



INDEX INSURANCE

BUILDING AGRICULTURAL RESILIENCE TO CLIMATE VARIABILITY AND CHANGE



Photo by: ILRI

USAID is supporting the development of innovative insurance products that help farmers in developing countries manage climate and weather risks while taking advantage of opportunities to increase production. Pilot projects involving a range of stakeholders such as farmers, insurers, policymakers, lenders, and meteorologists in Ethiopia, Senegal, and the Dominican Republic are introducing, testing, and supporting the adoption of new types of agricultural insurance as part of a package of complementary measures to reduce vulnerability.

USAID'S ROLE IN SUPPORTING INDEX INSURANCE

USAID is partnering with the private sector, universities, and local organizations to provide index insurance to farmers and pastoralists in developing countries.

The Dominican Republic: Climate resilience and risk reduction.

USAID and local nonprofit Fundación REDDOM are teaching farmers in the Dominican Republic to reduce the impact of minor weather and water disruptions through proactive measures such as storing water in lagoons. In tandem, USAID and REDDOM are working with Guy Carpenter, Swiss Re, and Columbia University IRI to design index insurance products that will allow banana, plantain, and dairy farmers to recover more quickly if severe winds or droughts damage their crops and livestock. The partners will train Dominican insurers to take over management of the insurance products, and work with the USAID-funded BASIS Assets and Market Access Innovation Lab to design a rigorous evaluation to show whether index insurance and complementary risk reduction measures improve climate resilience among the participating farmers.

Ethiopia: Protecting farmers from the impacts of severe droughts.

USAID support for the research, design, and outreach of an index insurance product in southern Ethiopia has made it possible for nomadic herders to protect themselves against the loss of livestock from severe droughts. Approximately 600 pastoralists bought policies covering 382 cattle, 15 camels, and 535 sheep or goats, in two sales windows during the first year of the program. The International Livestock Research Institute, Oromia Insurance Company, Cornell University, and BASIS Innovation Lab use

SNAPSHOT

- Index insurance can affordably protect small farmers against losses from climate shocks.
- Index insurance complements proactive risk management activities (such as water storage) to maximize farmers' resilience.
- USAID adaptation programs in the Dominican Republic, Ethiopia, and Senegal are providing tailored crop and livestock insurance for hundreds of farmers and herders.



Ethiopian pastoral farmer by ILRI/Zerihun Sewunet.

“Drought leads me to depend on handouts from the government and humanitarian organizations. But during the previous drought, I benefited from the insurance, and that motivated me to buy it again this year.”

Guyo Jarso Guyo, pastoral farmer,
Marsabit County, Kenya

MAKING INSURANCE AFFORDABLE

THE CHALLENGE:

Conventional agricultural insurance payouts to farmers and herders who have suffered from a poor growing season or extreme weather event are based on their actual losses of crops or animals. This approach is costly to administer because it requires verification through on-the-ground inspection. These costs are recovered through higher insurance premiums, making insurance unaffordable to many farmers and herders.

THE RESPONSE:

Index insurance has lower administrative costs than conventional insurance because the payout is made when an index—such as wind speed or an amount of rainfall over a specified time period—falls above or below a predetermined threshold, so insurers don't have to travel to the field to verify losses.

Some programs have developed other ways to make index insurance even more affordable to farmers. For example, some providers make premiums due when farmers are more likely to have cash on hand, such as after harvest time.

Alternatively, insurance can be bundled with credit, with the insurance premium factored into the interest rate, eliminating the need for a cash outlay. Other approaches allow farmers to pay with their labor through “insurance for work” programs.



An Ethiopian pastoralist receives an index insurance policy. Photo credit: ILRI

publicly available NASA satellite data on vegetative greenness that indicates forage health and drought conditions to determine whether claims should be paid out. Payouts are typically used by pastoralists to buy food or new livestock to replace those lost in the drought. About 60 of the cattle are being tracked via GPS-equipped collars, as researchers hope to determine whether insurance is affecting the herders' movements.

The USAID Mission in Ethiopia plans to integrate index insurance into its flagship Pastoralist Areas Resilience Improvement and Market Expansion (PRIME) program, which aims to increase pastoral household incomes and improve their ability to adapt to a changing climate. In 2013, USAID's Office of Science and Technology selected the Ethiopia index insurance project as a Grand Prize winner of the Science and Technology Pioneers Prize.

Senegal: Providing index insurance to farmers. USAID supports the R4 Rural Resilience Initiative, which helps farmers in Senegal better prepare for climate shocks through improved natural resource management techniques, combined with access to index insurance and other financial tools like credit and savings. The R4 Senegal project builds on the success of a previous index insurance pilot in Ethiopia, which currently reaches 20,000 small-scale farmers and provided payouts to more than 12,000 of these farmers after a drought in 2012. The World Food Program and its partners conducted a robust risk assessment to initially select the rural community of Koussanar in the Tambacounda region, and—after completing a dry run in 2013—plan to make the new insurance product formally available in 2014. With continued USAID support, they aim to scale up to additional locations and enroll 18,000 farmers by 2015.

BREAKING THE BARRIERS TO AGRICULTURAL INSURANCE

With conventional agricultural insurance, payouts to farmers after a poor growing season or extreme weather event are typically based on actual losses of crops or animals. This approach requires verification through on-the-ground inspection. Conventional insurance is thus typically only accessible to larger commercial producers in developing countries; it is very costly to administer for smallholder farmers and rural populations that are dispersed and remote. The higher costs would need to be recovered through higher insurance premiums, making insurance unaffordable to many smallholder farmers. Without insurance, these farmers not only lack a safety net, but they often find it hard to convince banks to give them loans to invest in better inputs.

Index insurance aims to address these problems. With index insurance, payouts are triggered not by observed damages such as failed crops, but rather when an index—such as wind speed or an amount of rainfall over a specified time period—falls above or below a threshold. Because payouts do not depend on demonstrating losses, administrative costs are reduced. This allows insurers to price insurance premiums at more affordable rates.

As climate change makes weather shocks such as droughts more frequent and more intense, index insurance can help smallholder farmers and herders reduce their vulnerability and protect their assets.

For more information about index insurance, see *Insurance Innovations for Development and Adaptation: Frequently Asked Questions* – <http://goo.gl/h2LM6q>.