



Kenya:

Lessons Learned from Supporting the Implementation of Large-Scale Agriculture Insurance Programs

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As part of its strategic effort to address the impacts of drought, the government of Kenya (GoK) has worked cooperatively with partners to design, prepare, and implement large-scale agricultural insurance schemes as public-private partnerships. In response to GoK's request for technical assistance to support this undertaking, the World Bank Group conducted a technical analysis of the fiscal implications and welfare benefits of various agriculture insurance options, which led to the identification of suitable products for targeted herders and farmers.¹ Building on this technical analysis, Kenya's Ministry of Agriculture, Livestock and Fisheries ("the Ministry") launched the Kenya Livestock Insurance Program (KLIP) in October 2015 to provide pasture drought insurance cover to vulnerable livestock herders in the arid and semi-arid lands of northern Kenya. In March 2016, a crop insurance program—the Kenya Agriculture Insurance and Risk Management Program—was launched to provide crop insurance, starting with area yield index insurance, to small-scale emerging maize and wheat farmers in selected counties of Kenya.

¹ World Bank, Kenya: Toward a National Crop and Livestock Insurance Program, 2 vols. (Washington, DC: World Bank, 2015).



Livestock Insurance

Background

Kenya is exposed to severe droughts that strike every three to five years and significantly impact the livestock sector. Livestock represents 70 percent of household income in the arid and semi-arid counties. When drought occurs, households are at risk of losing their livestock, which is their primary source of food and income. During the severe droughts between 2008 and 2011, the Kenyan economy lost an estimated K Sh 968.6 billion (US\$12.1 billion), and the livestock sector alone accounted for 72 percent of that loss.

The government of Kenya plays a key role in supporting and implementing KLIP. It currently fully subsidizes the insurance program by purchasing insurance policies from private sector insurers on behalf of approximately 14,000 targeted vulnerable pastoral households (the beneficiaries). In the event of an insurance payout being triggered, the insurance companies pay out directly to the beneficiaries through mobile money or bank accounts. Recipients are selected based on their vulnerability to drought. Moving forward, GoK plan to launch a voluntary livestock insurance product where the government will provide 50



percent premium subsidies, with the remainder of premium paid by the pastoralist household. The voluntary product will target all pastoral households in insured counties.

Looking to utilize private sector expertise, KLIP draws on an index-based livestock insurance model that uses satellite data to enable rapid insurance payouts. The fast payouts enable beneficiaries to undertake rapid coping strategies (such as buying water or food) that can keep livestock alive.

Results to date

The KLIP successfully responded to the recent El Niño drought in northern Kenya. The severe drought, which was due to poor rains in 2016 and 2017, resulted in KLIP insurers making large drought insurance payouts to 12,000 pastoral households in six counties. Households received total payouts of approximately US\$5 million, compared to the cumulative premium of US\$2.2 million paid by GoK by 2017.

KLIP has successfully crowded in private sector capital and expertise to manage the insurance risk of the program. Looking to actively engage with the private sector, GoK selected insurance companies to underwrite the insurance risk of KLIP through a competitive process. The private sector response was overwhelmingly positive, with a consortium of seven companies (APA, CIC, AMACO, Jubilee, Kenya Orient, Heritage, and UAP) winning the bid for the 2015–2016 and 2016–2017 insurance seasons. For the 2017–2018 insurance season, Takaful Insurance of Africa, in collaboration with the insurance consortium, won the bid.

Crop Insurance

Background

In Kenya, semicommercial farmers continue to produce below their production potential because of insufficient investment in high-yielding technologies. Financial institutions are reluctant to lend to small farmers due to the high climatic risk, which can result in crop failure and can leave farmers unable to repay their seasonal loans. The crop insurance program aims to reduce the financial impact of production shocks and unlock much-needed credit for farmers.

GoK supports targeted activities to enable the expansion of crop insurance, including (i) partially subsidizing insurance premiums; (ii) collecting and making freely available historical area yield data, critical for agriculture insurance product design and pricing, and (iii) collecting area yield data through crop-cutting experiments to estimate yields at the time of harvest, which reduces the program's basis risk,² a key challenge to previous index insurance pilots.

Results to date

The crop insurance program was launched on a pilot basis in 2016. Due to moderately severe drought conditions, payouts were made in two districts. In 2017, the crop insurance program was expanded to 10 counties. By utilizing the network of farmers under One Acre Fund, a nonprofit farm input and credit provider, the program has managed to extend coverage to 200,000 smallholder maize farmers.

² Basis risk is the potential risk that a calculated loss from a model or index does not equate to the actual incurred loss.

Lessons Learned



1 *Successful provision of agricultural insurance requires committed and prolonged government participation.*

The provision of agricultural insurance to smallholder crop and livestock producers is complex and requires substantial government commitment to make it sustainable. In Kenya, agricultural insurance was previously piloted by private sector insurance companies without government involvement. These programs did not reach significant scale or sustainability and were terminated at the end of the pilot phase.

Informed by international experience, GoK decided to play an active role in providing agriculture insurance by investing in improved data and information, developing a clear agriculture insurance policy, and providing subsidies to improve the sustainability of agriculture insurance programs. The government's involvement has enabled insurers to reach more than 14,000 pastoral families and over 200,000 smallholder maize-growing farmers in three years.

Government engagement and support have helped to generate a critical mass of agriculture insurance business; this is a requirement to crowd in the private sector, which is attracted by the potential of significant premium volumes. With the commitment from government to support premiums over several years (and beyond political cycles), eight insurance companies are actively engaged in the programs and are underwriting the business. Furthermore, private sector players are looking to use the opening of agriculture insurance to expand coverage of their other business lines, such as motor insurance and home insurance, in rural areas.



2 *Linking to development bank lending operations is critical to implementation of agriculture insurance programs.*

Agriculture insurance is a complicated product, and it requires targeted and prolonged technical assistance. In the case of Kenya, a prolonged capacity development exercise was carried out over five years with relevant ministries and the insurance industry. The three- to eight-year time horizons offered by development bank lending operations were necessary for this capacity development. Lending operations also provide important financial support to critical yet often overlooked areas, such as awareness creation, implementation support (including field trips), high-quality data, etc.



3 *A healthy and active private sector with supportive financial regulators accelerates rollout.*

Kenya has a vibrant insurance market, with 35 of 51 registered companies offering non-life insurance. Many of these companies have substantial technical capacity in product development, marketing, and pricing expertise, essential requirements to underwrite agriculture insurance.

Kenya has a supportive framework that enables innovation in the financial sector, and in recent years has developed several unique innovations in the areas of agent banking and mobile money, which the agriculture insurance programs have built upon. Such innovations were enabled by the financial regulators who are adopting "regulatory sandbox" approaches—i.e., a set of rules allowing businesses to test new (not-yet mainstream) products under the supervision of the regulator without following all the regulatory requirements.

The strong support of the reinsurance industry is also critical. To date, reinsurers have paid 80 percent of the total insurance payouts. This financial capacity from the reinsurance industry is needed to protect local insurers from the large losses that can arise from such programs, while local actors build up the capital and expertise to take on more responsibility for payouts themselves.



4 *Reliable historical data are necessary for launching agriculture insurance programs.*

As a precondition for an agriculture insurance program, the government should provide the enabling support to allow the private sector to design and sell the product. The KLIP launch was made possible by making freely available NDVI (Normalized Difference Vegetation Index) data of appropriate time series. For crop insurance, the Ministry invested in collecting historical data used to price the products. The World Bank supported the strengthening of systems for undertaking crop cuts for loss adjustment. This step provides the private sector with comfort that crop cuts will be done in a timely and efficient manner.



5 *The existence of appropriate systems and infrastructure accelerates the rollout process.*

KLIP has benefited from the Hunger Safety Net Program (HSNP) systems, including its electronic registry and delivery channel (bank accounts for every household). KLIP used the registry to identify potential beneficiaries of the program, saving the time and resources that would have been required to develop its own registry. KLIP also used the bank accounts established under HSNP to make timely payouts to beneficiary households in HSNP counties. In non-HSNP counties, where this infrastructure did not exist, KLIP has experienced significant challenges in making payouts, leading to delays in payment of up to six months.

Government can look to utilize private sector capacity and expertise to develop the enabling infrastructure, where appropriate. In the first year of the crop insurance program, a public agency was assigned to conduct the crop cuts. However, organizational challenges and budgeting issues led to severe delays in completion of the data collection exercise. To ensure more timely delivery of crop data (and thus more timely payouts to farmers), GoK is exploring the use of specialized private firms to provide the crop-cutting services in the future.

Large increases in outreach can be achieved when insurance companies partner with aggregators with big numbers of farmers. In 2016, the insurance consortium relied entirely on direct sales to individual farmers by insurance agents and achieved only modest sales (approximately 1,000 farmers were insured) at a high cost per policy sold. In 2017, however, the consortium teamed up with One Acre Fund, which dramatically increased the number of farmers purchasing insurance to over 200,000. This result was achieved by incorporating insurance cover into a credit package provided by One Acre Fund to maize-growing farmers. Encouraged by this success, the Ministry is supporting insurance companies in establishing partnerships with risk aggregators to reach more smallholder farmers.



6 *Good awareness creation is critical from program onset.*

Awareness creation at all levels is a critical component of the successful rollout of agriculture insurance. Agriculture insurance is a new concept to farmers as well as government officials and calls for continuous awareness creation. The Ministry organized several workshops with the goal of increasing officials' confidence in and buy-in to the implementation of agriculture insurance at the central and county level. With adequate sensitization, budgets were secured and premium subsidy funds set aside. This enabled the Ministry to increase the agriculture insurance budget from K Sh 56 million in the 2014/2015 financial year to K Sh 700 million in 2017/2018.



7 *Monitoring, evaluation, and learning are important.*

A robust monitoring and evaluation framework is critical to the success of the Kenya agriculture insurance programs. A complete assessment of the conditions under which KLIP makes payouts was carried out in 2015, and the results were used to refine the contract and improve its value for pastoralists moving forward. In addition, monitoring of payouts identified the key bottlenecks in the payout process, which GoK is seeking to eliminate as it refines and improves the process.

Preliminary impact assessments undertaken have shown that KLIP is helping to improve the economic well-being of the insured households. Impact assessments carried out in northern Kenya demonstrate that index-based insurance has strong positive impacts on economic and health-related indicators of well-being for pastoralists, and that these gains are especially pronounced during drought events.³

³ Nathan Jensen, Christopher Barrett and Andrew Mude, "The Favourable Impacts of Index-Based Livestock Insurance: Evaluation Results from Ethiopia and Kenya," ILRI Research Brief 52, May 2015, <https://cgspace.cgiar.org/bitstream/handle/10568/66652/ResearchBrief52.pdf?sequence=1>



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