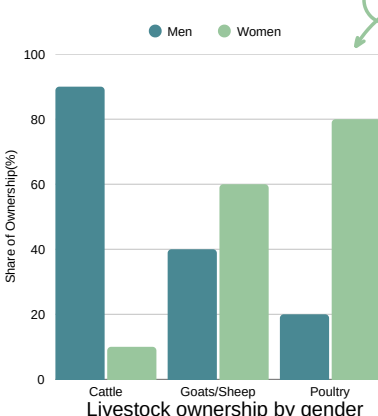
## METHODOLOGY

We employ a **mixed-methods approach** to develop and test improved insurance mechanisms. Key components include:

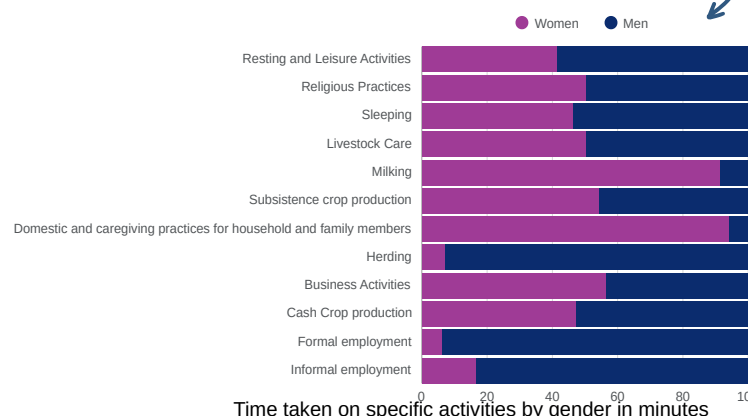


## INTERIM INSIGHTS

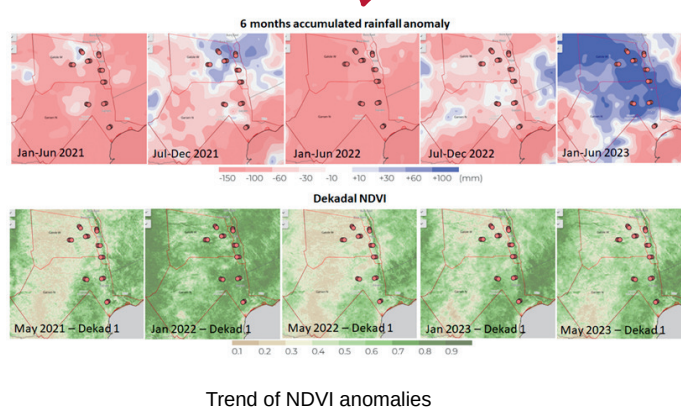
### #1 GENDER DISPARITIES IN LIVESTOCK OWNERSHIP



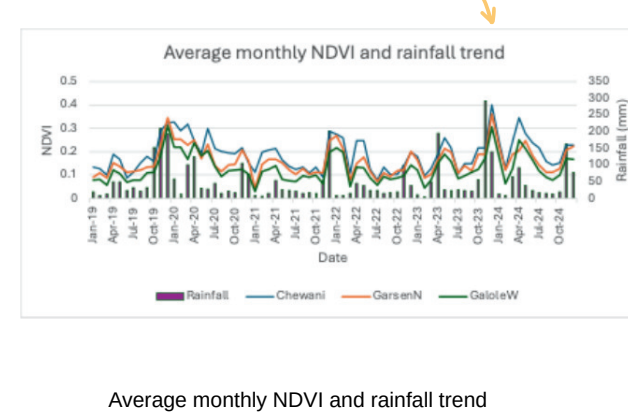
### #2 WOMEN'S LIMITED BENEFITS



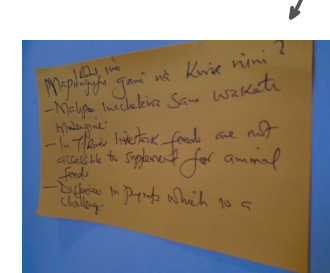
### #3 SATELLITE INDEX VS REALITY



### #4 MODERATE POSITIVE ASSOCIATION (r=0.46) of NDVI and rainfall



### #5 NUANCES AROUND LOCAL TRIGGERS



## SUMMARY

Pastoralist men typically own and control most large livestock (e.g. cattle), whereas women tend to own smaller animals like shoats and poultry.

Men take insurance on major herd animals; many women do not directly receive insurance benefits.

Women's significant labor in herd management is largely uncompensated.

The NDVI anomalies over the 6 years agree with the National Drought Management Authority (NDMA) reports on drought, validating its suitability as a drought indicator.

Rainfall influences vegetation health more than land surface temperature.

Higher-than-normal NDVI values at the end of the short rainy season may falsely suggest vegetation health despite longer harsh periods.

The phenological behavior implies that IBLI payout triggers could be misrepresented if the length of the rainy season and the start of the season are not factored in.

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