



Inclusive Investment Opportunities for Unleashing the Power of the Pastoral Sector

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GLOBAL FOOD
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Innovation Expo: MooMe education and data analytics platform

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Type of innovation

Inclusive education and data analytics for dairy ecosystem stakeholders

Country or region where innovation is being utilized

Country of Origin: Tunisia
Utilized in Algeria and Morocco

Beneficiaries

Dairy farmers

The remaining stakeholders of the dairy ecosystem

Description of innovation

MooMe is a platform that gathers the dairy value chain stakeholders (producers, collectors and processors) as well as private practitioners (Vets, Agronomists) and allows real time data sharing for timely advisory services, farm assessments, and provides a marketing channel.

As the datasets grow, MooMe will be able to provide prediction analytics across multiple levels (production, collection) such as feed efficiency, diseases surveillance, or milk traceability.

Impact

Managed small / medium dairy farmers have an increase of 10% to 15% in yearly average milk yield per cow (Comparison between the average of years 2019 to 2021, and 2022 when MooMe app was used.)

MooMe helped to multiply the number of managed dairy farmers by one advisor by 4 (dairy industry).

Innovation Expo: Carbon neutral pastoral production of meat

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Type of innovation

Facilitating export market access to pastoralist communities and enabling regional collaboration to enhance disease surveillance and drought and adverse weather surveillance

Country or region where innovation is being utilized

Kenya; All Counties in the Arid and Semi-Arid Lands
IGAD region

Beneficiaries

60% of the revenue from export sales of meat go directly into the hands of part of the 10M pastoralists in Kenya.
Culturally women control 90% of small stocks in pastoral areas.

Description of innovation

Provision of financial services in livestock markets and communities which includes advocacy, financial inclusion, and empowerment of persons through agency banking.

Build resilience of the meat industry players through adoption of models that promote efficient utilisation of all livestock/meat products, especially offals/tripe, by adopting cold chain systems that offer cheap/affordable products to the vulnerable poor and urban communities while improving income of the poor pastoral producers through better prices of livestock.

Improve adaptive capacity and resilience of pastoralists to the vagaries of climate change. Improve coordination and collaboration of green finance opportunities towards reducing vulnerability to climate change and livestock mortality.

Impact

400,000 rural household access to export market. Bridging the 30 million metric ton (MT) annual feed deficit and annual 2.4 billion bales deficit.

Additional impact includes, women and youth pastoral producers from 400,000 households, 4,000 fodder (feed and seed) producers, 55 feedlot owners, 350 livestock and 50 fodder aggregators and general populace.

Innovation Expo: HOINA, Livestock 247AIMs, Meat Bank, Livestock express

Ugochi Izuora | ugochi.izuora@livestock247.com

Type of innovation

Innovations along the value chain incl. livestock primary health care to pastoralist communities, animal identification, traceability, advocacy and provision of cashless financial services.

Country or region where innovation is being utilized

Nigeria, Lagos, Adamawa, Niger, Plateau, Kano, Kaduna, Taraba, Bauchi, and Jigawa.

Beneficiaries

Livestock owners, pastoralists, agro-pastoralists, public officers (the government), and the general public.

Description of innovation

For a premium price per livestock per year, owners/pastoralists enjoy periodic routine visits, subsidized drugs, vaccines, and services via our team of vet doctors that visit the communities.

Technologically backed animal identification and management system traces the meat from farm to plate. Case study: LAG-AIMS.

Provision of financial services in livestock markets and communities which includes advocacy, financial inclusion, and empowerment of persons through agency banking.

Impact

20,000 rural household reached with livestock primary health care services, animal identification and management, and increased access to markets for their products.

Development of the National framework for animal identification and management using the lessons learned from LAG-AIMS

Innovation Expo: SPARC innovation dashboard

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Type of innovation

Knowledge and information on innovation in pastoralist and agro-pastoralist regions

Country or region where innovation is being utilized

Globally, with a focus on Eastern Africa and the Sahel

Beneficiaries

Governments, development and humanitarian partners, innovators; to ultimately benefit pastoralists and agro-pastoralists

Description of innovation

The Supporting Pastoralism and Agriculture in Recurrent and Protracted Crises (SPARC) innovation dashboard co-creates, curates and brokers evidence on innovation and innovation systems in the drylands of East and West Africa. The SPARC innovation dashboard provides a summary of the various types of innovations available to pastoralists and agro-pastoralists and is always growing! SPARC conducts research with innovators to inform decision-makers on a wide range of topics.

Explore it online to learn more and contribute!

Impact

SPARC conducts research, brokers knowledge and provides advice to improve policies and programs that impact pastoralists and agro-pastoralists in East and West Africa. SPARC program is funded by the UK Foreign, Commonwealth and Development Office (FCDO) and implemented by Cowater, Mercy Corps, International Livestock Research Institute (ILRI) and ODI.

Innovation Expo: Index-based livestock insurance (IBLI)

Rupsha Banerjee | b.rupsha@cgiar.org

Type of innovation

Livestock insurance that provides drought risk financing insurance solutions

Country or region where innovation is being utilized

Piloted in Kenya and Ethiopia (2010 and 2012). In 2022 scaled as part of DRIVE to Djibouti, Ethiopia, Kenya, and Somalia.

Beneficiaries

- Volume of policies sold per year ~7,000
- KLIP programme covered ~18,000 of most vulnerable pastoral households in Kenya

Description of innovation

Index-based drought risk financing and insurance (IBDRFI) instruments trigger payouts/financial response based on an 'objective' index approximating the impact/loss. The products have been specifically designed to protect pastoralists in the face of drought. In all Index-based livestock insurance (IBLI) products. Normalized difference vegetation index (NDVI) time series are elaborated to obtain an area-aggregated index of relative seasonal forage availability. When the index falls below a pre-defined threshold, payouts are triggered. This assumes that, when forage is scarce, grazing resources are depleted quickly, leading to deteriorating livestock conditions and increased livestock mortality. Pastoralists could use the payouts to make production decisions that reduce their herd losses during the drought including, purchasing animal fodder, water or veterinary services

Impact

This livestock insurance product is the first of its kind which was designed and implemented in the drylands. There has been evidence to suggest that during drought, households with IBLI coverage have higher incomes and milk production (*Matsuda, Takahashi, and Ikegami 2019*), are 27–36 percent less likely to skip meals and 22–36 percent less likely to sell livestock—a practice known as distress selling because this is a period when prices are lowest (*Janzen and Carter 2018*). A study in Ethiopia indicated that women were purchasing insurance at higher rates than men (*Bageant and Barrett 2017*), while a study in Kenya showed that women tended to have better access to credit if they were IBLI policy holders (*Gesare et al. 2016*). Administrative data from insurance companies show that about 45 percent of IBLI policy holders are women.

Innovation Expo: Hybrid livestock insurance for pastoralists

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Type of innovation

Livestock insurance

Country or region where innovation is being utilized

Dry run is being conducted in Northern Nigeria. Scale up potential across Africa, especially in Horn of Africa and the Sahel.

Beneficiaries

- Pastoral communities
- Women livestock owners incl. owners of small ruminants who are part of informal savings/credit groups
- Smallholders, small scale agro-pastoralists

Description of innovation

No comprehensive livestock insurance product exists in the market which covers both feed and mortality risks

Trying to make a cost-effective hybrid product which is affordable

Administrative costs are too high to cover mortality risks while offering an affordable product

Impact

Resilience for pastoral and smallholder communities across Africa, especially in arid and semi-arid areas.

Could offer women livestock keepers (~250 million in Africa!) a chance to protect their livestock and household incomes.

Innovation Expo: Syndromic electronic livestock disease surveillance system

George Wamwere-Njoroge | G.Wamwere-Njoroge@cgiar.org

Type of innovation

Mobile-based livestock disease surveillance system developed by International Livestock Research Institute (ILRI)

Country or region where innovation is being utilized

Arid region of northern Kenya, with growing interest and potential to expand to the Greater Horn of Africa and the Sahel

Beneficiaries

Impacted 3.5M people in six (6) arid counties in Northern Kenya: Isiolo, Garissa, Marsabit, Samburu, Turkana, and Wajir. Requests to expand to Sudan, Tanzania, and Mali.

Description of innovation

Surveillance data collection system that collects and relays info/data from the community disease reporters (as the 1st point of call), to the animal health assistants at the ward and locations, and then to subcounty vets, and finally uploaded to county disease surveillance database for basic analysis and interpretation before dissemination.

Private sector involvement:

ILRI has partnerships with Safaricom Ltd for enhanced connectivity in these remote settings. Additionally, the project is working with Badili Innovations Ltd, a Nairobi-based private sector techno company, exploring sustainable technology driven innovations to scale the system.

Impact

Anticipated impact:

Availability of real time surveillance data allows immediate action by the respective Veterinary authorities; data being used to solicit for additional support from partners. Counties have used this data to lobby for increased disease control resources from public coffers. Averting loss of pastoralist livestock assets (their only livelihood), leads to assured livelihoods, and therefore food and nutrition security.

Lessons learned:

Mobile phone driven technology has the potential to enhance disease surveillance data collection and dissemination; and inform early action.

Innovation Expo: Index-based livestock Takaful (IBLT)

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Type of innovation

Market mediated, index-based insurance products to protect livestock keepers

Country or region where innovation is being utilized

Kenya

Beneficiaries

- Pastoralists
- Women from pastoralist communities (Primary care givers)

Description of innovation

IBLT is the first Shari'ah-compliant index-based livestock insurance policy that combines a financial risk mitigation instrument with innovative use of satellite imagery. Through measuring the quality of pastureland the data is able to indicate when the forage is impaired to the point where policy actions kick in. When this occurs TIA pays policy holding pastoralists, allowing them to manage their individual risk.

Within our Livestock Plus products, we also have women-centric products which provide a cover for women to shield them from the disproportionate impact of drought on them and their families. The payouts to them provide means for them to provide for their elderly relatives and children.

Impact

To reduce poverty and promote asset retention and accumulation among its beneficiaries. Its primary function is to act as a resilience measure and a safety net during periods of drought by offering a fairly effective solution to protecting beneficiary households in the ASAL regions against the worst effects of drought by giving them the finances to purchase substitute fodder to keep their livestock alive during periods of severe drought.

Shown to have a significant impact on the long-term livelihood and asset protection of pastoralists in the region. Women beneficiaries have easier and better access to food, firewood and healthcare for their families and reduced exposure to gender based violence.

Innovation Expo: Carbon-neutral livestock fattening and finishing

Chip Stem | cstem@livestocktradeservices.com

Type of innovation

Pastoral livestock market access and value addition before export while enabling Climate Change Mitigation and Adaptation

Country or region where innovation is being utilized

Kenya and the Horn of Africa

Beneficiaries

The project will sustain livelihoods of 3-6 million pastoralists, most of whom are women, once scale is reached and 3-6 million head of livestock exported a year

Description of innovation

1) Drawing male weanling livestock from pastoral communities, 2) bringing them to market weight in a year rather than the normal 3-5 years, 3) feeding high quality, nutrient dense feed produced under water saving Solar Floppy Irrigation and Regenerative Ag and Grazing, 4) supporting pastoral female core breeding herds during drought with quality feed, 5) using Red Seaweed (*Aspergopsis taxiformis*) and 6) and ensuring that they are disease-free for export by a professionally managed livestock export quarantine.

Expect to be able to produce carbon-neutral livestock for export, sustain pastoral livelihoods, enhance pastoral drought resistance and flood resilience, and develop pasture to plate traceability.

Impact

Horn of Africa pastoralists will have reliable, consistent and quality markets for their livestock ensuring sustainable pastoral livelihoods for millions of marginalized people.

Lessons learned: Pastoralists can be market oriented as proven by 9.7 million livestock exported in 2015. However, quarantine management should never reside in the hand of livestock traders. Instead, should be operated by private sector quarantine operations supervised by export country veterinary services That follow World Organization for Animal Health (OIE) standards and with proactive and transparent communications with importing country partners.

Innovation Expo: Market based livestock offtake

Guyo T. Dabelo | tukeguyo70@gmail.com

Type of innovation

Market access

Country or region where innovation is being utilized

Upper eastern Kenya (Marsabit, Samburu and Isiolo counties)

Beneficiaries

- Pastoralists and livestock traders
- Meat traders and consumers

Description of innovation

Organized pastoralists to form Livestock Market Association (LMAs) and manage day-to-day management of market function and infrastructures of the markets.

Link LMA to livestock traders in the regional and beyond and publish livestock marketing days for each market.

Developed credit product at low interest rate with equity bank branches, enabling livestock traders to access the credit without any collateral.

Impact

Vibrate livestock marketing policy and disease control legislation which promote livestock business.

Strengthen private sector-driven livestock marketing offtake from pastoral areas and strengthen pastoralists' involvement to embrace a cash economy.

Fatten by entrepreneurs in ranches and finish through feedlot fattening to meet normal and export requirements.

Innovation Expo: GARBAL Services

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Type of innovation

Greater information access via setting up a call center with PPP

Country or region where innovation is being utilized

- Mali (Ménaka, Kidal, Tombouctou, Mopti)
- Niger (Tahoua, Tillabéry, Dosso)
- Burkina Faso (all localities)

Beneficiaries

- Pastoralists
- Agro-pastoralists
- Farmers
- Other value chain actors

Description of innovation

Pastoralists and farmers through a simple phone call to a call center to receive information in their local languages. Information is given by call operators who are specialist in the field. Some information is combined with field and satellite data.

GARBAL Services provided: Market Prices, Pasture Quality, Herd Concentration, Advisory Services, Water Surface, Biomass & Vegetation, Cultivated Land, Weather Forecasts, Marketplace, and Inclusive digital financial products under development.

Impact

- 1,4 M calls received, 450 500 unique users (30% women)
- 93% made decisions based on the info
- +50 000 SMS/USSD
- +200 000 Push SMS in conditions of transborder transhumance.
- Received, 98% satisfaction
- +39% incomes in Burkina Faso