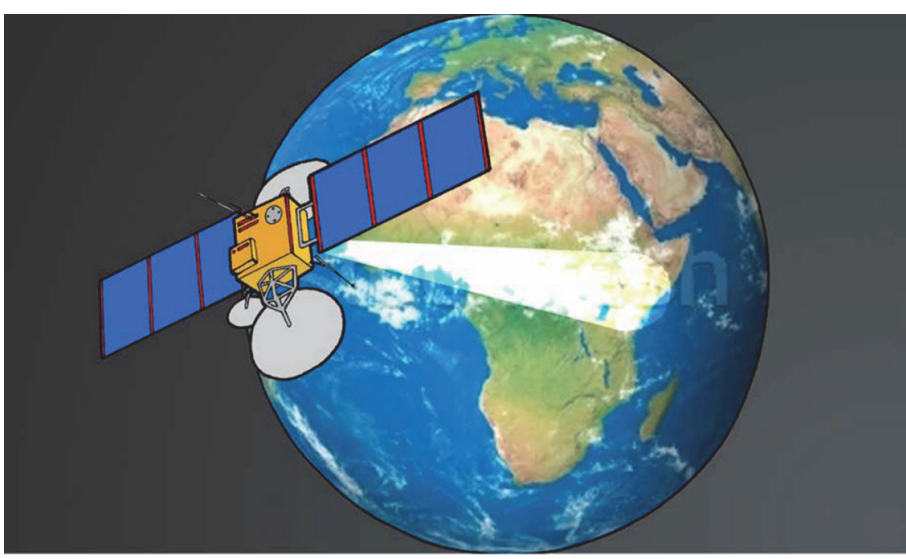
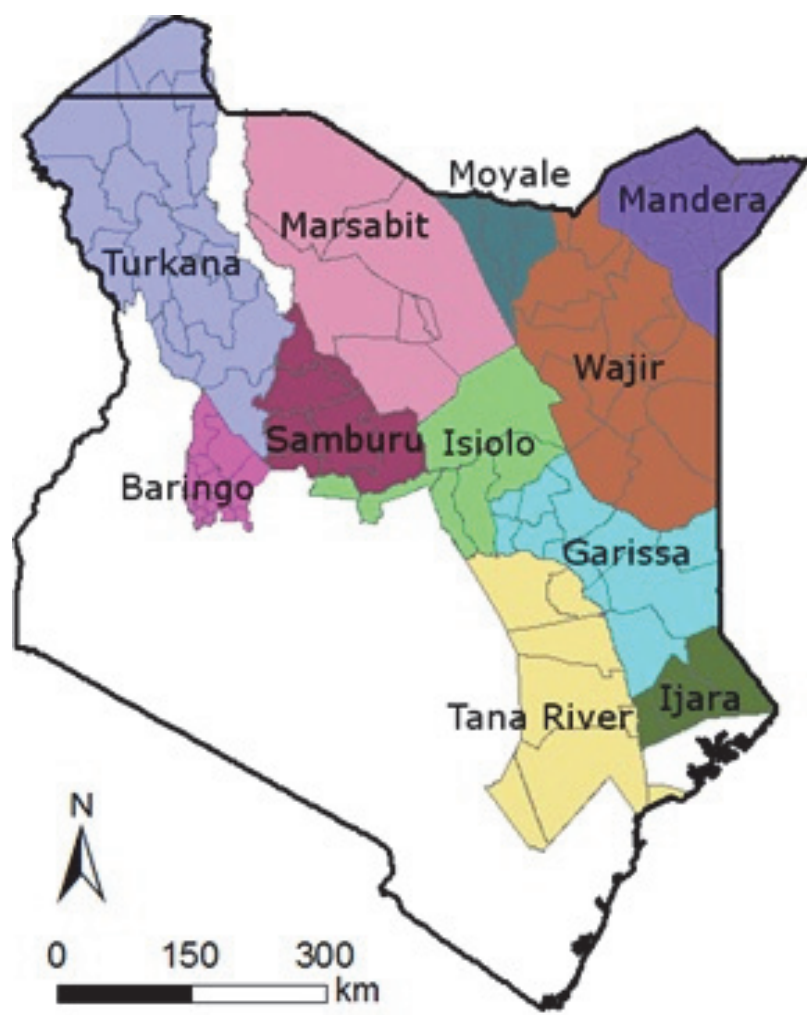


Index Based Livestock Insurance: Research-for-development agenda



Motivation

- Drought is a covariate shock that erodes livestock assets making households fall into poverty traps
- Poor pastoralists have few available strategies to manage and cope with livestock mortality risk
- Estimated livestock deaths worth USD 8.74 billion in northern Kenya recorded due to drought from 2008–2011
- Failure of governments and international aid agencies to deliver timely and adequate relief to prevent adverse impact of drought
- Lack of credit and insurance markets in infrastructure-deficit environments has weakened traditional risk sharing arrangements, making them insufficient
- Hence, the effort to develop risk management instruments that are both feasible, commercially viable and potentially effective in reducing uninsured poor pastoralists’ exposure to risk.



Contract design

- **Design:** protects pastoralist against drought-related livestock losses ; contract holders receive payouts when forage conditions deteriorate below a certain historic level. The index is calculated using a measure of pasture availability recorded by satellites, through the normalized differenced vegetation index (NDVI).
- **Good science:** Has been selected for use in the provision of insurance contracts to selected households in the arid semi-arid districts of northern Kenya by the Kenya Livestock Insurance Programme (KLIP).
- **Change in contract parameters:** Move from predicted mortality to forage scarcity contracts, as well as changes from asset replacement to asset protection contracts, hence standardization of the model across northern Kenya and southern Ethiopia.
- **Technology:** Improved remote sensing data and processing algorithms; with World Bank developed powerful design and rating tool for both asset protection and replacement contracts.

	A	B	C	D	E
1	INPUT: CONTRACT PARAMETERS				
2	1. Geographical coverage:		2. Temporal coverage:		
3	MANDERA	Y	MAN	Choose	
4	MARSABIT	Y	MAR	Choose Main Payout	
5	TURKANA	Y	TUR	Choose Main Payout	
6	WAJIR	Y	WAJ	Choose Main Payout	
7					
8	county	Short name	Payout	Mar	Apr
9					
10	MANDERA	MAN	Main	0%	0%
11	MARSABIT	MAR	Main	0%	0%
12	TURKANA	TUR	Main	0%	0%
13	WAJIR	WAJ	Main	0%	0%
14					
15	SUM INSURED PER HOUSEHOLD				
16					
17	5. Sum Insured				
18	Choose Monthly feed cost of per TLU (KSh)				
19	Choose Number of Months Covered (#)				
20	Choose Insured TLU per HH (TLU)				
21					
22	County	Monthly feed cost per TLU (KSh)	Number of Months Covered (#)	Sum Insured per TLU (KSh)	Insured Trop Lives Un per (TLU)
23					
24					
25	MANDERA	1,167	12	14,000	5

Behavioural change and welfare impacts

- Studies showing:**
- **IBLI coverage:** Increases investments in maintaining livestock; increases total and per tropical livestock unit (TLU) income from milk.
 - **Behaviour outcomes:** 36% reduction in likelihood of distress livestock sales, especially (64%) among modestly better-off households (>8.4 TLU); 25% reduction in likelihood of reducing meals as a coping strategy, especially among those with small or no herds (43%).
 - **Flexible safety net:** IBLI seemingly responsible for reducing reliance on the most adverse behaviours undertaken by different groups in the community.



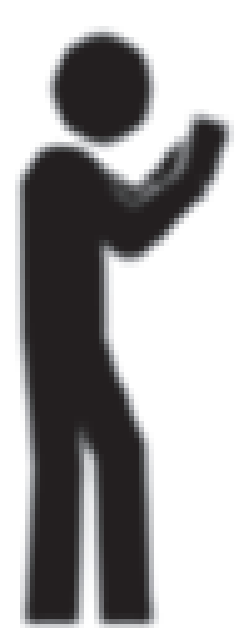
Market and capacity development

- **Developing and creating demand:** - To catalyse informed demand through consumer awareness, education and extension towards market-based solutions in the arid and semi-arid lands for IBLI.
- **Addressing supply side:** Building the market, structure and institutions for sales delivery, platforms for providing insurance in a sustainable manner.
- **Capacity development:** Building capacity of service providers, agents, brokers through digital and traditional education methods; strengthening capacities of the government of Kenya for scaling and creating an enabling policy environment.
- **Significant activities:** Community dialogue, innovation challenge, technical support for the KLIP program—development of the training strategy, the training curriculum and the training of trainers through mLearning and eLearning methods.



Drivers of change in pastoral systems

- **Constant improvements** on NDVI or insurance processing, contract design and parameters selection
- **Scoping studies and need based action research** to map information systems and distribution channels of products and services, understand support needs during droughts and stressful times, validate data with ground conditions
- **Crowdsourcing of market information and rangeland vegetation** to improve market functioning and vegetation monitoring in the rangelands. Has potential importance to provide timely access to services and improve decision making for different agencies working in the drylands
- **Other research questions being worked** on essential service access and demand, understanding systems of service delivery and institutional frameworks in the pastoral economy



Contacts
Project leader: Andrew Mude
a.mude@cgiar.org • P.O. Box 30709, Nairobi 00100, Kenya • Tel: + 254 20 422 3368 • www.ilri.org
Ethiopia project: Masresha Taye
m.taye@cgiar.org • P.O. Box 5689 Addis Ababa, Ethiopia • Tel: +251 116 172241 • www.ilri.org