



Novel insurance program offers hope for livestock keepers in drought-prone East Africa

An unlikely sounding alliance involving NASA, livestock researchers, sharia-compliant insurance agents and pastoralists has come up with a novel approach to reducing the vulnerability of livestock keepers in increasingly drought-prone regions of Africa.

A lifeline for pastoralists

No communities rely more on livestock for their livelihoods than the pastoralists of East Africa. The pastoralist way of life has always been harsh and droughts are part of life in these arid lands.

Thanks to global warming and limitations on access to traditional dry-season grazing areas, however, these pastoral people, their livestock and lands, have become increasingly vulnerable.

Until recently, in the face of crippling droughts pastoralists had few options: watch their precious herds and flocks die or sell them at rock-bottom prices. The solution, which ILRI and its partners have successfully piloted in this area, offers a new option – to join an innovative [livestock insurance program](#).

Index-based livestock insurance – how it works

Index-based livestock insurance, IBLI for short, overcomes two of the major problems associated with insurance in remote areas. The first is providing insurance cover for mobile peoples across a vast landscape with very challenging communications. The second is the cost of verifying claims, weeding out the genuine from the fraudulent.

Whereas conventional insurance products involve case-by-case claims, which are costly to investigate, IBLI is based on satellite-derived data - the Normalised Difference Vegetation Index (NDVI), basically a measure of the amount of grass available for livestock. By feeding the NDVI into a scientific model, this can be used to predict animal mortality: when the model predicts that over 15% of animals will die due to starvation because of shortage of grass, payments to all IBLI policy holders in the affected geographical area is triggered with no need for on-the-ground verification.

NDVI, which is derived from data collected by National Oceanic and Atmospheric Administration (NOAA) satellites and processed by the National Aeronautical and Space Administration (NASA), is freely available and updated every 16 days.

This approach has enabled ILRI to partner with local insurance companies which are now offering commercial

insurance products specially tailored to the needs of pastoralists, which in some cases includes being sharia compliant.

The story so far

The IBLI program was launched as a pilot project in two districts of northern Kenya in January 2010. Insurance was a totally new concept to nearly all the pastoralists in this area and the use of educational games was one approach to help increase the level of understanding. The pilot included stakeholder consultation and field studies; the knowledge and experience gained enabled a commercial IBLI product to be developed, priced, tested and sold.

In October 2011 drought caused the critical threshold to be reached and, as a result, the first ever payments were made by the insurers to the policy holders. From 2012 coverage of IBLI began to be expanded into seven new districts in northern Kenya as well as Borana, an important pastoralist area in southern Ethiopia.

In the latest payout in March 2014, around 100 pastoralist families from Wajir in northern Kenya received a total of more than USD 6,000 – a significant sum in a country where the average annual income is around USD 300.

So far, over 4,000 pastoralists in Kenya have bought IBLI policies and these are now being actively marketed throughout pastoralist areas of Kenya. The policies are also being made available to pastoralists in Ethiopia with wider expansion planned. An estimated 70 million people live in the drylands of East Africa. With rainfall too low and too unreliable to depend on crops, and few other options available in these remote regions, many people depend on their herds of cattle, camels, sheep, goats and donkeys for their livelihoods. This pastoral livestock sector is huge: in Kenya alone it is estimated to be worth at least USD 5 billion a year and across East Africa it provides 90% of the meat consumed in the region.

Impact of IBLI

A study of IBLI's impact on pastoralists' coping behaviour in the face of a drought has been carried out involving close to a thousand pastoralists in northern Kenya, where the IBLI pilot had taken place. Drought had triggered payments to policyholders in October and November 2011 with the average payment being around USD 150 per household; the study was carried out shortly afterwards.

Results showed that insured households were less likely to have reduced the number of meals eaten each day and

would be less likely to sell their cattle than their uninsured neighbours. The insured households also anticipated they would be less reliant on food aid or the help of others. All insured households reported they would be reinvesting some of their payouts on renewing their policies.

It is critical for pastoralists to recover quickly from drought, building their herds back up to enable them to cope better when the next drought occurs. Thus, not having to sell their herds, their most precious asset, as a last resort, at rock-bottom prices, is a great advantage.

In fact, the study results suggested that insured pastoralists were shifting from being net sellers to net buyers of livestock. This could have significant spill-over impacts to uninsured neighbours - by creating stronger local demand for their animals this should help the uninsured to cope better too.

Next steps

Progress so far in these dry regions shows that insurance can make keeping livestock a more effective and sustainable livelihood strategy and can act as a cushion to household assets and income in times of distress. It is, however, early

days for IBLI. There are undoubtedly still lessons to learn, such as how the poorest pastoralists can benefit and how insurance can be bundled with other services pastoralists need, such as livestock vaccination.

Building on the success to date and experience of the IBLI initiative in East Africa, in addition to continuing to roll-out the livestock insurance product, efforts will be made to investigate how index-based insurance models could be adapted as a tool to cope with other weather-related perils. This could be an attractive alternative to the conventional approach of development agencies and governments, based on declaring an emergency and appealing for emergency assistance.

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