

## Promoting Women's Resilience in Africa's Arid Regions in the Age of COVID-19

*A Virtual Panel Discussion with:*

- *Michael Carter, University of California, Davis & MRR Innovation Lab*
- *Sam Owilly, The BOMA Project*
- *Watson Lepariyo, International Livestock Research Institute*
- *Nathan Jensen, International Livestock Research Institute*



# Pastoralism in the Drylands of Africa



- More than 250 million people depend on pastoralism in the drylands of West, East and Southern Africa
- Their lives are threatened by periodic droughts that can in just a few months drop their income to zero and destroy more than half of their productive wealth
- Droughts in Kenya from 2008-2012 cost over \$12 billion
- At a more human scale, the consequences of these events are enormous and long-lasting, if not irreversible
- In short, drought makes and keeps people poor, thrusting them into situations of economic non-viability or poverty traps
- Climate change is making this problem worse

# Altering Poverty Dynamics in the Drylands



- While emergency food aid has been the standard response to the slow moving disaster of drought, it is a band-aid that does not address underlying causes of persistent poverty nor restore families to economic viability
- The group of us with you today are part of a multi-year effort to design and test a program in northern Kenya intended to address the underlying causes & fundamentally alter the dynamics of poverty in this and the other pastoralists regions of Africa
- As you will hear, there are two pillars to our program:
  - Asset Protection, through Index-Based Livestock Insurance/Takaful (IBLI/T)
  - Asset Building, through the Rural Entrepreneurs Access Project (REAP)

# The Samburu Experiment & the Pandemic



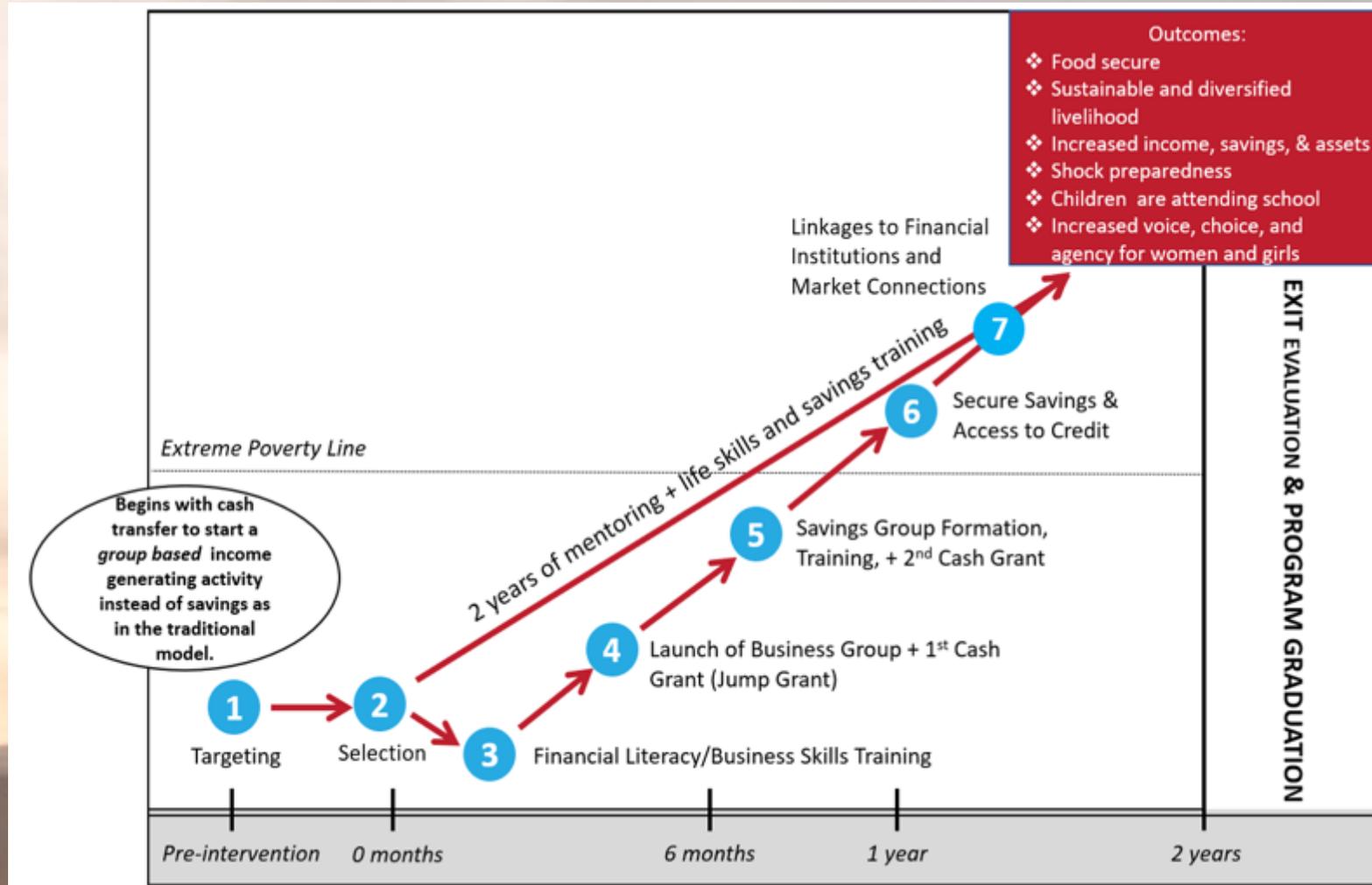
- The synergies between these Asset Building & Asset Protection elements are many:
  - REAP can build up assets of women so they can work their way out of the poverty trap
  - IBLI can protect those assets so they do not tumble back down
  - Especially important when we consider how risk is shifted from men to women in many households
- Complex systems analysis suggests that together these program can not only work, but can be cost effective
  - Cuts long-term poverty rates in half and costs 25% less than the standard band-aid strategy
  - With climate change, benefits of the integrated program grow (unless we hit the worst case scenario)
- Great in theory is one thing, but we are in the middle of a 5-year experiment to test the real world efficacy of this program; Mid-line results are promising
- As we are all aware, the global COVID-19 pandemic touches us all. After describing the basic pieces of our program, we will also talk about the impacts of COVID on families in our study area
- Also learn more later today on the UC Davis podcast: <https://www.ucdavis.edu/unfold/> with Amy Quinton & Kat Kerlin

## What We Do

- High-impact, gender-focused poverty graduation program
- Build long-lasting resilience



# The REAP Graduation Model



# The REAP Model



**COMMUNITY  
ENTRY &  
TARGETING**



**CONDITIONAL  
CASH TRANSFER**



**FINANCIAL  
& LIFE SKILLS  
TRAINING**



**MENTORING  
& COACHING**



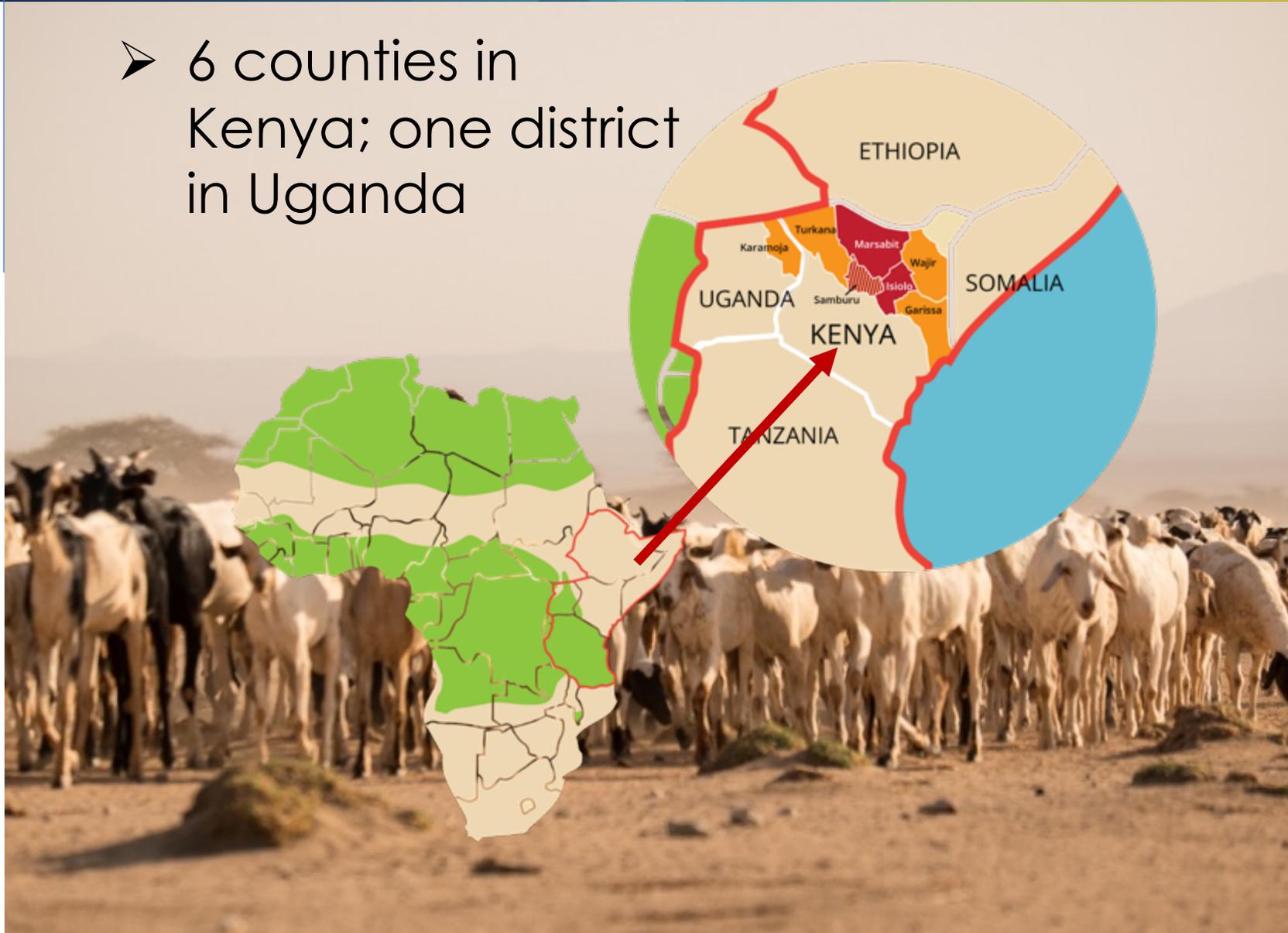
**SAVINGS &  
ACCESS TO CREDIT**



**FINANCIAL INCLUSION  
& MARKET LINKAGES**

# Where We Work

- 6 counties in Kenya; one district in Uganda



# Results



**\$ 567,295**  
IN SAVINGS



**\$ 251,109**  
IN TOTAL LOANS  
ISSUED



**780**  
# OF WOMEN LINKED TO  
FINANCIAL SERVICES



**116,892**  
# OF WOMEN AND  
CHILDREN  
IMPACTED



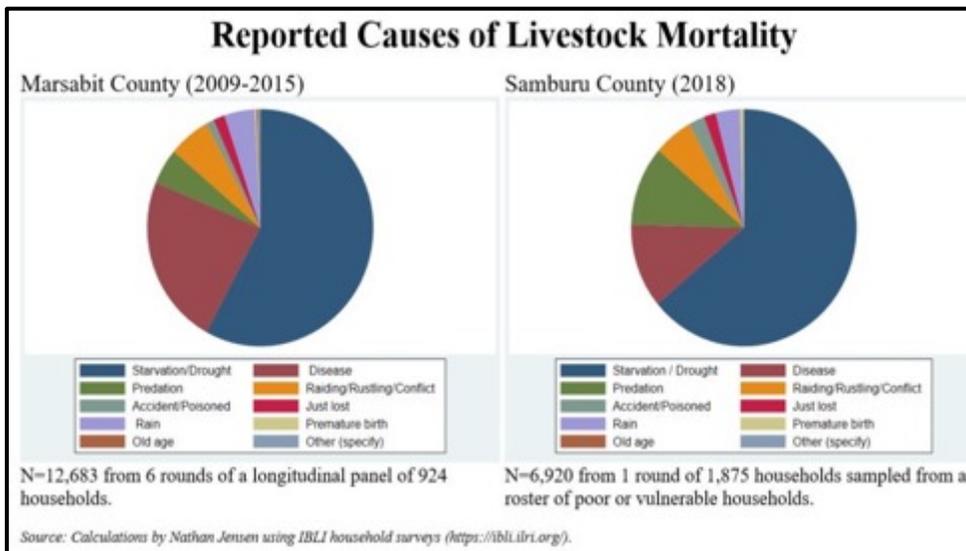
**1,000,000**  
WOMEN AND  
CHILDREN BY 2022



# Index Based Livestock Insurance



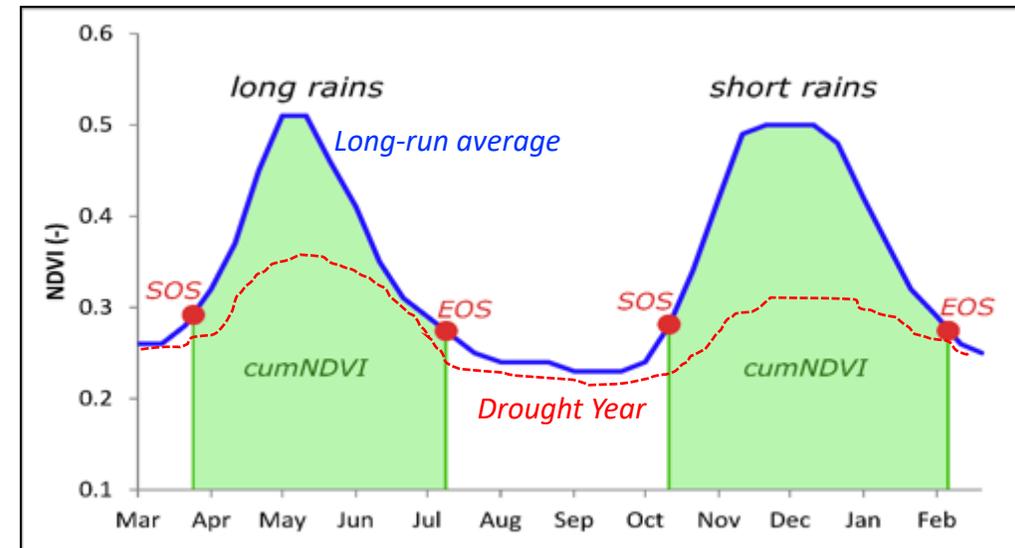
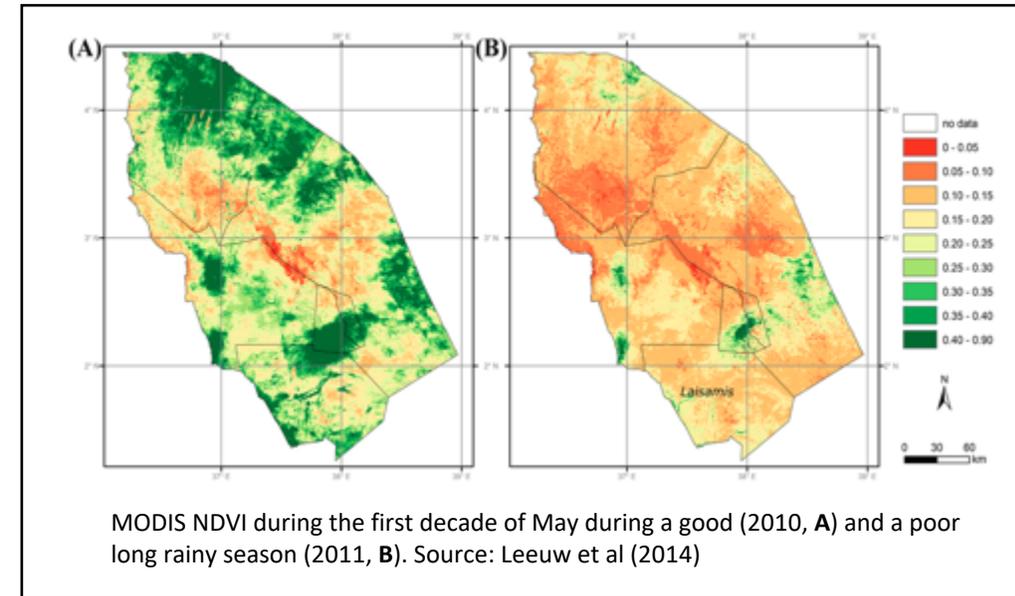
1. Pastoral household rely on extensive rangelands to generate most of their income and maintain their main stock of wealth.
2. Forage availability & quality in extensive rangelands is extremely sensitive to the distribution and level of precipitation.
3. Low availability to forage results in low productivity (milk, calves) and deterioration of productive assets (livestock).
4. Households respond by coping.
  - Migrating and herd splitting (use of more “costly” rangelands)
    - Less income available at the homestead
    - Loss of human capital investments
    - Conflict
  - Distress selling of animals and other assets
    - Poorly integrated markets exacerbated by loss of terms of trade
    - Long-term implications of selling productive capital (poverty traps)
  - Taking on debt and reducing consumption



# Index Based Livestock Insurance



- **Objective:** To mitigate the impact of droughts on households.
- **Signal:** eMODIS NDVI time series (USGS) that strongly correlates with drought/forage scarcity/livestock losses.
- **Index:** Relies on historic NDVI observations to identify relative anomalies of low vegetation.
- **Policies** have been commercially sold by private insurance companies (APA, TIA, OIC) in Kenya and Ethiopia since 2010.
- IBLI has been integrated into Kenya's social protection programming through the **Kenya Livestock Insurance Program (KLIP)**, which purchases IBLI on behalf of 18,000 households.



# Impacts of Insurance

## Production

- Increased livestock off-take in good seasons, when prices are high
- Increase investments in productivity through vet. & vaccination services

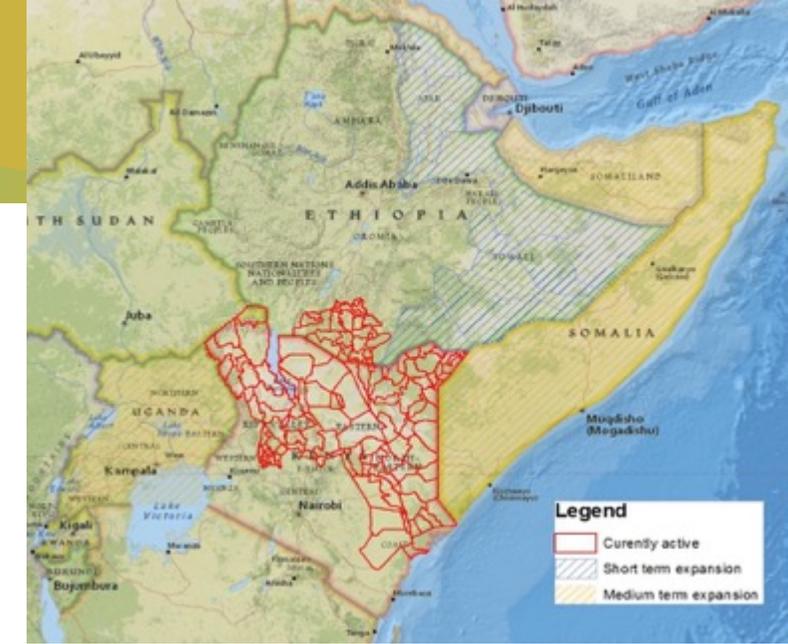
## Drought coping

- Reduction in likelihood of distress livestock sales
- Reduction in likelihood of reducing meals as a coping strategy

## Welfare

- Improved income per adult equivalent
- Improve subjective welfare even in the absence of droughts/payouts
- Improved resilience

Sources: Cissé & Barrett 2018; Janzen & Carter 2019; Jensen et al., 2017; Matsuda et al., 2019; Tafere et al., 2019



## Insurance helps Kenya's herders protect against drought

Victoria Eastwood, CNN  
Updated 9:31 AM EDT, Mon June 18, 2012



### Insurance payouts for Kenyan pastoralists

As drought desiccates fields and forages in northern Kenya, the Government, in partnership with insurers, has made payments to over 12,000 pastoral households under a livestock insurance plan, the Kenya Livestock Insurance Programme (KLIP).



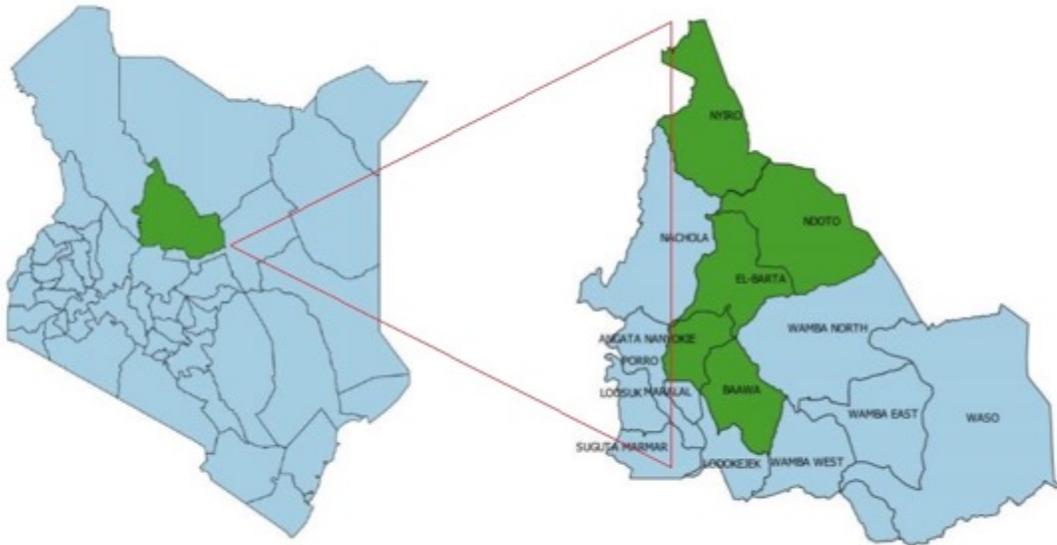
KLIP is intended to provide a safety net for Kenyan herders, who for centuries have grazed their animals across vast stretches of arid and semi-arid lands.

# Can Asset Transfer & Asset Protection Policies Alter Poverty Dynamics in Northern Kenya?



- There is strong evidence that each of these programs—REAP and IBLI—can improve welfare.
- But, there is some concern that the new REAP businesses, and therefore the long-term success of REAP graduates, are vulnerable to drought.
- At the same time, while there is evidence that insurance coverage can increase productivity, there is still no evidence that this is sufficient to lift households out of poverty.
- In this study we are testing if, by combining these two programs, we can both help participants lift themselves out of poverty and protect those gains for long-term sustainable outcomes.

# Field activities overview



- Location: Samburu County
- Sample selection (PRA and individual verification)
- Selecting both Vulnerable and poor households that meet the selection criteria.
- Total RCT participants: 1875



- We have had 3 (2018, 2019, 2020) rounds of individual in-depth interviews, which are coupled with discount coupon distribution and extension on IBLI.
- In addition to the main surveys, we have had 1 round of games to understand gender dynamics and recently phone survey to understand impact of Covid-19 on RCT participants.
- TIA sales agents are in most of the small trading centers selling index insurance policies to individual pastoralist and women that are project participants.
- Challenges faced;
  - Tracking respondents that are constantly moving.
  - The terrain.
  - No connectivity in some of the areas
  - Lack of ID by some participants

# Experiences and lessons learned



- Conducted games using a digital mobile app ([simpastoralist](#)), a great way of teaching pastoralist about index insurance.
- Index insurance is a new concept to pastoralist, requires more extension to guarantee buy in.
- Women participating in BOMA are clearly notable among others, the mentorship instills confidence and self reliance.
- In some areas, REAP beneficiaries are engaging in Livestock trade and are doing great in a market domain dominated by men.
- For the pastoralist that understand the product, they term it as a second helper during drought and agree that this product has the potential to reduce the effects of drought.



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