



## MRR INNOVATION LAB PROJECT IN BRIEF

# MAKING INSURANCE FULLY AVAILABLE FOR WOMEN IN NORTHERN KENYA

Women in pastoralist communities are particularly vulnerable to extreme drought which is becoming more common due to climate change. Index-based Livestock Insurance (IBLI) has proven vital in these communities but has not appealed to women because in most cases men control the family's livestock and the insurance payments for losses. MRR Innovation Lab researchers are testing Family Insurance, which is built on the technical foundation of IBLI but provides coverage in "family" units that pay for household needs during droughts that threaten families' wellbeing.

### Lead Principal Investigator

Michael Carter, UC Davis

### Project Partners

The BOMA Project  
International Livestock Research Institute (ILRI)

Takaful Insurance of Africa  
The University of San Francisco

### Development Innovation

Index insurance

### Commodity

Multiple

### Targeted Population

Women in pastoralist communities

### Country/Location

Northern Kenya

### Timeline

2022-2024

### Funding

\$400,000 (USAID)

### The Challenge

In Kenya, the potential for devastating drought is a constant threat, particularly for the nation's roughly ten million pastoralist households whose livelihoods depend on their mobile herds of livestock. In a severe drought, pastoralist families can lose as much as half of their assets, driving them into extreme hardship.

In Kenya's arid north, where pastoralism is a predominant livelihood, The BOMA Project has been implementing its Rural Entrepreneur Access Project (REAP) that provides the poorest women in pastoralist communities with the funds and training to establish a small business. Many of these businesses are based on livestock keeping or setting up a small shop to sell goods.

However, these businesses are at risk when a drought drives their owners into hardship. Index-based Livestock Insurance (IBLI), first marketed in Kenya in 2009, has proven to be an effective way for pastoralist households to manage their drought risk. IBLI is a low-cost form of insurance that releases payouts when satellite measurements of vegetation predict that a drought will threaten an area's livestock.

In 2017, this MRR Innovation Lab research team led from UC Davis with support from USAID partnered with the BOMA Project to test the impacts

### RESEARCH INNOVATION

Family Insurance was first tested in 2019 using SimPastoralist, a tablet-based game created to simulate ten seasons of buying and selling goats with the additional options to insure them against drought. It was developed by University of San Francisco economist Andrew Hobbs to explain how index insurance works to women and men in pastoralist communities.

Using experimental games to explain index insurance is not a new idea. For a decade, Carter and his colleagues have been included games around the world using poker chips, paper and dice to help people understand how a complex financial instrument like index insurance works as well as to test demand for it.

Results from the experiment with SimPastoralist showed that women had strong preferences between Family Insurance and traditional IBLI. Family Insurance, which directly addressed women's responsibilities in taking care of themselves and their children, almost doubled their demand for insurance relative to the traditional IBLI that framed coverage as a means of maintaining livestock during drought.

Insurance partner Takaful Insurance translated what was learned from SimPastoralist into a real insurance contract that was first piloted in two counties in Northern Kenya in 2021.

of pairing IBLI with REAP. The idea was that the insurance would provide the means for new business owners to hold onto their gains in the event of drought. However, the team quickly learned that livestock insurance did not appeal to women because in most pastoralist households, men control the family's livestock as well as the payments that come from insuring it.

### Research Design

Family Insurance, developed by the MRR Innovation Lab at UC Davis, is a new type of drought insurance that supports the collective welfare of pastoralist families in Northern Kenya. Family Insurance is built from the same index and technical foundation of the well-established Index-based Livestock Insurance (IBLI) but is sold in “family” units that account for a family's needs in times of hardship.

The research team developed Family Insurance in close collaboration with the International Livestock Research Institute (ILRI) and Takaful Insurance Africa. The payout value for coverage was calculated based on the amount of money that Kenya's emergency cash transfer program, the Hunger Safety Net Programme (HSNP), provides to families in times of extreme need. Women could buy coverage for the number of family members needing support in a drought emergency.

In 2021, Takaful Insurance Africa launched Family Insurance with payouts to be delivered directly to insured women's M-Pesa accounts on their mobile phones. The team launched a randomized controlled trial (RCT) in 50 study areas where half of the women could purchase Family Insurance and the other half could purchase conventional IBLI. In 2023, the research team reported results showing that 20 percent more women bought Family Insurance than conventional IBLI, and the amount they insured was 40 percent higher. These increases in coverage show significant demand for

drought protection when provided in the form of support for the collective family.

The team is now measuring the broader impacts of the insurance on people's livelihoods by scaling Family Insurance across five counties in Northern Kenya. In this expansion, Family Insurance is offered by research partner Takaful Insurance of Africa as a bundle of coverage that includes health insurance and accident insurance.

The insurance bundle is being marketed to 430 women's savings groups made up of graduates of The BOMA Project's 24-month REAP program. Women will also have the opportunity to pay for the insurance through Village Insurance Savings Accounts (VISAs), a new innovation through which women in these savings groups can save up over time to pay the full cost of insurance coverage during the next upcoming sales period.

### Development Impact

The objective of Family Insurance is to provide women who face a high risk of losing their livelihoods to drought a way to independently take care of themselves and their children during times of hardship. This expansion of Family Insurance and its inclusion as a bundle of coverage could reduce the hardships of drought, especially on young children, while also enabling women to take advantage of opportunities like the REAP program that can help them to generate a higher income.

These impacts closely align with key objectives in the current USAID Kenya Country Development Cooperation Strategy (CDCS). First is Development Objective (DO) 2: Resilience of vulnerable populations and environments improved, and second is Development Objective (DO) 3: Economic growth opportunities, especially for young men and young women, catalyzed. Family Insurance could prove to be a powerful tool for increasing overall resilience across some of Kenya's most vulnerable communities.



### Development Opportunity: Kenya

- 55** : Population in millions (2021)
- 29.4%** : Poverty rate at \$2.15/day, 2017 PPP (2015)
- 39.3** : Rural population in millions (2021)
- 54%** : Total employment in agriculture (2019)
- 27%** : Prevalence of undernourishment (2020)
- 26.2%** : Prevalence of stunting for children under 5 years (2014)

Source: World Bank

More than 75 percent of Kenyans make a key part of their living in agriculture, and the sector accounts for more than one fourth of Kenya's gross domestic product (GDP). The FAO estimates there are 36 million people residing in rural Kenya and over 720 million people living in rural Africa. Many of these individuals are smallholder agricultural producers or depend on smallholder agriculture for their livelihood in some way.

Increasing agricultural growth for small-scale farmers is a critical avenue for improving livelihoods in Kenya. Most smallholders continue to subsist on low-input, low-output, rain-fed agriculture. Crop production is limited due to farmers having low access to, and usage of, improved technologies and practices, including seed and irrigation technologies. Market access is also needed to create incentives for investing in and using new technologies and practices.<sup>1</sup>

<sup>1</sup> Feed the Future. 2018. “Global Food Security Strategy (GFSS) Kenya Country Plan.”

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