Sustainable Livestock Insurance for Pastoralists: the Index-Based Livestock Insurance (IBLI) Experience

Masresha Taye (m.taye@cigar.org)
International Livestock Research Institute (ILRI)
IBLI: Why and for Whom

A SIZEABLE CONSTITUENT

• Over 50 million pastoralists in Sub-Saharan Africa: over 25 million in the Horn of Africa
• In the Horn of Africa: Exports of livestock and livestock products exceed $1 billion annually, 90% of which from pastoral flock.

THE CENTRALITY OF LIVESTOCK

• Median pastoralist household holds **100% of their productive assets** in livestock
• Livestock products and sales of livestock are **40% of income** for average household

VULNERABILITY TO LIVESTOCK LOSSES

• 75% of livestock losses, among pastoralists, due to **drought**
• Between 2008 and 2011 Kenyan economy suffered US$ 12.1 billion in damages due to drought, over 70% due to livestock losses. In 2017, Borana zone (10% pastoralists) in Ethiopia lost 300,000 livestock because of drought
IBLI: Why Insurance?

Sustainable insurance can:
- Prevent downward slide of vulnerable populations
- Allows focus humanitarian resources on the needy
- Crowd-in investments

Conventional insurance unlikely to work:
- Very high transactions costs, esp. w/little financial intermediation among pastoralists
- Moral hazard/adverse selection

INDEX-BASED LIVESTOCK INSURANCE
- Independent “index” strongly correlated with drought/forage scarcity/livestock losses. No claims.
- Better suited to the pastoral production system and risk profile
IBLI: Challenges and Components

IBLI: Challenges

- No Index developed for pastoral areas
- Financial literacy low or absent
- No experience of the private and public sectors
- Remote areas, difficult to reach
- Lack of reliable datasets
- Overlap with existing humanitarian aid programs in Ethiopia, Kenya and elsewhere in Africa

Components of Sustainable Index-Based Livestock Insurance

- Precise contract design;
- Evidence of value and impact;
- Establishing informed effective demand;
- Low cost, efficient supply chain;
- Policy and institutional infrastructure.
IBLI: Introduction

**The IBLI Product** – uses NDVI to measure Forage availability

**First Launch** – in 2010 in Kenya and 2012 in Ethiopia

**IBLI strives** to strengthen pastoralists’ resilience efforts against shock by creating a commercially viable insurance product for pastoralists. Currently, three private insurance companies are underwriting the IBLI Product

- APA Insurance
- Takaful Africa
- Oromia Insurance
Precise Contract Design

- **Objective (Initially):** To insure against drought-related livestock mortality. *Asset Replacement.*

- **Index:** Predicted average livestock mortality.

- **Index Evolution:** Seasonal Forage Availability

- **IBLI Covers the *cost of keeping an Animal alive* due to **FORAGE SCARCITY**!**

- **Asset Protection!**
Precise Contract Design...

From **Asset Replacement** to **Asset Protection** Contract

- Limited mortality data availability for scaling-up, issues with data accuracy.
- Why replacing rather than protecting livestock?

**NDVI-based Forage Scarcity contracts – ASSET PROTECTION**

**New Contract (2015)**

- Payout at the beginning of the dry season rather than the end
- Insured unit: cost to keep livestock alive during drought
- APA Insurance (Marsabit, Isiolo), Takaful Insurance of Africa (Wajir, Isiolo, Mandera, Garissa)
- Ethiopia, Oromia Insurance SC – Borana zone, 10 districts
Evidence of Impact and Value

Methods:

• Panel survey for impact assessment – Kenya and Ethiopia
• Monitoring Evaluation and Learning surveys and interactions

Evidence:

• Wide range of positive household impacts
• Quantification of risk-coverage precision of contracts
• Indication of value-for-money for public expenditure

For references refer to https://ibli.ilri.org/publications/
Establish Effective Informed Demand

- Capacity Development, Training, Extension and Marketing
  - Critical for ensuring impact and scaling efficiently
  - Unlocks a rich and important new research agenda

**Level 1**: Knowledge and tools for government and insurance industry policy makers

**Level 2**: Knowledge, skills and job aids for IBLI/KLIP sales agents and promoters

**Level 3**: Awareness raising for potential clients
Low Cost and Efficient Delivery System

- Pastoralist rangelands offer quite a challenge for delivery of the IBLI product
- Delivering related services (sales, indemnities, information), very costly
- Mobile and digital solutions could potentially solve many of the delivery challenges
  - Developed mobile sales transactions applications with back end MIS for insurance companies.
  - KLIP program leveraging provision of bank accounts through HSNP program in Northern Kenya.
Policy and Infrastructure

- Index Insurance emerging as an important tool for managing drought and production risk proactively and efficiently

- Sustainable, large-scale index insurance program requires a clear and well articulated policy structure

- Experience and evidence suggests that for programs to go to scale they need to build on strong, well-coordinated public and private sectors

- Supporting the development of enabling policy
Leveraging Mobile Technologies for IBLI and beyond

- **Mobile Phones as a Service Delivery Tool**
  - Delivering Sales
  - Delivering Premiums
  - Delivering Information

- **Mobile Phones as a Training and Performance Assessment Tool**
  - mLearning and Gamification
  - Tracking impact of training on sales

- **Mobile Phones as Data Provisioning Tools**
  - Crowd Sourcing for Rangeland Conditions
  - Livestock Market Information Systems
  - ...and more

- **Sales Transactions Application**
  - Cost of Agency among the most limiting constraints.
  - Mobile sales transactions applications resulted in rapid increase of agent distribution
  - Allowed for better data management and a range of useful analytics on agent behavior

- **Mobile Delivery of Indemnities**
  - Indemnity payments initially conducted manually
  - Increasingly paid through MPESA (in Kenya).

- **Index calculator**
  - Delivering critical information on performance of IBLI contract
  - Agent can now show active or potential client the current or historical state of the index.
  - Can show historical payout of hypothetical contract
  - Building awareness, trust and salience
Leveraging mobile...
**IBLI Sales**

- **Kenya IBLI contracts** – 12,000 (APA & TIA), and Ethiopia - 9,054 OIC
- **Total in 2017, Kenya and Ethiopia in USD** – 734,750
- **KLIP households covered** – 14,000
- **KLIP payouts issued** – as of February 2017 – Over Ksh. 200 million (Number of beneficiary households – 11,000)
- **Ethiopia only in 2017 (two payouts)** USD 330,000 for 4,430 policy holders
It Takes a Village!
The IBLI Program is a Collaboration of Many Players

IBLI Policy and Academic Workshop – July 2015
Thank you!

For more information on IBLI, visit https://ibli.ilri.org/

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