



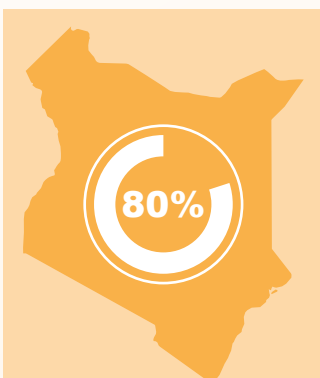
# PROMOTING INDEX BASED LIVESTOCK INSURANCE IN KENYA

TECHNICAL BRIEF

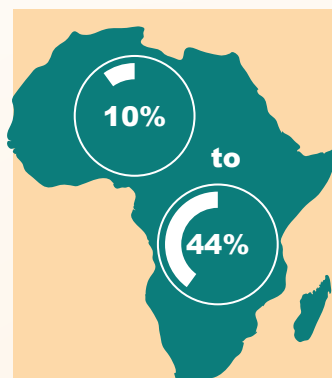
January 2022



Water trough built by BORESHA at Jabi Bar village in Mandera County, Kenya.



About **80%** of Kenya is characterised as arid and semi-arid lands (ASALs) with pastoralism as the main source of livelihood to millions of people residing in these lands (Amwata et al., 2015).



Pastoralism contributes between **10%** and **44%** of the gross domestic product (GDP) of African countries with approximately 1.3 billion people benefiting from the livestock value chain (Karaimu, 2013).



Further, over **75%** of cattle herds in Kenya are kept by pastoralists who supply the bulk of meat consumed in the country (Wakhungu et al. 2014; International Livestock Research Institute (ILRI) 2013).



Pastoralism directly supports an estimated **20 million people** and produces **80%** of the total annual milk supply in Ethiopia, provides **90%** of the meat consumed in East Africa, and contributes **19%**, **13%** and **8%** of GDP in Ethiopia, Kenya and Uganda, respectively (Nyariki, 2017).

Pastoralism also contributes close to **60%** of the meat and milk products consumed in West African countries (United Nations Economic Commission for Africa (UNECA) 2016). Despite the role of pastoralism in the local, national and global economies, it faces several setbacks that hinder the realisation of its full



*A flock of camels in search of pasture.*

potential. These setbacks include misconceptions on pastoralism, climate change, globalisation, urbanisation and undervaluation of the pastoral economy (Amwata et al., 2015).

However, pastoralists are among the poorest and most vulnerable populations on the continent. Decades of marginalisation, misguided policies, underinvestment, and now climate change, have resulted in the deterioration of this ancient livelihood.

The effects of climate change mean that when major droughts occur, the livelihoods of the pastoralists are threatened. Livestock, which is their main productive asset, perish in great numbers during drought. The primary cause of livestock loss is the inability to find adequate pasture and water. Most families are also unable to afford the commercially available supplemental livestock feed.

With no resources to help their herds withstand the drought, and limited knowledge of pasture availability within their traditional grazing areas throughout the year, pastoralists are turning to negative coping strategies such as seeking pasture outside traditional lands leading to conflict, overgrazing depleted grasses, eating less and outmigration.

The outmigration specifically has adverse effects on the vulnerable members of the pastoralist communities. Women are culturally obliged to provide water to their households as many young, able-bodied men migrate with the livestock in search of pasture and water. The most vulnerable

persons (including women, children, people with disabilities, and the elderly) are left behind without livestock and milk, and with minimal access to water and food.

Currently, pastoralists rely on indigenous knowledge, word of mouth, and scouts to determine when and where to move their herds when drought strikes. Pastoralists spend hundreds of dollars on scouting, and substantially more on supplemental feed when pasture cannot be found. These financial outlays and economic losses can be devastating for a single household. With approximately seven million pastoralists in Kenya and more than 250 million across the continent, it represents billions in expenditures and lost resources across Africa.

The traditional risk management strategies have increasingly become insufficient. Discussions calling for the need to better mitigate the risks of drought among the pastoralist communities have led to the innovative product – Index-based Livestock Insurance.

### **Index-based Livestock Insurance (IBLI)**

International Livestock Research Institute (ILRI), various donors, research organizations and commercial partners piloted and supported the implementation of an Index-based Livestock Insurance (IBLI) product in the arid and semi-arid lands (ASALs) of Kenya since 2008. The main aim of the piloting was to support pastoralists keep their animals alive during severe drought seasons. There are two adaptations of the IBLI product; the commercial IBLI product and



the charitable product. The commercial IBLI is sold and distributed directly to pastoralists by private insurance companies. The charitable IBLI operates under the Kenya Livestock Insurance Program (KLIP), which is a government-led livestock insurance scheme. In KLIP, the State Department of Livestock (SDL), under the Ministry of Agriculture, Livestock and Fisheries (MoALF) identifies, registers and pays premiums on behalf of selected vulnerable households across the ASAL counties. Some insurance companies have further contextualised the IBLI product to suit Islamic sharia requirements, to meet the demand for a Sharia compliant product in the ASALs of Kenya. The Islamic version of the IBLI product is referred to as the Index-based Livestock Takaful (IBLT).

Index-based Livestock Insurance (IBLI) / Index-based Livestock Takaful (IBLT) is an insurance product designed to protect pastoralists against the risk of drought-related forage scarcity. The product uses satellite observations of current forage availability. If the forage is expected to fall below a set threshold, pastoralists receive indemnity payments to help them keep their livestock alive during these periods by buying feeds, water and other requirements. The IBLI index is based on satellite data, which measure the quality of the pastureland every 10–16 days. These data are inputs to a statistical model of livestock mortality developed using historical data from the region (ILRI 2018).

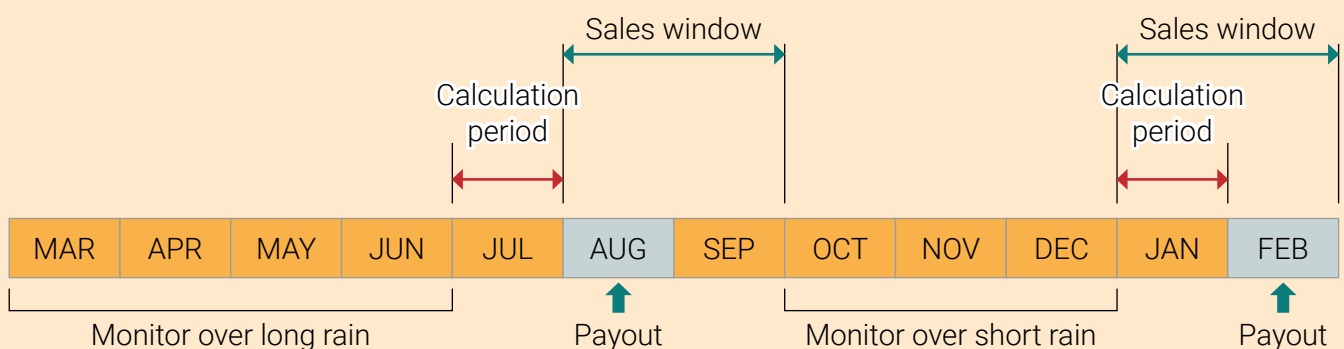
### How IBLI works

Like other insurance policies, IBLI clients are required to pay premiums to the insurance companies. The premium is paid annually by a pastoralist (policy holder) for each animal that he or she wishes to insure. The insurable unit is the amount of forage required to sustain an insured livestock during a given season of drought within a year. The cost of insuring each animal species is based on the value of the risk covered, which is the amount required to sustain each animal species during drought. In the case of KLIP, the premium is paid by the State Department of Livestock (SDL), while in IBLI individual pastoralists pay premiums for themselves. Insurance companies set their premiums based on the level of risk they expect to undertake. The IBLI product covers the standard livestock types in a pastoral herd, in essence, camels, cattle and shoats (sheep and goats).

The IBLI product is sold at specific times of the year, in essence, in the months preceding the Short Rain (SR) and Long Rain (LR) periods, which in Kenya is August/September before the SR and January/February before the LR. This is to avoid the phenomenon of adverse selection where clients would opt to purchase or not to purchase an insurance product based on prior knowledge of an impending risk.

The premium amount is dependent on the total number and type of livestock you wish to insure and non-transferable from one period to another. The percentage payout is calculated at the end of every rainy season (SR or LR). The IBLI index for the season determines whether a payout will be made and is the basis for calculating the percentage payout.

### Sales window and pay-out cycle



- Taking readings over the rainy period makes it possible to determine forage availability over the dry season
- Payouts can be made in time to protect livestock assets

The strike level (threshold below which payments must be made) is set to the 20<sup>th</sup> percentile of the historical index value for the specific season. If the index shows that the forage availability at the end of the rainy period falls below the 20<sup>th</sup> percentile, it means that the forage availability is significantly lower than normal as compared to the historical norm. This strike level means a payout is triggered and the insurance pays out the pastoral households who are IBLI clients. The payouts are done immediately after the announcement of the trigger. In Kenya, the IBLI clients receive their money through mobile wallet (Mpesa). The payouts enable insured pastoralists purchase fodder, feed supplements, water, and vaccines/drugs to keep their livestock alive until grazing conditions return to normal or improve.

## The Commercial partners of IBLI: A brief journey

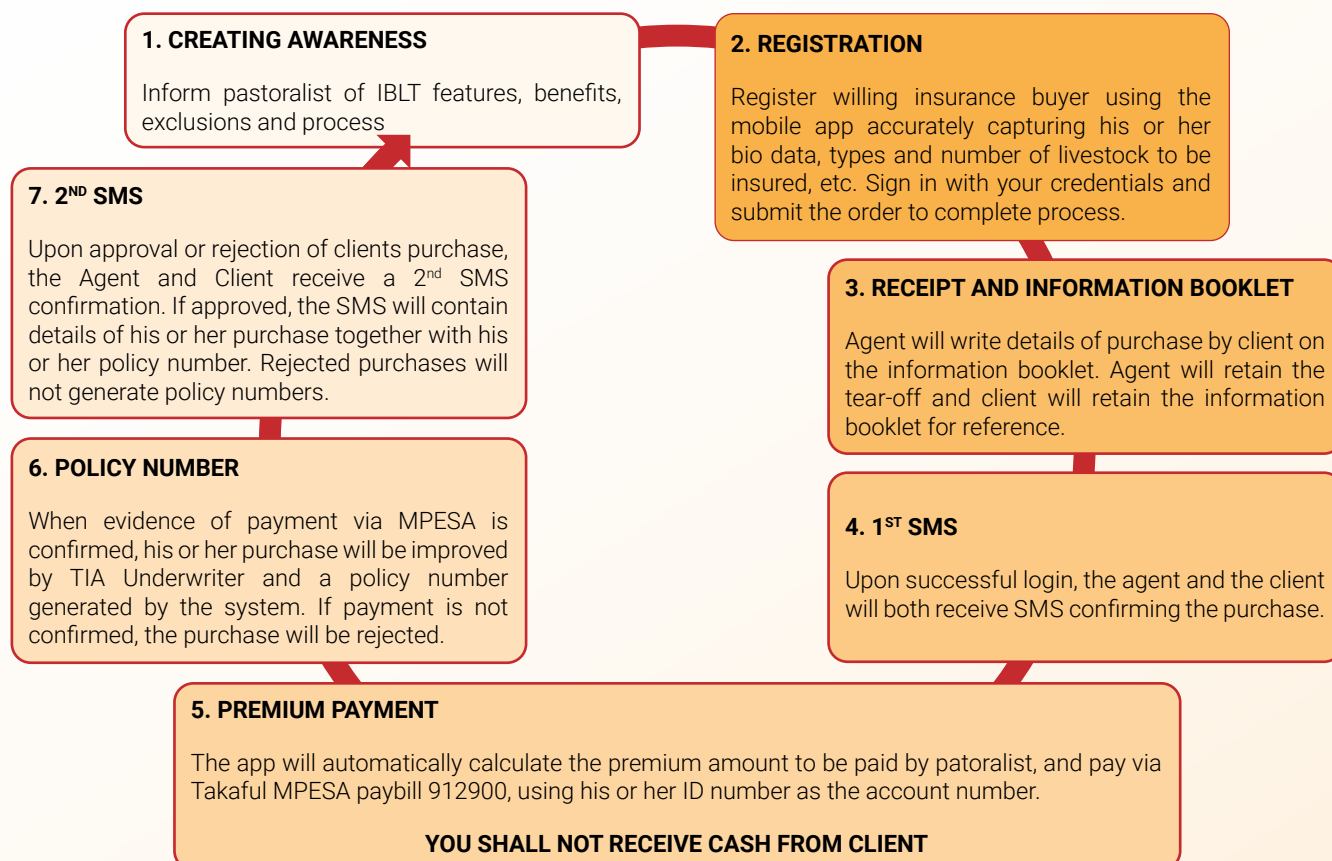
While the IBLI/IBLT product is being marketed in Kenya by Takaful Insurance of Africa (TIA) as the commercial partner, in Ethiopia, the commercial partner is Oromia Insurance Company.

In Kenya, the IBLT project took off in 2013 in one county and as at 2018, it had spread to eight counties. The table below provides more details of the spread.

IBLT GEOGRAPHICAL EXPANSION									
2013	2014		2015		2016		2017		2018
Win 1	Win 2	Win 3	Win 4	Win 5	Win 6	Win 7	Win 8	Win 9	Win 10
WAJIR	WAJIR	ISIOLO	WAJIR	WAJIR	WAJIR	WAJIR	WAJIR	WAJIR	WAJIR
			ISIOLO	ISIOLO	ISIOLO	ISIOLO	ISIOLO	ISIOLO	ISIOLO
			GARISSA	GARISSA	GARISSA	GARISSA	GARISSA	GARISSA	GARISSA
			MANDERA	MANDERA	MANDERA	MANDERA	MANDERA	MANDERA	MANDERA
				MARSABIT	MARSABIT	MARSABIT	MARSABIT	MARSABIT	MARSABIT
						TANA RIVER	TANA RIVER	TANA RIVER	TANA RIVER
									SAMBURU
									TURKANA

Source: Takaful Insurance

## IBLI CYCLE



## ACCELERATING UPTAKE OF IBLI

The IBLI uptake had been on an upward trend before the recent drop. To promote its uptake, BORESHA used the approaches described below:

**Assessing communities' vulnerability** using the Community-owned Vulnerability and Capacity Assessment (COVACA) tool and Disaster Risk Reduction (DRR) Action Planning. The COVACA assessment led to a comprehensive risk analysis to inform decisions towards addressing resilience objectives. The exercise, enabled communities identify and rank common shocks (based on their frequency of occurrence and the magnitude of their impact). Drought is one of the prioritised shocks. The communities identified and prioritised activities in DRR Action Plans to enhance preparedness to disasters, improve their capacities and reduce their vulnerability to the shocks. The COVACA findings have provided evidence to promote IBLI.

**Stakeholders / actors mapping and buy-in** helped avoid duplication of activities in the same area. The mapping averted possible activity clashes and concentration of support in particular areas than others. BORESHA held forums at county level through County Steering Group, and at sub-county levels with authorities, communities and stakeholders. Through this, the program ensured diverse participation, transparency, and accountability in the IBLI process.

**Existing community structures and groups** including locations administrators (chiefs and their elders), youth groups, women groups, religious leaders and DRR committees made community members have a sense of ownership of the project activities and contribute towards its sustainability. The existing community structures are trusted and amplify the importance of IBLI to the community.

**Mainstreaming conflict sensitivity** ensured balanced targeting in all locations and inclusivity. The frontline staff, who are from the local community with deeper understanding of the local culture and context, strictly observed the "do-no-harm" principle. The staff also ensured ethical practices and discouraged behaviours not consistent with the local customs.

**Leveraging on agency system of the insurance company** to address awareness gap on IBLI. BORESHA trained 40 insurance company village-based agents to gain a deeper understanding of IBLI. BORESHA provided the agents with IBLI promotional materials such as cartoon books,



*A group of women going through the IBLI information booklet.*

pictorial manuals, and posters with images that resonated with the local pastoralist context. The program also equipped the agents with mobile phones with special applications, and solar chargeable power banks which enabled them conduct IBLI sales activities. With improved capacity, the agents supported awareness creation activities, significantly enhancing the awareness level of the community on IBLI to 80% (BORESHA project external evaluation 2021).

**Use of Media** in the era of COVID-19 pandemic was cost-effective and an innovative way of creating awareness. The advantages of media over physical meetings included staff safety and security, wider audience reach, and frequent broadcast over a period of time assuring consistency of the message. The media used was Star FM of North Eastern Media & Telecommunication Network.

**IBLI Mobile Application** is an interactive multilingual android application that provides assessment and video tutorial on Index Based Livestock Insurance. It contains pre-, and post-assessment on IBLI. Between Pre- and Post-assessment, there are video tutorial structured into seven modules to enhance understanding. The modules also have quizzes to test recall.

The app is native android application and can be installed on 90% of android phones. Minimum platform level to install is android 5.5 (Lollipop). Since the app communicates with a remote server at the beginning of installation for phone number verification and data syncing, it requires an active sim card and Internet connection. It is important that the Location feature on the phone is enabled. Download the app from here [http://ibliapp.ilri.org/assets/a\\_pk/learningIBLI.apk](http://ibliapp.ilri.org/assets/a_pk/learningIBLI.apk)





*Joint communities and livestock holders sensitization in partnership with Takaful staff.*

The COVACA assessment enabled the communities identify and rank common shocks based on their frequency of occurrence, and the magnitude of their impact.



## RESULTS

BORESHA I endline evaluation report 2020, revealed that 80% of the respondents knew and understood IBLI, and 33% of them took up the insurance. However, since 2019 many counties in Kenya have been recording low purchases of IBLI. In Isiolo County, Takaful recorded in 2018 sales figure of 2,653 households taking up IBLI; In

2019, purchases reduced to 549 households; and, in 2020, many households did not purchase IBLI.

Of those insured in Mandera county, 258 have not received their payout due to wrong client information provided at the time of registration. Verification and collection of correct details is ongoing to ensure full payment. Takaful transferred 70% of KLIP and 30% of commercial policies risk to the Kenya Reinsurance.

### IBLI is God-sent



*Mama Nima tending to her goats.*

Mama Nima Hassan Bilal of Girisa village in Mandera County in Kenya is among the IBLT payout beneficiaries. She spent Ksh 2,150 (EUR 19) to buy IBLT premium for her 15 goats and received a payout of Ksh 10,000 (EUR 88). She says, "IBLT is God-sent. We feel empowered because we have a very simple way of protecting ourselves and minimising the effects of droughts. We used to rely on relief aid and handouts from NGOs and the government, which was not only inadequate but also distributed unfairly".

Mama Nima used part of the money to buy fodder for her goats. "I have stored the fodder in the village fodder store, and I give it to my goats in portions. I do not spend money on water because with the fodder, the goats are able to walk to river Dauwa," she says. She also used part of the money to buy foodstuff for her children, which was not possible in the last drought just about two years ago. She has kept the little left money for treating the goats if they get sick.

## CHALLENGES

Index-based Livestock Insurance has faced some challenges that have partly contributed to the low uptake since 2018. This section shares some of the key challenges.

**Perceptions of the local community towards insurance and religious barriers/beliefs.** The local community views insurance as a form of gambling or lottery, thus limiting their participation and buy-in of the product. Continuous sensitisation of community for better understanding of IBLT and working together with religious leaders is important.

**Lack of proper legal framework governing livestock insurance in Kenya.** Index-based Livestock Insurance is a relatively new concept in the region, and there are few Sharia-compliant IBLI underwriters. This results in limited number of underwriters that in turn leads to lack of commitment in meeting obligations by the only insurance company. Partners should rally to advocate for government to have in place proper legal framework.

**Poverty and community mistrust.** The number of premium payers have been reducing due to the poverty among households, even though they need it the most. Those who could afford did not renew their contract due to mistrust of the product. As pastoralists move because of drought the illusion of better conditions deter uptake and so affect sales. Sporadic Community conflicts in some areas poses security risks for TIA staff as well as community members who are unable to reach TIA shop agents

The lack of understanding of the index trigger that qualify payouts remains one of the major challenges faced in IBLT. Lack of payouts (basis risk) in index insurance arises when the index measurements do not match an individual insured's actual losses. Those who do not receive payouts tend to lack confidence in the satellite triggers and resist the product. In other instances, the index may trigger payouts even when the individuals are not necessarily experiencing actual loss. This confuses them and they therefore conclude that this is 'trial and error'.

**Below is a table showing aggregated IBLI data**

Result Area	Achievements
Sales Window	5
Policy holders	1,015 (430 M: 585 F)
Number of livestock insured	5,367, (5,164 Shoats, 72 Camel, 131 Cattle)
Total Premium Collected	KES 1,221,898
Total Sum Assured	KES 12,291,600
Expected Payout	KES 3,237,009
Actual Pay out	
No. of Policy holders Paid	396
Physical Awareness meetings	1756 (1,203M: 553F) livestock holders
Radio Awareness meetings	350,000
No of Village Agents Trained	40



## LESSONS LEARNED AND RECOMMENDATIONS

**From aid to payout.** When pastoralist communities experience the adverse effects of drought through loss of their livestock and facing high level of food insecurity, their respective governments and aid agencies usually come in to save lives. They provide food, non-food items, and cash transfers to the affected population. Index-based Livestock Insurance provides a partnership between the affected population and IBLI promoters to ensure that communities take the decision to address the drought risks by buying insurance and receiving some cash not as aid but in the form of insurance payout. This point is not only a justification but a lesson to be directed at Government and aid agencies who are calling out for sustainability of the IBLI product especially in the wake of low uptake.

Government and aid agencies can redirect their resources towards IBLI to mitigate drought risk first as a way to promote partnerships with

private sector and also as a means to empower community on other innovative drought mitigation strategies.

**Gender empowerment.** The IBLI payouts, unlike other forms of drought alleviation interventions, are received directly by the policyholder regardless of their gender, and the recipients have the discretion in deciding how to use the payout money. While men mostly attended awareness meetings, majority of those who bought policies were women. This was attributed to the following factors:

- Women have realised that IBLI and its benefits is an issue between themselves and the insurance service provider and that the insurance scheme does not isolate or favour individuals based on their gender.
- Most women are owners of small ruminants, (shoats) and therefore insure the livestock over which they have control.



*IBLI awareness session.*

- Women of the target community (Mandera) have an age-old saving culture locally known as “*ayuuta*” and are therefore able to pay the premiums.
- The increasing sedentary lifestyle of the pastoral community is compelling women to become household heads or decision-makers. Therefore, when women are able to sustain their livestock, they are able to safeguard their livelihood assets (livestock), which can catapult them to economic stability and to some level of independence.

**Leveraging on capacity, technology and presence in local communities.**

The project introduced a mobile phone technology that registers beneficiaries and store data offline. Once online, the data is automatically uploaded in the IBLI system for approvals. The e-receipt will then be sent to the client. This was made possible because the IBLI service providers were trained, well equipped and closer to the pastoralist client.

**Data accuracy and building mutual trust.** Data accuracy is made possible if the insurance underwriters meet their obligation, otherwise this can cause harm to mutual trust. It is also important that communities provide accurate information to the underwriters because all insurance policies are provided in good faith.

The IBLI product remains a good alternative to drought mitigation if some setbacks are addressed. From BORESHA I endline evaluation, the findings state that the reasons for IBLI clients’ likelihood to recommend IBLI to other livestock keepers is that it prevents losses during drought and is suitable for large herds. On the other hand, likelihood not to recommend IBLI is due to lack of sufficient information about it and how it operates, lack of trust, time it takes to issue payout, and that it is not necessary for small scale herders.

**Factors affecting uptake of IBLI**

For communities to adopt a product like IBLI, it has to be easily accessible and trust has to be established between communities, the IBLI company and other stakeholders who promote the product. Other factors that determine uptake include personal characteristics, for example, perception on drought risk, awareness and understanding of insurance, trust in the product, product quality, ability to pay the premiums, use of other drought coping mechanisms and behavioural patterns (Matul et al., 2013).

In Kenya, program staff are of the opinion that two fundamental factors that have led to the low uptake is trust which was breached at one point when the insurance company delayed payouts even after the payout trigger. The second factor is financial constraints which makes the household not prioritise the premium payments.

This is comparable but also slightly contrast BORESHA I endline evaluation in 2020 which provided the following statistics on reasons for lack of IBLI uptake — lack of sufficient information 34%, a feeling that it is not necessary 24%, religious/cultural beliefs 21%, high premiums demanded 17%, lack of trust in the insurance process 7% and negative perception based on delayed claims 6%.



## RECOMMENDATIONS

**Continuous awareness creation:** Continuously sensitising the communities on the importance of saving towards purchase of insurance and making insurance part of their business/domestic budget will be vital to the project's success. Understanding of the concept and the importance of insurance/Takaful will answer lingering questions and provide distinction between IBLI and other insurance setups and help manage expectations. Strategic communication among the various IBLI stakeholders and sales agents will enable them to take advantage of the sales window and promptly tap into the IBLI window timelines.

**Additional innovation:** The product and service delivery can gain from further research, for example, partnerships with Safaricom for improved technology, and partnership with other private sector underwriting partners. Innovations can also be sought in stakeholder engagements. Pastoralist communities rely on gatekeepers (local level influencers and the program) to make decisions. Gatekeepers can engage and sensitise the community on the benefits of IBLI. All livestock stakeholders in the entire pastoralist value chain can benefit from information on IBLI. To empower communities to afford premiums, IBLI can be integrated with other livelihood programs that can enable the communities to generate income for IBLI premiums.

The IBLI policy should be set to provide more information to create awareness and understanding among households. Training and financial literacy should be provided for pastoral households to enhance their indigenous knowledge about their climate risk perception and encourage them to undertake calculated risks and mitigate future losses within a given domain of expectation.

The institutional capacity of the underwriters needs to be supported until they are able to break even. This can be done by supporting them to manage provision of both upstream (product development, data availability and management, regulation) and downstream (product delivery and implementation) services.

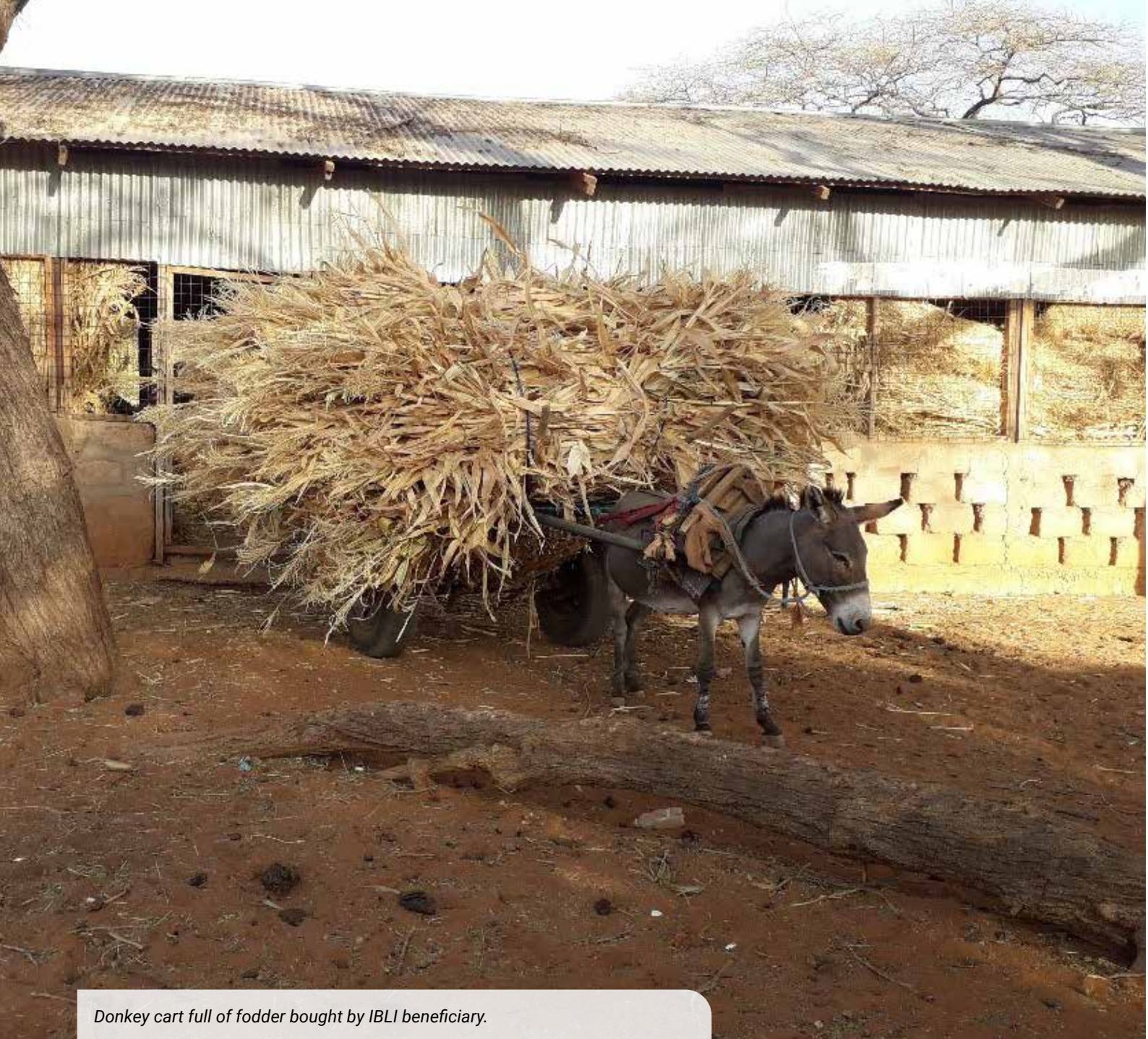
## CONCLUSION

The IBLI policy is a good insurance product that cushions pastoralists from the shocks of drought. This helps them to keep their livestock alive. The challenges experienced are common to many new products, and the lessons learned inform improvement of related programs. It is also important to address the challenges that were faced in the BORESHA I and II to make the product more attractive to the communities, and increase purchase of the policy. As the uptake of the product increases at the community, it will also become profitable to the underwriters.

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*Donkey cart full of fodder bought by IBLI beneficiary.*

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