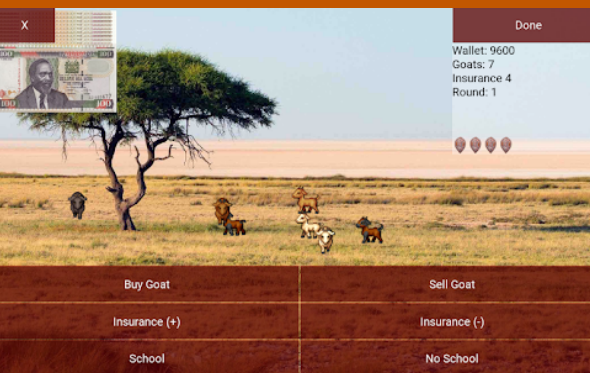




Research team member Benjamin Ltarapua Lolminga (center) facilitates a game of SimPastoralist in northern Kenya

Photo Credit: MRR Innovation Lab



A screenshot of SimPastoralist

Photo Credit: MRR Innovation Lab

## Using a digital game to strengthen the design and uptake of pastoralist index insurance

Index insurance products, meeting minimum quality standards,\* make it easier for agriculture-focused households to weather shocks like drought or disease. However, the idea of paying money for a service that may not produce any benefit – if a payout-triggering event does not occur that year – can be a tough sell to people, especially those without previous exposure to insurance.

The Feed the Future Innovation Lab for Markets, Risk, and Resilience (MRR Lab) developed an experimental, digitized game to try to make the value proposition for insurance more relatable to pastoralists. Instead of theoretical arguments about hypothetical situations and risk, SimPastoralist takes users through a realistic journey across multiple seasons as a pastoralist. Players get the experience of up to 100 seasons as they try different choices around insurance and observe the long-term consequences.

In addition to helping pastoralists understand the value of insurance, SimPastoralist also supports improved design of insurance products for resilience. The MRR Lab analyzes gameplay data to calculate player risk preferences, so that researchers can better understand how they relate to insurance demand. Comparing player decisions by gender indicates that women may be more likely to purchase insurance when the payouts can be used for household expenses. While the use of games to understand preferences is nothing new, the digital format offers multiple advantages to researchers: the game can be played quickly and repeatedly, gameplay data is recorded instantly and without error, and the visual representation of weather and animals makes it more realistic and engaging to players.

A modified version of SimPastoralist has built understanding of insurance products among governments, development actors, and financial service providers. The simulation allows a look at the real-life consequences of differences in insurance products that may seem insignificant on paper, but can determine whether subscribing households are left better or worse off.

Built in-house by the MRR Lab, the SimPastoralist app was designed to be played on a tablet. It has been played in facilitated groups and, due to popular demand, has also been made available on Google Play.

The MRR Lab sees potential for future adaptation of the app to develop a similar game that helps crop farmers make strategic decisions around insurance.

\*The MRR Lab has proposed a Minimum Quality Standard for agricultural index insurance products.