



Better Markets, Better Lives

PATHWAYS

TO SYSTEMIC CHANGE
IN KENYA'S LIVESTOCK
SECTOR

MAY 2020



The undertaking and production of this work was made possible through funding from the UK's Department for International Development (DfID) and Gatsby Africa.

The contents of this report are solely the responsibility of Kenya Markets Trust and do not necessarily reflect the views of DfID or Gatsby Africa.

For more information on this report or Kenya Markets Trust, please get in touch:

Kenya Markets Trust,
14 Riverside Drive, Cavendish Block,
2nd Floor, Suite B,
P.O. Box 44817 – 00100,
Nairobi, Kenya
Tel: +254 20 2588343
+254 722 201233
Email: info@kenyamarkets.org

Copyright © 2020

This research work was undertaken to inform relevant policies, actions and stakeholders. All or certain parts of this material may be used for relevant work, provided that the necessary references and acknowledgements are made back to Kenya Markets Trust.

Correct citation:

Kenya Markets Trust (May 2020). *Pathways to Systemic Change in Kenya's Livestock Sector*. KMT Livestock Case Study. Nairobi, Kenya.

www.kenyamarkets.org

Kenya Markets Trust (KMT) is a Kenyan not-for-profit organisation that specialises in market transformation. We work to stimulate inclusive and resilient growth that will lead to a step-change in the livelihoods of millions of Kenyans. We take a long-term approach, staying true to our vision while adapting to the forces that are shaping the markets we operate within such as climate change and access to emergent technologies.

“ The livestock sub-sector is a significant player in our economy which must be enhanced to create more wealth and jobs for our people. A time has come for us to adapt our cultures to the needs of today. We must embrace new technologies in order to upscale our farming for quality production, if we are to survive and compete in the global market.”¹

UHURU KENYATTA
PRESIDENT OF KENYA, 2018

Acknowledgements

The publication of this case study was made possible through the support and collaboration with many stakeholders.

A special thank you goes to MarketShare Associates who performed the ground work and drafting of this report. .

We are grateful for the support and collaboration we received from Kenya’s national and county governments, various market actors mentioned in this report, all interviewees, and all Kenya Markets Trust (KMT) staff.

In collaboration with



Table of Contents

Introduction to the Livestock Sector	6
KMT's approach to stimulating systemic change	10
Pathway 1 – Improving primary production for pastoralists	13
Pathway 2 – Strengthening the route to market for pastoralists	22
Historical context	23
Building ranches' capacity to engage with pastoralists	25
Pathway 3 – Building the capacity of end market processors and retailers	29
Facilitating retailer investments in improving supply chains	31
Enabling processors investments in meeting international food safety standards	32
Increasing industry coordination and investments to improve the value chain infrastructure.	33
Pathway 4 – Strengthening consumer awareness and demand for higher quality produce	35
Increasing consumer awareness to change demand patterns	37
Working with government to implement national food safety standards	38
Enabling businesses to compete on quality and increase consumer information	39
Building an enabling environment for livestock identification	40
Sector evolution	42
Future pathway for systemic change	44
Endnotes	48

INTRODUCTION TO THE LIVESTOCK SECTOR



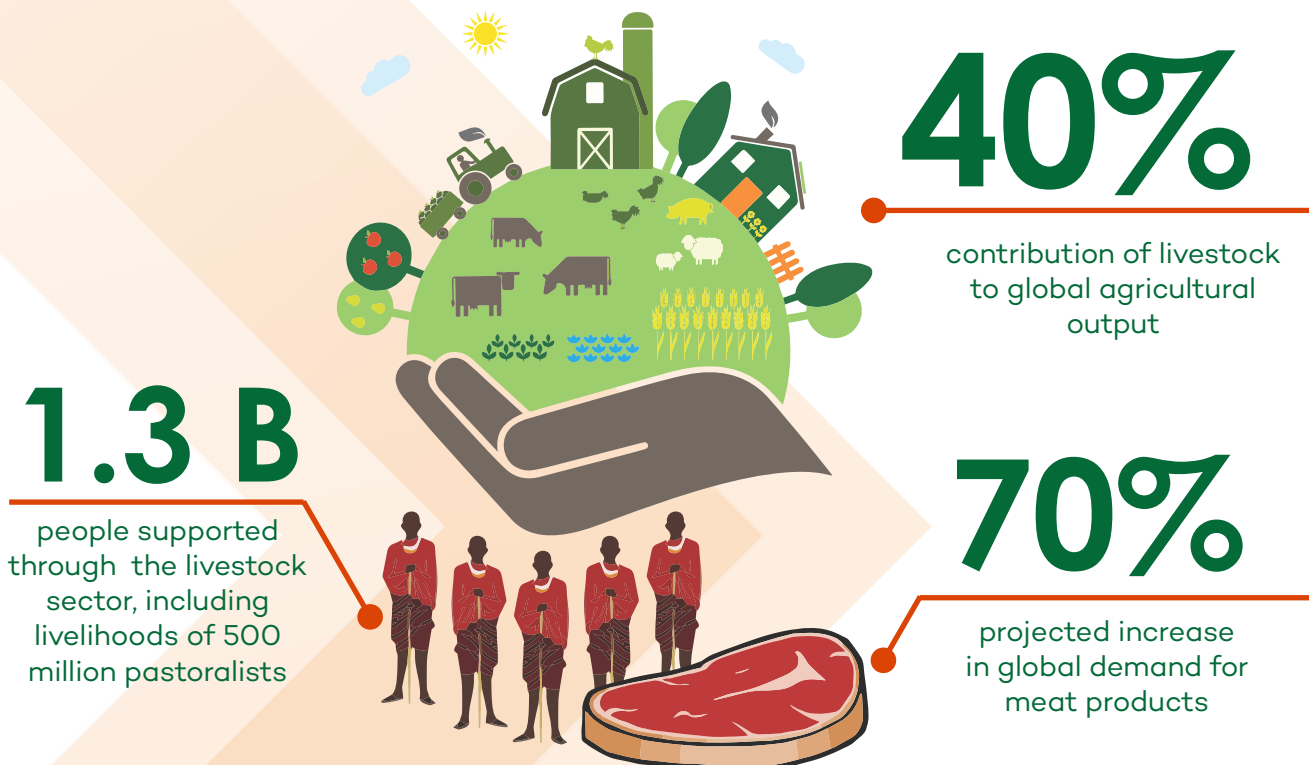
Livestock is a fundamental part of life for the world's poorest

Livestock is a significant part of the global economy, contributing to economic growth, poverty reduction and nutrition. The sector contributes 40% of global agricultural output and supports the livelihoods and food security of almost 1.3 billion people, including 500 million pastoralists.²⁻³ For these pastoralists, livestock provide income and employment, a store of wealth, resilience to shocks, food security, as well as in addition to holding cultural significance.

Growing populations, rising affluence and urbanisation are translating into increased demand for meat products, particularly in developing countries. Global demand is projected to increase by 70% by 2050, to feed a population estimated to reach 9.6 billion.⁴

Consumer preferences are also changing. Higher incomes in emerging markets are increasing demand for new meat products and higher food safety standards, whilst environmental concerns are leading consumers to avoid harmful chemicals and unsustainable production practices.

These rapid shifts are creating both opportunities and challenges. With the heavy presence of the poor within the livestock sector, capturing these opportunities can ensure transformation of the sector results in rural agricultural development, poverty reduction and food security.⁵

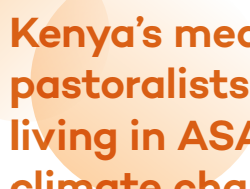


Growth in the livestock sector has the potential to help Kenya achieve its SDG goals

Whilst livestock is globally important, it is fundamental to Kenya's economy. The sector contributes between 10% to 13% of national GDP and employs up to 50% of the agricultural labour force. The importance of livestock is set to rise further, as growing incomes lead to higher meat consumption. For example, demand for beef in Kenya is expected to increase by over 170% between 2010 and 2050.⁶

Production of meat products is predominantly through pastoralists, who own 70% of national livestock valued at USD 834 million.⁷ This trend is set to continue, with smallholders in sub-Saharan Africa expected to remain the primary producers of livestock until at least 2050.⁸ In Kenya, pastoralism is mainly in arid and semi-arid land (ASAL) regions, which make up 80% of Kenya's landmass and where income levels are amongst the lowest in the country. Here, the livestock sector provides 90% of employment opportunities and 95% of the family income and security.⁹

It is also in these areas where climate change is expected to have the biggest impact. Rainfall is becoming more erratic, increasing the frequency of droughts over the past 10 years. Water systems are already under strain, and increased livestock production will add to this pressure. This, coupled with overstocking and degradation of rangelands, is leading to acute vulnerability of pastoralists livelihoods.



Kenya's meat production is predominantly through pastoralists, who are primarily low-income earners, living in ASAL areas, where they have to deal with climate change threats.

Modernisation of the sector has significant potential.

Kenyan pastoralists suffer losses from droughts and consistently produce cattle below their potential weight. Solving these problems could significantly increase productive capacity. For example, the Food and Agriculture Organization (FAO) estimates that given the right socioeconomic conditions and technology to reduce costs and raise productivity, pastoral systems could increase small ruminant milk and meat production by a factor of five or six relative to the production levels of the year 2000.⁴

Further up the chain, pastoralists can benefit significantly from better access to markets.

When selling animals, pastoralists may receive only 40%-50% of the final sale price, with the rest going to the various levels of traders that aggregate live animals from rural areas. For processors, modernising slaughterhouse practices can increase margins by over 90%.¹⁰ Better processing, storage and transport can reduce high post-harvest losses, by moving away from hot chain practices¹¹ towards end-to-end cold-chain processing and storage. Better practices can also open new markets, with premiums available to those who can demonstrate high standards to buyers, both nationally and internationally. Finally, end retailers have the potential to diversify the range of products they offer to cater for a greater range of tastes.

The current and future pace of change leaves pastoralists in Kenya at risk of being unable to increase production or access higher value markets that demand quality meat. Nomadic strategies for risk mitigation are less able to deal with frequent drought, as they are undermined by land privatisation and poor governance of rangelands. Finally, the government has not focused on the sector and government spending has been consistently low. However, with the right support and incentives, significant growth in the sector will increase the chances for pastoralists to play a fundamental role in the future market.

KMT'S APPROACH TO STIMULATING SYSTEMIC CHANGE (2013 - 2020)



KMT's vision for systemic change

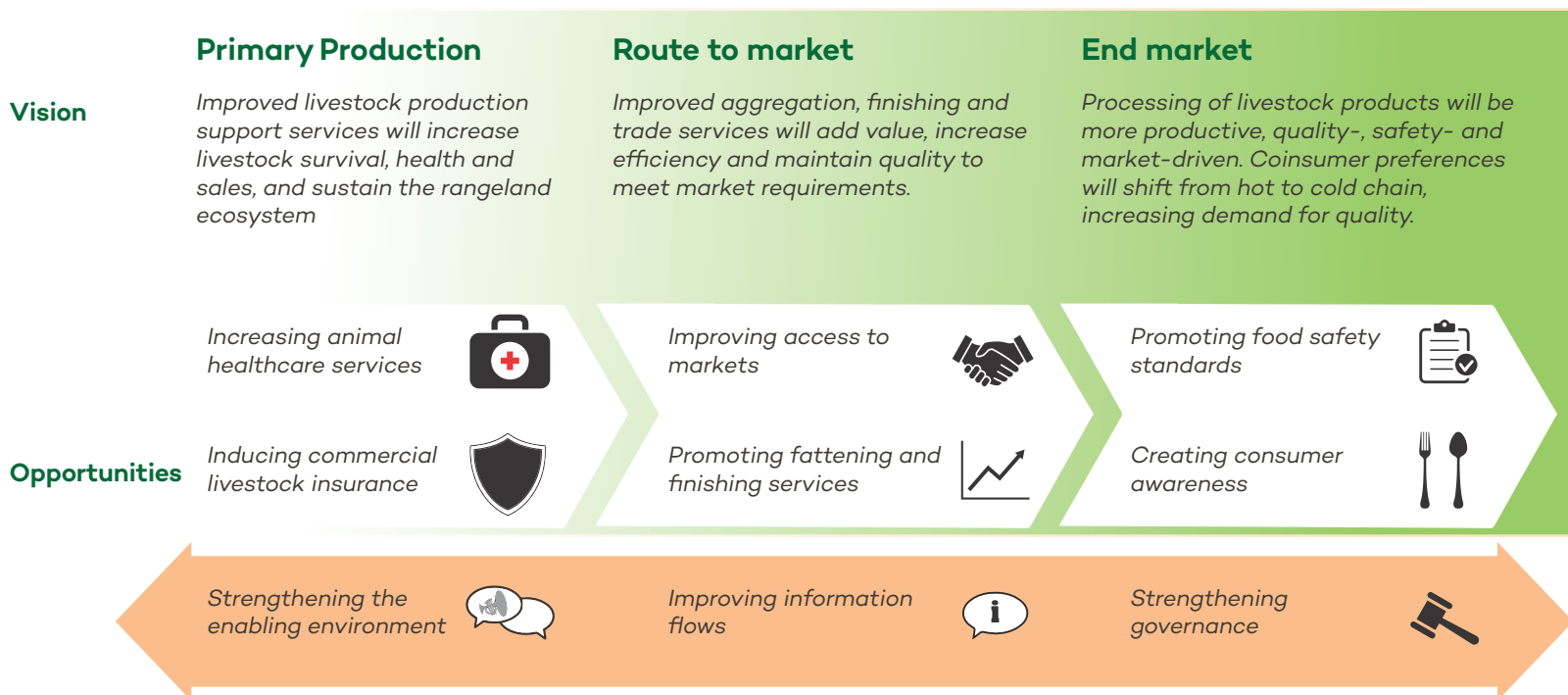
Growth in the livestock sector has clear potential for reducing poverty, and KMT has sought to achieve this by stimulating systemic changes in the market. KMT's vision is that:

“The livestock sector will modernise to become efficient, organised, professional and capable of adding more value. This will see increased returns to pastoralists from sales of livestock, as a result of increased quantity, quality, reliability of supply, as well as increased demand for consistent, quality meat sourced from pastoralist areas.”

KMT's identified opportunities

To achieve this vision, KMT have identified three stages of the value chain. Each has its own vision, which has been used to identify opportunities for stimulating systemic change within the livestock value chain. The three stages and opportunities are outlined below:

Figure 2: KMT's identified opportunities

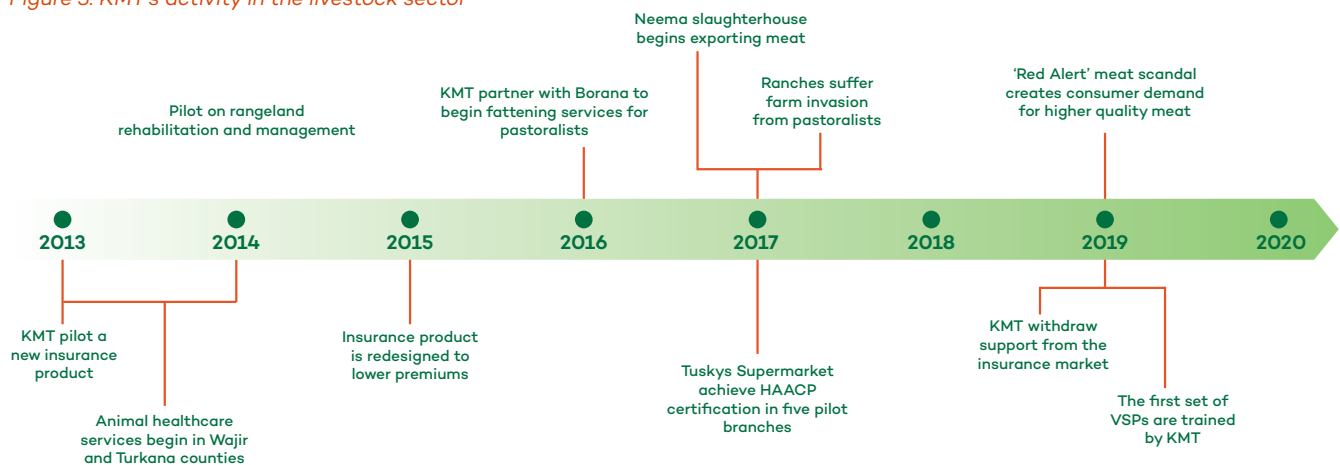


KMT's activity in the sector

KMT have been active in the livestock sector since 2013. During this time, they have been flexible in their approach, piloting several interventions in response to identified opportunities. They have focussed on attracting qualified members of staff, including both donor and private sector professionals, that have shown motivation to work to capture the benefits of economic development for the poor.

The following sections outline the pathways to systemic change taken by KMT during that time, focussing on what interventions were run, the impact these had on the market, and what lessons have been learnt in the process. An overview of their activity in the sector is below.

Figure 3: KMT's activity in the livestock sector



PATHWAY 1

Improving primary production for pastoralists

PATHWAY 2

Strengthening the route to market for pastoralists

PATHWAY 3

Building the capacity of end-market processors and retailers

PATHWAY 4

Strengthening consumer awareness and demand for higher quality meat

Impacts to date



ANIMAL HEALTH INPUTS AND SERVICES ACCESS

90,000 households
+US\$ 31m income



1.5 million pastoralists have improved access to livestock markets



1.2 million pastoralists with increased incomes from livestock



US\$ 10m in public and private investments leveraged in the livestock sector



COLD CHAIN TECHNOLOGY ADOPTION PILOT PROGRAMME

-14% wastage

15x revenue

PATHWAY 1

IMPROVING PRIMARY PRODUCTION FOR PASTORALISTS



Historical context

Despite being the main source of income for Kenyans living in ASAL regions, pastoralism has historically been characterised by low productivity. Whilst there are many reasons underlying this low productivity, the following two historical trends have contributed to persistently constrained growth.

Low access to animal health inputs and information

Formal suppliers concentrate on urban areas, with the perception that pastoralists do not present a market for products. Expanding into rural areas, closer to pastoralists' migratory routes, is seen as too expensive, given the sparsity of pastoralists, their frequent migration, and low disposable income.

This gap has been filled by suppliers who are informal and without training. Products are sporadically available, and are often low-quality, with little guidance given to pastoralists on how to apply treatments. This results in pastoralists relying on products that can be out- of- date or counterfeit, potentially harming animals. A lack of guidance from suppliers leads to under- or over- application, creating problems of drug resistance or high levels of drug residue, respectively.

Government and donors periodically supply large amounts of free inputs during crises, but are often late, failing to reach those who need them. This has further discouraged formal suppliers and distributors from entering the market, whilst encouraging a culture of donor dependence for those within rural communities.

For pastoralists seeking drugs not available from informal suppliers or donors, it is both time consuming and expensive to get to urban areas, and delays frequently lead to the death of livestock and spread of disease.



It takes us 6 days to go to Kakuma. Transportation was costly. By the time we went, our sick goats had died. Drugs were far away, and we used to lose many animals that way

PASTORALIST GROUP,
TURKANA COUNTY



75%
of pastoralists
have never received
animal health
information¹²



81.9%
of pastoralists
travel more than
25KMs to access
animal health input
services¹²

Pastoralists are exposed to climate events¹³

Pastoralists in Kenya lead a nomadic lifestyle, where livestock are constantly moved cross communal rangelands in search of pasture and water. Pastoralists' large migratory routes traditionally mitigate risks. However, as private land for agriculture and conservation expands, decreasing rangelands mean pastoralists are less able to use this technique. Large herds of pastoralists, often beyond the number that rangelands can support, gradually degrade the remaining rangelands.

These shifts leave pastoralists more exposed to weather events, the most significant being drought. These kill significant numbers of livestock, whilst reducing the value of remaining animals, devastating incomes and putting human health at risk. These climate changes are further complicated by emerging events. For example, the recent infestation by locusts across the Horn of Africa has destroyed much of the forage available for livestock and wildlife.

Agricultural insurance to protect against such events is heavily subsidised. In 2008, global subsidies were worth USD 20 billion per year, and have continued to increase.¹⁴ However, these are predominantly in high income countries, who account for 86% of global subsidies, covering 53% of livestock insurance premiums.¹⁵

In Kenya, there are few options available to pastoralists. Index-based livestock insurance (IBLI) is a new product that has been trialled with positive results. However, these have been heavily funded by donors. Low uptake from pastoralists and the private sector have raised questions about the attractiveness, scalability and sustainability of IBLI in the current form.^{16 17}



The problem with pastoralism is that [livestock] is a mobile asset. Their communities are spread, communication is difficult. The pastoralists we are dealing with now, in the next season could be in Somalia or Ethiopia. They are not sedentary in one place, so the cost of reach is very high.

EX-CEO,
TAKAFUL INSURANCE



70.2%
of pastoralists are not aware of any livestock insurance products¹⁵

BOX 1:
Significant recent droughts in Kenya

1998	Drought affected 3.2 million people and caused losses of 2.8 billion USD
2006	Drought affected 2.97 million people
2009	Drought affected 3.79 million people and required 432.5 million USD in humanitarian aid
2011	Drought affected 4.3 million people, and caused losses of 12.1 billion USD

Building local agrovets' sales networks to improve access to animal healthcare inputs and services

Despite being the main source of income for Kenyans living in ASAL regions, pastoralism has historically been characterised by low productivity. Whilst there are many reasons underlying this low productivity, the following two historical trends have contributed to persistently constrained growth.

Improving rural distribution

To increase access to animal healthcare products and services, in 2013/14 KMT targeted agrovets in Wajir and Turkana counties. First, KMT identified existing agro-dealers, which were usually found in main towns with stores that customers visit. KMT engaged these to understand their ability and willingness to implement an agent model, using locally-based agents to increase sales in underserved areas. Two agrovets were selected, Wajir Agrovets in Wajir county, and Silo Agrovets in Turkana county.

KMT supported the training of field agents, focussing on business skills for successful shop management, and technical skills to enable agents to provide accurate product information. Agrovets have invested in developing supply systems that respond quickly to orders from agents in the field. They have also been successful in managing relationships with rural agents, an indicator that KMT's focus on local agrovets, in-tune with local socio-economic dynamics whilst having the capacity for growth, was a successful strategy.

The agent network has created distribution points for genuine products in rural areas. Agents, being community based, have been able to generate sales quickly. Providing information to pastoralists has shown the value of products, and consistent supply has ensured these are readily available. The agrovets have proven pastoralists are able to invest in products that provide value.



Silo agrovets made it affordable, convenient and efficient for the store to re-stock. Profit margins increased from KES 20 to KES 150 per bottle. With higher profit margins, the store was able to stock more drugs. The drug variety has increased. It allows us to employ qualified staff to sell drugs.

SILo AGROVET AGENT,
TURKANA COUNTY



The drug store has lifted us up. When we compare before and after: diseases have reduced; our livestock are healthy; we are making profit. We are now familiar with the drugs of the agrovets. They have taught us how to manage and cure, we are small veterinarians.

PASTORALIST,
TURKANA COUNTY





Agrovets selection

Despite there being only limited candidates, KMT ensured their partners demonstrated the following:

- A sole focus on specialized shops providing only animal health inputs and services, rather than mixed shops providing other goods and services.
- Proven experience of selling inputs and services to pastoralists in rural areas.
- Willingness and ability to manage a network of agents in rural areas.
- Qualified managers with the legal and technical ability to sell inputs and provide services.

Strengthening national supply networks

With strong demand for animal health products in rural areas, consistent supply became a constraint to continued growth of the KMT supported agrovets. Relying on intermediaries led to inconsistent service levels and limited profitability.

In 2015, KMT sought to establish new relationships by facilitating discussions on the development of supply networks between the agrovets and manufacturers.

The revenue growth of these two agrovets gave confidence to manufacturers, who invested in distribution networks infrastructure to directly supply products to agrovets through more regular deliveries and regional sales hubs.

These stronger networks have increased drug availability in rural areas, and dramatically reduced costs for agrovets.



Initially I had one manufacturer. From there, I've learnt from KMT, going to eleven. Initially [the manufacturers] said there is no business [in rural areas]. But they've learnt about the opportunity. The beautiful part that I'm really enjoying is bringing together all these products. If I was reliant on only one company, I could not have reached where I am today.

WAJIR AGROVET,
WAJIR COUNTY



The products I initially had were sourced from other stockists, which affected my profit. Now, I have a list of more than ten manufacturers who supply me at better prices. If you are buying volumes, manufacturers see your potential. The partnerships have really helped me.

SILO AGROVET,
TURKANA COUNTY



Expanding business in rural areas

In both regions, expansion of the model has occurred within the businesses KMT has worked with. Both businesses have significantly increased sales, the geographical areas they cover, the number of agents they work with, the products they supply, and the number of manufacturers they receive supplies from. This expansion is likely to continue, with each agrovets looking to maintain growth through continued investments independent of KMT.

Expansion is also happening beyond the businesses supported directly by KMT. This has been through two routes. The first, happening in Turkana County, is through competitive pressure. Sidai, a competitor of Silo Agrovets, is recognising that their presence in the county is lessening, due to the presence of Silo agents. As a result, Sidai has begun employing their own agents in rural areas.

The second, in Wajir, has been through the support of Bimeda, an input manufacturer who have become a scale agent. Whilst KMT facilitated numerous supplier relationships between manufacturers and agrovets, most did not want to go further. Bimeda, on the other hand, have recognised the potential of this model to increase sales in other locations, and are encouraging the uptake of the agent model by approaching both new and existing agrovets, providing extensive training and in some cases giving discounts on products.

	Wajir Agrovets	Silo Agrovets
Agents	Initially, I did not have a single agent. When KMT came, I had two agents. After this intervention, I moved from two to 42 agents.	In 2015, KMT were trying to assess input supply and I was the only person, then. Every month or two months since then, we have been getting new agents. Now I have 35.
Revenues	Before, it was a very small margin. From KES 1,000 to 2,000 per day. Now, there is a complete change. During the rainy season, I can make say from KES 20,000 to 55,000 per day.	I started with KES 250,000 a month. Now I can sell KES 1 million from the counter, and between 600,000 to 700,000 from my agents.
Future expansion	I'm foreseeing expansion to a part of Garissa, where we neighbour, and to open more outlets in our sub-counties. If you develop a system in the local area, to make a simplified feed formulation, it's another business.	I want to increase my agents and reach places I have not reached, so that in a year I can have 20/30 people coming on board. I want some agents to replicate. Then they can have another 30 agents who will buy more from me. We also want to introduce feeds, and I will use the same agents to supply the products.



Pastoralists are ready to be serviced. If you talk to them, make them understand the availability, quality, reasonable price - then there is a complete change in behaviour. They will pay.

WAJIR AGROVETS,
WAJIR COUNTY



BOX 2: Stimulating investments in supply networks

With increasing sales in the north of Kenya, manufacturers have begun to invest in networks that more effectively supply inputs and services to pastoralists. Bimeda are now leading the way, after KMT subsidized the appointment of a sales manager in Wajir for two years. The first of its kind in North-Eastern Kenya, the role has now been internalized and expanded to a regional sales role, providing a permanent presence in the North and a scale-agent for KMT's agent model.

“With the collaboration of KMT, we have seen the business opportunity in the Northern region. Everything revolved around the feasibility studies they conducted and the business opportunities they carried. We started with Wajir agrovet and have expanded. We have two distributor agrovet in Wajir, two in Moyale, two in Marsabit, two in Garissa, one in Mandera. The model that I used with Wajir, that's the same model I'm using for the other agrovet. In Marsabit, the current stockist was himself an agent. I made him independent, developed agents for him and now he's doing it on his own.”

“The company is happy and expect more from me. This is a profit-making company and they see that the opportunities are there. Most of these companies, they fear investing in the northern region because of that perception of insecurity. But now they are realizing.”
- Bimeda Regional Sales Manager

Improving the enabling environment

County governments represent a valuable partner in the development of the livestock sector. However, for the businesses KMT worked with, their occasional mass provision of free drugs harmed both the short-term sales of agrovet, and the mindset of consumers, who came to expect free inputs.

Recognising this risk, KMT facilitated discussions between agrovet and county officials to help increase their understanding of the impact of free input programs on business. Since this, some counties, led by Wajir and Turkana counties, have taken several steps:

- Free treatment programs have reduced. Counties focus on vaccinations, leaving treatments to agrovet. Where treatments are supplied, counties make efforts to purchase locally, reducing the negative impact on agrovet.
- Counties are using the network of private agents to provide information on areas of need and react quickly to disease outbreaks. This reduces the cost of information for counties, whilst also giving agrovet a position from which to quickly respond to emergencies.
- The seven frontier counties in ASAL regions have created a disease control framework. This is a policy focused on prevention rather than treatment and has harmonised disease control programs.

Working with insurers and government has pioneered Insurance-Based Livestock Insurance (IBLI)

Previous pilots of IBLI in Kenya provided insurance to pastoralists in a way that relied on significant donor support. With IBLI seemingly successful in other countries, KMT supported the commercialisation of a product under development by the International Livestock Research Institute (ILRI). ILRI had been working on the model since 2008 but had never commercialised the model with a private partner, instead working with government and donors.

In 2013, KMT brought together ILRI, two private insurance companies, Takaful Insurance Africa (TIA) and APA Insurance, to test a model that sold IBLI directly to pastoralists through agents.

This had slow up-take, and APA Insurance decided that the returns were too low to justify their continued support. TIA had similar issues, with the product unable to grow beyond 120 policies and creating a four to one, cost to premium ratio. However, with a patient CEO continuing to offer support, KMT and ILRI conducted an impact assessment to investigate constraints. This found that premiums were too high for pastoralists, there was misleading information given by sales agents, and cash frequently went unaccounted for. Reacting to these findings, KMT, ILRI and TIA updated the model in 2015:

- Insurance cover moved from the value of an animal, to the cost of emergency feed. This reduced average premiums from KES 750 to KES 50, significantly increasing affordability.
- The agency model was dropped, and instead used community shop owners. These provided a permanent, more credible sales outlet, and increased trust in the product.
- An app was produced for mobile payments. Every policy was paid for before being confirmed.

The change in the model enabled significant growth, from 120 policies up to 5,000 per window, moving the product towards a scale that could become sustainable. This scale also attracted government interest. Within the Kenya Livestock Insurance Program (KLIP), the government designed a product using a similar model. KLIP made IBLI a key policy, with fully-funded insurance for 18,500 of the poorest households in Kenya.

Despite this growth, the intervention lost traction, providing valuable lessons in the process. In 2016, a new CEO was appointed at TIA. Where the previous CEO was positive about IBLI, the new CEO was not committed to the long-term investment it required. Similarly, whilst the national government had quickly scaled-up subsidised insurance, there have been no further increases in funding.

Without these commitments, KMT could no longer justify the high expense of the intervention. It withdrew its support to TIA, who also reduced their own investment. Whilst the government has maintained funding for 18,500 policies, it remains subject to changing political priorities. KMT offers of support to protect it have reportedly received little traction, suggesting it is not a priority.

Lessons learnt

1. Focusing on businesses with entrepreneurial skills has demonstrated the commercial viability of providing inputs to pastoralists, leading to replication by agrovets and manufacturers.

The input market in Northern Kenya did not show a clear route to expansion when KMT first intervened. However, by selecting businesses that demonstrated clear entrepreneurialism, and who were receptive to trying new models, significant growth has generated interest. The first-mover businesses have continued to invest and grow, leading to more agrovets and large manufacturers investing in rural input and service provision.

2. IBLI is not commercially sustainable without subsidies from the government.

IBLI is not currently a product that is sustainable without subsidies. This contrasts with the typical types of interventions a market system programme traditionally focuses on. However, this does not mean market systems thinking cannot be applied, with the approach being applicable whenever there is a way for private sector actors to improve the way markets work for the poor.

In this case, government partnerships with the private sector that result in livestock being insured offer an alternative to the vast amounts of money spent on humanitarian efforts during severe droughts and can minimise some of the impacts on the wider economy. Supporting a public-private partnership in this way can strengthen government's ability to provide services, provide opportunities for growth of private service providers, and reduce risk for pastoralists.

With models that require significant subsidy, it is imperative that clear strategies for this support be built in from the start. In this case, KMT was able to attract the attention of government, but has not yet been able to convert this into long-term support. Other alternative actors could include impact investors, or similar institutions, willing to provide long-term capital and higher risk profiles than traditional investors.



PATHWAY 2

STRENGTHENING THE ROUTE TO MARKET FOR PASTORALISTS



Historical context

Kenya is home to many animals. With 60% of households keeping livestock, it is the fourth largest producer in East Africa.¹⁸ However, Kenya still has a production shortfall of 314,000 tons of meat per year relative to domestic demand.¹⁹ Pastoralists are poorly linked to formal markets for several interrelated reasons:

1. Pastoralists rely on traditional methods of production and local markets

Pastoralists predominantly see livestock as assets to be maintained and expanded, only selling when necessary, rather than when they could get the best price.

For example, many pastoralists sell stock at the beginning of the academic year for school fees. This means livestock is sold past their optimum age, in bad condition, which means they do not attract premiums.

Pastoralists are located geographically far from end markets, creating a system of local and regional traders that aggregate stock.

Without access to large-scale buyers, pastoralists have a weak position in the supply chain, and sell at low prices to the few local traders.²⁰



We sell animals based on the way they look; we don't weigh them. We have to bargain, and our position is not strong as we sell as individuals. Because you mainly sell when there is a pressing need, you have to sell even if the price is not good.

MAASAI COMMUNITY MEMBERS,
LAIKIPIA COUNTY



2. There is a lack of information in the supply chain

Underlying pastoralists' inability to interact with formal markets is the lack of market information.¹⁸ Pastoralists do not know how to produce cows in a condition that attracts formal buyers and the associated price premiums. Local traders do not have a good understanding either, creating a large disconnect between formal buyers' requirements and pastoralist production.

In addition, pastoralists cannot access ranch grazing, leading them to relying on extensive grazing, which generally produces lower growth rates, carcass yield²¹, and meat quality compared to intensive and semi-intensive forms of grazing.²² This often causes tensions between ranchers and pastoralists, peaking in 2017 and 2018, when pastoralists invaded ranches, causing significant damage to property and the death of some ranchers.²³

Numerous programmes have been designed by the government and donors. However, these broadcast price information, but have not resulted in behaviour change, due to a lack of both market coordination and support for meeting buyers' requirements.



We don't have information on how many animals are required by butcheries. Sometimes we have a lot of animals that go to market, and all that is needed is a small number.

MAASAI COMMUNITY MEMBERS,
LAIKIPIA COUNTY



Figure 4: Impacts of lack of information on pastoralist production



Building ranches' capacity to engage with pastoralists

Piloting livestock access to conservancies with Borana Ranch

In 2016, KMT partnered with Borana Ranch, a ranch that had historically good relationships with the local community, to trial an approach where livestock from pastoralists could access the ranch for finishing and fattening. At this time, most ranches provided some support to local communities, but did not regularly trade with pastoralists, preferring to donate to community projects. This made Borana unique, and they supported the pilot with a coordinator and community vet. KMT provided management staff and equipment to build the capacity of Borana. Animals are then sold by Borana, where payment for Borana's services is subtracted from the final sale. This is a new way of working for both pastoralists and ranches.



The culture of the Masai is that we don't sell animals for the sake of it, we sell only when we need. We are not commercial. But during our engagement with Borana over these past two years, that is slowly changing. We are now looking at it in terms of management. The first is the cultural perspective - it's a livelihood and you want that to continue. At the same time, we are embracing more commercial [practices], so there are some [cattle] we can sell to make money.

MAASAI COMMUNITY MEMBERS,
LAIKIPIA COUNTY



With greater integration into markets, pastoralists are receiving better prices, and gradually recognising their herds as a source of income. The community have created a cooperative to help organise their efforts and have begun planning production in line with market information, providing animals closer to market demands (e.g. younger animals that can be more easily finished). Further, pastoralists have been supported to create a committee, which has led to a community cooperative, that acts as a coordination point for the relationship with Borana.



We are able to sell more animals through Borana. In two and a half years, about KES 49 million worth of animals have been sold through the finishing system.

MAASAI COMMUNITY MEMBERS,
LAIKIPIA COUNTY



However, Borana has not built on the commercial venture. The ranch has continued to run numerous development initiatives, of which the finishing business is one, aimed at supporting its main business as a tourism destination. This lack of commercial drive became clear to KMT gradually, with Borana continuing to invest in other non-commercial development initiatives such as educational provision, rather than expand the ranching model. With little scope of Borana taking the model on as a commercial initiative, KMT were not able to prove pastoralist ranching could be a commercial venture for other businesses.

Expanding a ranching model to encourage greater integration of pastoralists

KMT began work with Borana whilst other ranches were not interested in economic integration with local communities. However, after the violence of 2017 and 2018, the model attracted interest from ranches as a way of addressing tensions and reducing the risk of future losses. This motivation to reduce risk has led numerous other local ranches to implement similar models to the one piloted with Borana. It has also given KMT the opportunity to continue to develop the model with other ranches, with greater commercial interest.

One example is Mugie Ranch. After being heavily invaded, they began a commercially-orientated model in 2017. Their model provided fewer services to pastoralists in order to maintain simplicity and reduce costs. For example, insurance was offered at a fee, and so has been not taken up by pastoralists. Payments are now made in-kind, with animals used for fees. Farmers were better able to pay in this way, resulting in a financially sustainable model, which Mugie have continued to invest in. KMT has used this as an opportunity to support the development of the model, with the aim of now proving commercial viability. KMT invested in a pastoralist show, which sought to educate pastoralists on end-market requirements, with butchery demonstrations, carcass comparisons and taste tests. This has begun a relationship between Mugie and KMT, opening the door to further collaborative work.

Beyond KMT, Mugie have highlighted that, without education, there is a risk that pastoralists' income received from the sale of cattle will not be re-invested. This depletion of assets could eventually lead to worsening livelihoods. In response, Mugie have created a savings scheme for members, and are providing consistent messages about the need for re-investment. These are good first steps, but do not yet provide satisfactory protection, offering opportunities for further refinement.



It's a very new way of thinking. We take livestock, and we manage it, on the condition that the cattle are for sale. We have some [pastoralists] who take their cattle. [But for] those that don't have the market, the prices we get are better than what they can get.

MUGIE RANCH
LAIKIPIA COUNTY



Establishing local Village Service Providers as a one-stop-shop for livestock services

In 2019, KMT used the lessons learnt from their work in animal health services, and market integration, to create a new model for livestock service provision. Village Services Providers (VSPs) are locally based sources of information and extension services.

The model has three aspects:

- Locally based agents. Agents are most effective when they understand and are integrated into local communities. VSPs are selected as people with existing relationships with communities, and are further integrated through cooperatives that support VSPs. This enables VSPs to organise pastoralists to produce in a manner that ensures consistency in supply.
- Links to markets. To be able to understand market demands and receive good prices for pastoralists' animals, another key criterion for VSPs is their ability to engage with markets. Many VSPs selected already have trading businesses, and KMT has strengthened these links and VSPs understanding of requirements so they can effectively disseminate these.
- Support from agrovets. Although not currently in place, VSPs are being paired with agrovets. Agrovets then supply animal health products and services, and provide extension messages on how to produce animals that meet market requirements. VSPs disseminate this information to their producers.

The VSP model is being tested in with two cooperatives in Laikipia and Taita Taveta counties, chosen after KMT conducted a spatial analysis on trading routes within the country. This highlighted that previous areas targeted with agrovets, Wajir and Turkana counties, may not have the required demand for holistic services. Laikipia and Taita Taveta, however, are much closer to the main market of Nairobi and Mombasa respectively, and are already a hub of livestock rearing, providing a better area in which to test the VSP model.

Selection and training on VSPs focused heavily on entrepreneurship, understanding and disseminating market requirements, and aggregation of livestock. Whilst VSPs have also had basic training on livestock health and service provision, entrepreneurial skills have been vital in ensuring the VSPs remain in business as key contacts in the village and organising consistent supply for the buyers in return for a fee.

The commercial success of VSPs is still to be determined, but early results suggest that even in communities not used to paying for formal services, VSPs are able to generate fees. With approximately 50 households each, VSPs are earning enough to justify their continued presence, and as pastoralists continue to become accustomed to their presence these earnings are expected to increase.



Our community was not good at the livestock business. They did not know how they could make money out of their livestock. They did not know about the drugs, specialist spraying or de-wormer. Since we were trained, we've started to see business opportunities. We were taught about fake and expired products. We now know the quality of animal required in the market.

I hold meetings with the community for awareness creation and education. When we start talking about how to make money from livestock, we find it's easier than before. The community has started keeping the types of animals required by the market. Almost every household has an animal of four to five years being raised for the market. Now, we have more than 100 reared for the market.

TRAINED VILLAGE SERVICE PROVIDER
LAIKIPIA COUNTY



Lessons learnt

1. Pastoralists' lack of financial education presents a risk to their continued integration into markets.

A key risk identified by ranches was the low level of experience pastoralists have in managing finances. Without advice on how to reinvest cash following the sale of fattened animals in productive endeavours, and whilst pastoralists become accustomed to different income generating activities, there is the risk that assets are sold for cash which is never re-invested. If this happens, pastoralists who have not invested their income from the sale of livestock will deplete their assets. Programmes implementing interventions that change the way assets are used need to monitor this risk and use mitigation measures that can protect assets.

2. Grass feedlots are a significant opportunity to intensify production on rangelands.

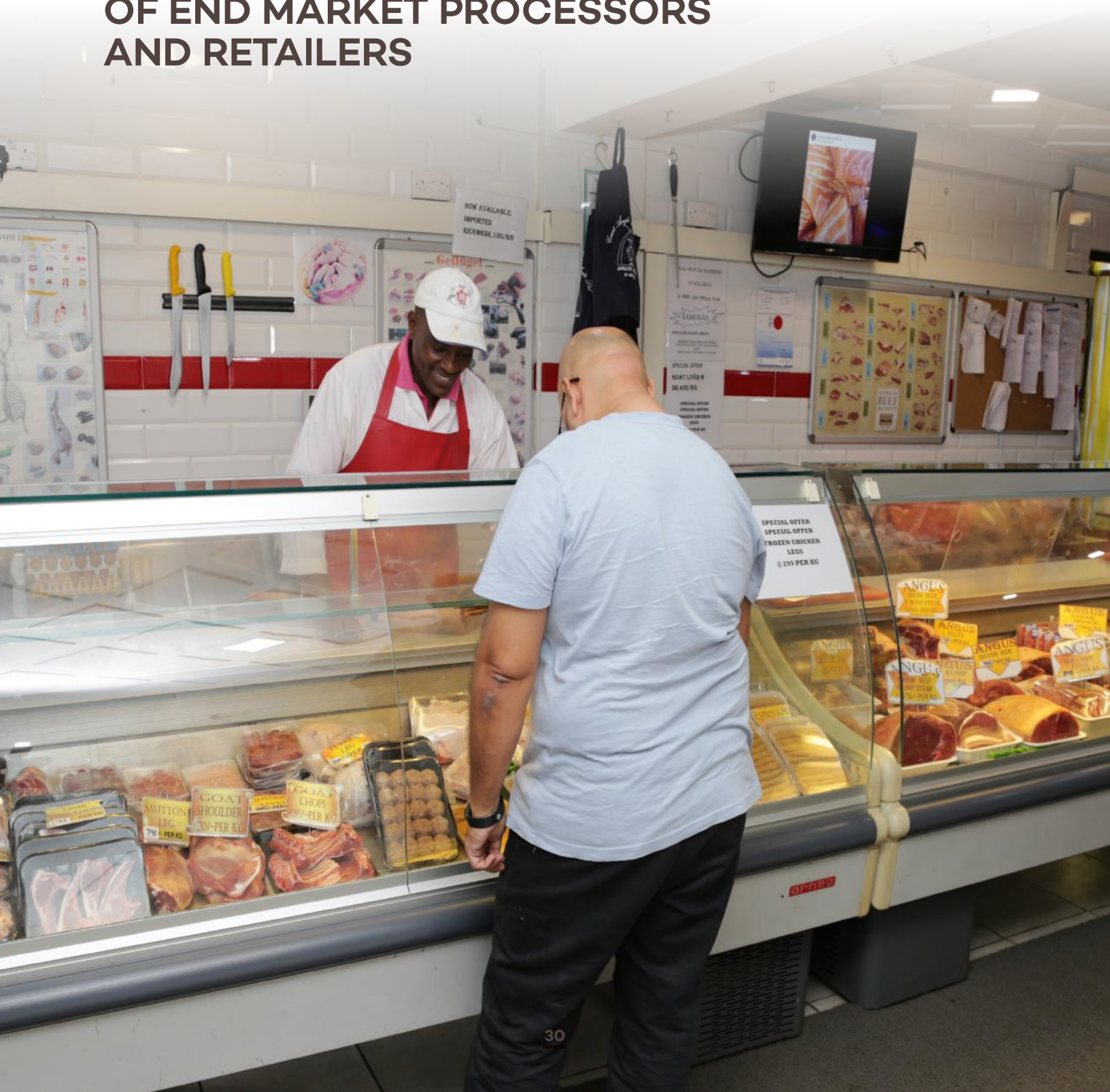
Cooperatives in Laikipia have reported that they already run some rangeland management to reduce the degradation of land. However, this is becoming an increasing risk to livelihoods, and may result in more violence. Borana Ranch has developed its own grass-fed feedlot with the potential for replication. By using the results of this private sector led pilot, KMT may be able to encourage replication within cooperatives.

3. Creating commercial models is reliant on community behaviour and investing in understanding socio-economic norms is important to success.

The VSP model relies on VSPs earning enough money to support themselves. However, this may not be through fees and set commissions. Mugie Ranch attributed their success to their willingness to take payments in-kind from farmers, who provide livestock in exchange for fees. Similarly, VSPs working in communities that are not accustomed to paying set fees for services are not charged. Rather, the services are 'appreciated' by customers, through either cash or in-kind contributions. In less mature markets, programmes need to be adaptable in their development of commercial models, recognising that whilst generating returns is important, these should be in keeping with local norms.

BUILDING THE CAPACITY

OF END MARKET PROCESSORS AND RETAILERS

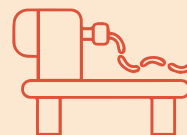


Historical context

Processors and retailers in Kenya's meat market do not have the operational capacity required to follow common food safety standards. The modern cold chain for processing is not effectively used, and poor practices during slaughter, transportation and processing leads to high post-harvest losses, up to 14%. For consumers, it means relatively expensive, and low-quality, meat and unsafe meat that has been attributed to various health scares, and a lack of differentiated purchasing options.

Kenyan meat is rarely exported, with few processors able to meet international certification standards. Large-scale export ventures have failed, including the national Kenya Meat Commission. Despite some recent growth, Kenya has been left without a significant meat export industry. Between 2006 and 2016, exports of beef, goat and cattle never reached over 4,000 tons, compared to South Africa's ability to export 39,000 tons of beef alone in 2016, and Ethiopia's average export of 15,700 tonnes of beef, goat and sheep between 2011 and 2016.²⁴

Investments in improving processing capacity in the sector are low despite wide-spread economic growth in Kenya, with a lack of both regulatory and competitive pressure. Traditional harvesting is done locally, in abattoirs that are effectively unregulated; whilst the government is aware of these establishments, it does not have the capacity to enforce standards. Without regulatory pressure, highly competitive processors focus on price and speed of delivery, rather than quality.²⁵ Processing plants are predominantly publicly owned, and privately operated, further reducing incentives to invest in modern infrastructure, making most abattoirs unfit for purpose.²⁶



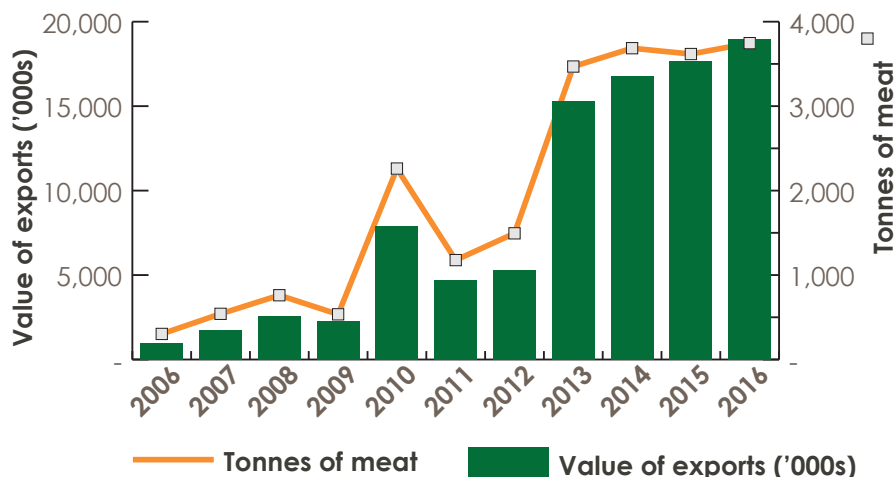
Processing standards are very low



Only **20%** of slaughterhouses have hand washing facilities



31% of workers are aware that disease could be transmitted from animals



BOX 3:
Kenyan meat exports

Facilitating retailer investments in improving supply chains

KMT supported Tusky's Supermarket Limited, one of Kenya's largest supermarket chain, to pilot Hazard Analysis and Critical Control Points (HACCP) international food safety standards as a way of both decreasing losses and strengthening their reputation as a high-end supermarket chain.

Tuskys was the first supermarket to open a butchery in Kenya, and the management prided itself on having been at the forefront of many retail innovations. Whilst Tuskys initially had reservations about the level of demand for cold-chain meat and its associated costs, KMT's de-risking support influenced the board's agreement to trial the approach.



We identified about five locations where we said we would implement HACCP and picked 10 champions in partnership with KMT. We made a schedule for cleaning, for maintenance, a checklist for checking temperature. All that was put in place in the five trials.

HEAD OF FRESH FOOD
TUSKYS SUPERMARKET LTD



We are at a level where this has to be in every store. For me to be able to do that, we set-up a food safety and health department

HEAD OF FRESH FOOD
TUSKYS SUPERMARKET LTD



This had an immediate impact. Between 2016 and 2017, revenue and profit grew 36% and 16% respectively; meat storage times increased from two to ten days; and the average basket value of meat per customer moved from KES 300 to KES 550.

Tuskys have continued investing in ensuring higher standards by:

- Expanding HACCP certification and cold chain system to all its 54 branches.
- Establishing a food health and safety department with a designated food scientist.
- Investing KES 400 million in a centralised warehouse, which raises food safety standards.
- Choosing suppliers based on their ability to identify and trace animals.
- Planning consumer engagement drives which differentiate Tuskys by quality.



Enabling processors investments in meeting international food safety standards

Neema slaughterhouse opened in 2015, with the aim of becoming a local high-quality slaughterhouse. However, it soon found that the low local prices could not justify the cost of maintaining high standards. KMT identified this as an opportunity to illustrate the premiums available to high-quality slaughterhouses. With managerial capacity extremely low, KMT first worked with Neema to improve governance within the business, providing a solid foundation on which to improve processing standards. With better management, Neema successfully implemented HACCP standards for processing, aiming to access export markets.

This work enabled Neema to establish themselves as an export certified slaughterhouse, with increased prices justifying the continued investment in higher processing standards. While KMT have continued to offer guidance, Neema have independently made significant investments. For example, they have established a quality assurance department and invested in reaching higher FSSC standards and are now slaughtering up to 3,000 animals a day for export to six countries in the Middle East. If successful, they expect to be the first slaughterhouse that is certified with FSSC version five in Kenya, unlocking potential markets in Europe, Asia and America.

BOX 4: When can programs justify supporting large businesses?

By supporting both Tuskys and Neema, KMT were investing in companies with very large revenues. It could easily be argued these companies did not need additional financing, and so are the wrong type of company to be supporting. However, KMT came to the decision that these investments had the potential to be catalytic, regardless of the financial clout of the partner.

This has been justified. Both Tuskys and Neema have continued to invest heavily after KMT withdrew support. More significantly, by targeting behavior change within significant market players, have influenced change at a wider scale. Tuskys, the first retailer to become HACCP certified, had their HACCP trained staff poached, as other retailers seek to prove their credentials by also meeting international standards. Neema have gained business from lower-standard slaughterhouses, and have been visited by government officials looking for best practice, resulting in other slaughterhouses being pressured to improve operations.

Whilst the market, and these businesses, were heading in the direction of improving standards, KMT's role has been catalytic in accelerating behavior change to the benefit of businesses and consumers.

"We started on a very high note, just because of KMT holding out hand. We became HACCP certified and found our way to FSSC certification. Within one year, Neema was the talk of the town." – Neema Slaughterhouse, Nairobi

Increasing industry coordination and investments to improve the value chain infrastructure.

With Neema proving the commercial benefits available to those accessing high-value export markets, KMT recognised the potential for cost reduction through coordinated investments from exporters. KMT supported the formation of the Kenya Meat and Livestock Exporters Industry Cooperative (KEMLEIC) which was registered in 2017 as the first association of its kind in Kenya.

In a highly competitive sector, this formation alone required significant effort, and relied on two key aspects. The first was KMT's role as an independent facilitator. Previous attempts to bring together exporters failed when members began undercutting each other and were unable to resolve their differences. However, KMT was able to foster trust as an independent organisation during the critical set-up phases of KEMLEIC.

The second was the involvement of key market players from the beginning. Particularly KEMLEIC's secretary, Mr. Ali Haji Yussuf, is well respected in the industry and can quickly coordinate members. To date, this has kept members aligned.

Since its inception, KMT have helped situate KEMLEIC as a coordination point between its members. With the aim of self-regulation, members are now investing in meeting universal standards, to improve their ability to market produce internationally. KEMLEIC are also investing in developing the supply chain, opening holding pens for the purchase of livestock in key areas of the country. This will significantly decrease transportation costs for exporters, allowing for further investments in the sector. For rural pastoralists, the changes could also be significant, who will benefit from a consistent local market that competes directly with local traders and is able to off-take large numbers of animals.

For long-term sustainability, it is important for KEMLEIC to be able to have influence beyond its members, with county and national government. With KMT's support, KEMLEIC are now able to lobby for support in the development of the sector. This again has relied on KMT's independent status, which has enabled open and frank conversations about the development of the sector



KMT supported the formation of the Kenya Meat and Livestock Exporters Industry Cooperative (KEMLEIC) which was registered in 2017 as the first association of its kind in Kenya.

Lessons learnt

1. Processors targeting high value export markets were needed to justify investment in food safety standards. This is now translating into domestic improvements.

Having invested in high processing standards, Neema quickly found they were not able to recover costs selling to the domestic market, with high quality meat unable to attract a significant premium, making it likely they would quickly go out of business. This required a quick repositioning to target the export market, and further investment to reach certification standards. Once in place, however, Neema has provided an example for other processors in Kenya and the government. Further, spare capacity is being used to provide high quality meat to domestic buyers, increasing the availability of high-quality meat for consumers. Targeting high-value markets can spark sector wide investment, as new standards trickle down to lower value domestic markets.

2. When influential market actors, such as Neema and Tuskys, improve practices, norms in the market can quickly change.

Changing behaviour within market leaders has very quickly put pressure on the rest of the industry to compete. In Kenya, this has resulted in many high-end supermarkets now pursuing certification, with a few going beyond the standards set by Tuskys. Neema have demonstrated an example of high standards for meat processing being met in Kenya, increasing pressure from regulators and providing competition against quality, rather than on price alone. In both cases, development has been accelerated by a key market player taking a step towards better quality produce.

3. As standards increase, there is a high chance of displacement as informal providers are unable to compete.

As formal retailers and processors begin investing in meeting higher food safety standards, there is a high probability of less mature businesses being unable to compete. It is not clear how this may impact these smaller businesses, but if government regulations start closing businesses, or consumers tastes change quickly, it is not clear how many of these businesses will survive. Neither is it clear if mitigating measures have been put in place by the government or development partners, creating an area for further investigation.

STRENGTHENING CONSUMER AWARENESS AND DEMAND

FOR HIGHER QUALITY MEAT

UP: CONSUMER KNOWLEDGE AND AWARENESS

ISSUE: CONSUMER CONCERNS ON SAFETY OF MEAT (DRUG RESIDUES, UNINSPECTED MEAT, GAME MEAT, AND CARCASS)



Historical context

On the demand side of the meat industry, consumers in Kenya generally prefer meat from the hot chain, where meat is slaughtered and sold without refrigeration typically the same day. Attributes that are used to define quality by consumers include: taste; freshness / slaughtered the same day; and leanness/ absence of fat.

Meat from the hot chain, to most consumers, is seen as providing these attributes more than meat from the cold chain. However, there are significant risks, with much higher rates of contamination of meat which does not go through the cold chain. Without information, consumers do not understand the benefits of meat sourced from the cold chain, and so do not demand this from retailers.²⁷

Without consumer demand, there is little interest from retailers and processors to change their practices. Despite a general level of awareness on the benefits of cold chain processing, and a significant number having some cold chain equipment, much of this is not used to its full extent. Most retailers instead focus on providing meat seen as fresh by consumers, slaughtered on the same day.

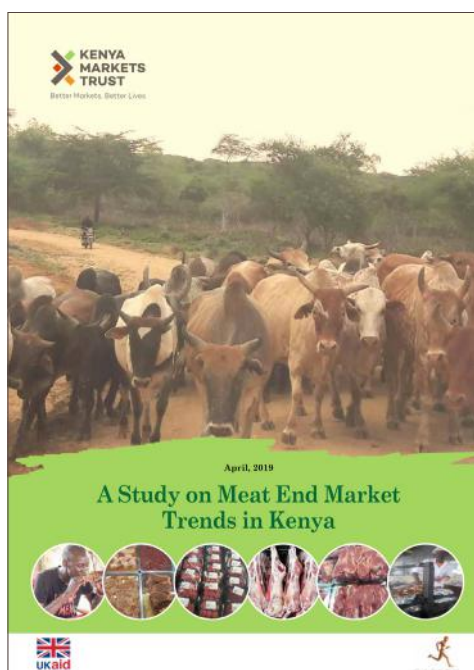
Recent consumer perceptions of the meat industry are being shaped by increasing household incomes, particularly in urban areas. Whilst overall demand is increasing, in some cases consumers report reducing their amount of red meat, with reasons including health concerns and quality concerns.²⁵

The complex chain of traders at multiple levels also prevents production information flowing to consumers. Information on breed, location and age are not easily verifiable, meaning markets demanding traceability. Whilst not an immediate constraint to pastoralists integration into markets, consumer trends indicate a growing demand for traceability that could further isolate pastoralists.



Increasing consumer awareness to change demand patterns

After multiple years of working to improve the quality of the supply chain, KMT were frequently confronted with the persistent consumer preferences that encouraged retailers and processors to continue traditional processing. KMT then focused efforts on understanding consumer tastes. This confirmed that most common preference in high-, middle- and low-income groups was hot chain meat. It also unearthed an emerging taste for, and understanding of, modern cold chain meat, particularly with higher income consumers.



With key findings outlined, KMT disseminated a paper on meat end-market trends in the summer of 2019. This sparked media interest in the sector, leading to several publications and news stories relating to KMT's publication.

Whilst this generated some interest, an expose titled 'Red Alert' ran two months later, further raising the issue of food safety to the awareness of most Kenyans.

Subsequent exposure of the use of preservative chemicals by retailers led to an industry-wide consumer crisis.

KMT reacted quickly to the surrounding interest by engaging a PR company, I-Witness, who provided strategic guidance to a group of industry stakeholders, which included the government, retailers, processors and associations. Their guidance included public acknowledgement of faults, quick action from regulators, continuing media education, and increased quality of information available to consumers.

This quick action halted panic and reframed the crisis into a call for action to improve food safety standards. This was a dramatic shift in both consumer and the media's behaviour caused by greater awareness of the risks of the hot chain system.



The important thing was not to deny the findings and have everyone start a blame game. We had to create a unified response that gave the public confidence that action was being taken

I-WITNESS
NAIROBI COUNTY





Working with government to implement national food safety standards

The government is reacting by increasing regulation within the sector. Due to its role in organising a sector response, KMT played a role in initiating the idea of a multi-agency task force to convene stakeholders, and has a seat on the task-force to input into regular meetings. This taskforce has to report back to the President, as well as other senior politicians, and has the task of coordinating a policy response across governmental departments, private sector associations and members of the media.

With KMT involved as a respected industry expert, the taskforce has focused on protecting consumers and repairing confidence in the meat industry. With various levels of the taskforce, the aim is to create a comprehensive national food safety policy and bill, alongside a food safety management plan to assist in its implementation.

The scale of investment in time and resources from the government has demonstrated the value they prescribe to it, and KMT's involvement has enabled it to influence discussions to encourage pro-poor participation of the private sector. As of March 2020, the final bill was with the national cabinet for approval. If successful, it will combine 34 separate acts into one single bill, significantly simplifying food safety regulation.

Enabling businesses to compete on quality and increase consumer information

Consumer and regulator pressure led retailers and processors to quickly adapt their behaviour, changing the way they deliver information to consumers. As quality becomes an increasing priority for consumers, it is vital they are educated on how to look for it.

This increasing prioritisation of quality also provides a way for processors and retailers to differentiate products, where currently meat is only sold as either “on” or “off” the bone regardless of the cut or processing technique used. Without this, consumers are not sure what to look for. For example, during the meat consumer crisis in 2019, many Kenyans began to look for flies on their meat as a sign of quality, believing this was a sign that preservatives had not been used.

The first example of changing behaviour came from KMT’s work to orchestrate the sector’s immediate response to the meat consumer crisis. With the need to respond to incorrect information, KMT facilitated a meeting of the Retailers Association of Kenya (RETRAK) to develop a strategy for providing consistent and accurate information to consumers and the media, dispelling myths and increasing awareness of best practices. This marked a shift towards marketing in the meat market, with retailers recognising the value of building a meat brand based on quality. This strategy is now being replicated by individual retailers.

With quality and hygiene significantly increasing in importance, and with retailers seeking ways of signalling their ability to meet these, the standards KMT had been trying to bring to the market have now generated significant interest. The crisis highlighted the work KMT had been conducting on HACCP standards with Tuskys, and increased pressure on others to compete on quality, rather than price alone. Other large supermarkets are now implementing different levels of certification standards, including Naivas, Carrefour and QuickMart. These supermarkets are aiming to meet or surpass the standards set by Tuskys, cementing quality as a new area of competition between retailers.

Neema, one of a growing number of modern slaughterhouses, is an example of how those catering for higher quality meat consumption are already benefitting from this shift. Naivas Supermarket was previously buying from a local slaughterhouse. However, with this slaughterhouse unable to meet higher standards, Neema Slaughterhouse now supply Naivas with between 25 – 35 cow carcasses a day. In line with this increasing demand, Neema are investing in a second slaughterhouse to be used for expansion into the domestic market.



Before, Naivas and Tuskys used to buy their meat from those local slaughterhouses. People are now yearning for good quality meat. Naivas cannot buy their meat from where they used to buy their meat from, because of the shifting consumer standards. That is how Naivas started slaughtering here.

NEEMA SLAUGHTERHOUSE
NAIROBI COUNTY



Building an enabling environment for livestock identification

Another tool for increasing consumer information that has seen increased interest after the 'Red Alert' scandal is Livestock Identification and Traceability Systems (LITS). LITS has always been viewed as the gold standard for improving consumer information and regulatory implementation, and the State Department of Livestock had been trialling approaches to LITS since 2006. However, these had been heavily funded by donors without legal and policy backing, rendering them as one-hit-wonders, with no repeat tagging of animals.



One thing that held back LITS was that we didn't have the necessary legal and policy framework to support. Without this legal and policy framework it becomes difficult for government to justify the investment of committing farmers to this system.

STATE DEPARTMENT OF LIVESTOCK
NAIROBI COUNTY



KMT became involved in 2017, to assist in the development of a county-wide pilot for a LITS in Laikipia. With the State Department of Livestock showing interest, KMT among other partners moved to support the development of a National Traceability Bill. KMT's decision to enter at the point was timely, and they have played the role of facilitator, maintaining pressure on government departments and providing funding for public consultation stages, which previously have cost a large amount of time and money.

KMT have fast-tracked these stages quickly, leveraging pressure coming from the public for traceability, to help bring the bill reach the final stages of public consultation. Once finalised, Kenya will have a comprehensive legal framework for the rollout of livestock identification nationally, addressing the constraints other pilots have faced. This is predicted to not only impact food safety, but also cattle rustling and crime, access to finance for pastoralists, and disease control by the government.



We've done a lot of work over very many years. But KMT support and other partners has really given it strength. We now feel like we are getting somewhere. This year, for the first time, we got a budget line from the treasury. A budget line means a lot in Government.

STATE DEPARTMENT OF LIVESTOCK
NAIROBI COUNTY



Lessons learnt

1. The media can be a powerful tool, but must be carefully managed to reduce the risks of panics and incorrect information.

By engaging the media, KMT played a role in creating interest in the sector, which later led to a significant nationwide scandal. At this stage, when messages from the media began to cause panic, it was vital for a coherent message to come from the industry. The Retailers Association of Kenya, whilst being the right platform, did not have the capacity to do this and so required the support of an independent stakeholder. By bringing together key stakeholders and investing in a PR company to deliver strategic guidance, KMT enabled the sector to respond in a positive way, leading away from blame-games and towards a proactive, positive response. Investing in professional advice at a time of crisis has been credited with containing panic and has shown market players better ways to market themselves in the future.

2. LITS can improve the quality of information but needs to be supported by national policies.

Whilst LITS has both the potential to increase information in the value chain and reduce costs of supporting services, numerous pilots have failed due to the lack of regulatory backing. A legal requirement for animals to be put into a LITS system was the next step, although not one that could have been taken without existing government interest. Unlike insurance, where the market was still immature, KMT introduced the government to LITS at the right time, enshrining in law the foundations needed for continued development.

Unpopular. Market share for red meat among low-income earners is 34pc of the meat consumed

Poor Kenyans eat more fish as rich prefer meat

New study attributes trend to ability to buy cheaper portions of the delicacy compared to other meats.

By Dominic Omond
dakure@standardmedia.co.ke

Despite complaints of fish being expensive, a new study has found that the delicacy is more popular than meat among the poor.

A new study on the consumption patterns of meat in Kenya by Kenya Markets Trust, a non-governmental organisation, found that it is the rich and middle-income Kenyans who eat more meat.

Conversely, those from low-income households prefer fish as it can come in "manageable portions."

"Consumers in the low-income segment prefer fish because of the ability to buy



Sardines, popularly known as omena, are preferred by low-income earners because of their affordability. [David Gichuru, Standard]

According to report titled "A study on meat end market trends in Kenya", among the low-income segment, the market share for red meat is

The study, which found that consumption of meat increases with income, estimated consumption of red meat - beef, mutton and goat - at 43

The study was conducted in 13 counties - Eldoret, Nakuru, Kajiado, Kakamega, Makeni, Machakos and Garissa.

Others counties that were Kiambu, Kwale, Kilifi, Kwale, Nairobi and Nyanza.

Cereals remain the main supplier of calories to a majority of Kenyans despite their share dropping from 52.5 per cent in 2009 to 45 per cent last year, according to the latest Economic Survey by the Kenya National Bureau of Statistics (KNBS).

Interestingly, the deficit in the consumption of cereals such as maize, wheat and rice has not been plugged by a proportionate increase in meat consumption.

If anything, KNBS noted, the share of meat consumed by Kenyans dropped from five per cent in 2009 to 4.2 per cent last year. However, the share of milk consumed over this period surged from 1.7 per

SECTOR EVOLUTION



Since KMT entered the livestock sector in 2013, there has been significant growth. Manufacturers of animal health products have grown, expanding into new counties. Meat exports have risen significantly, focusing on Middle Eastern markets, and livestock insurance has covered over KES 196 million in livestock. At a macro-level, livestock production has increased by 33%, with beef production increasing by 53%, accompanied by increases in both the number of cattle and yield per carcass.

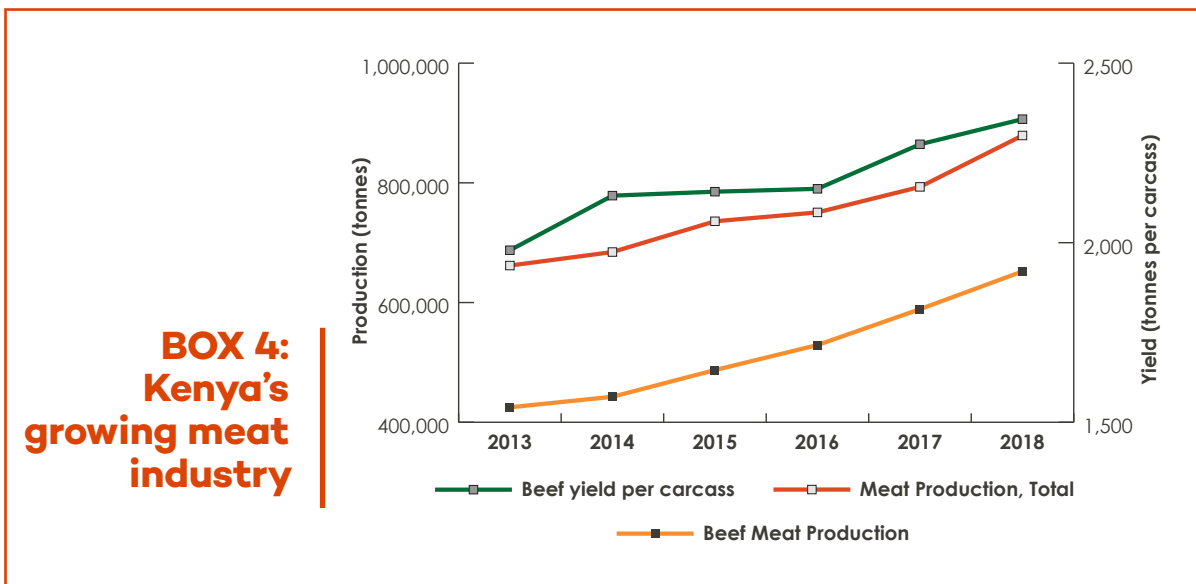
To achieve these impact figures, KMT have worked to create significant behaviour change with market actors, in some cases resulting in changes that are systemic in nature.

Livestock production is being formalised. Pastoralists in rural areas are being serviced by local agrovets, themselves increasingly supported directly by manufacturers investing in a better supply network. Pastoralist links to markets are becoming stronger, with better information and prices being made accessible.

KMT's support of national programmes have had a mixed impact. IBLI has not taken off, with government unable to scale their support of the product, and investments look like they may have been lost for now. However, LITS is showing more promise, with pilots starting from a strong foundation of national government led strategies. Beyond these two, KMT has been able to influence multiple policies, which will impact development throughout the chain.

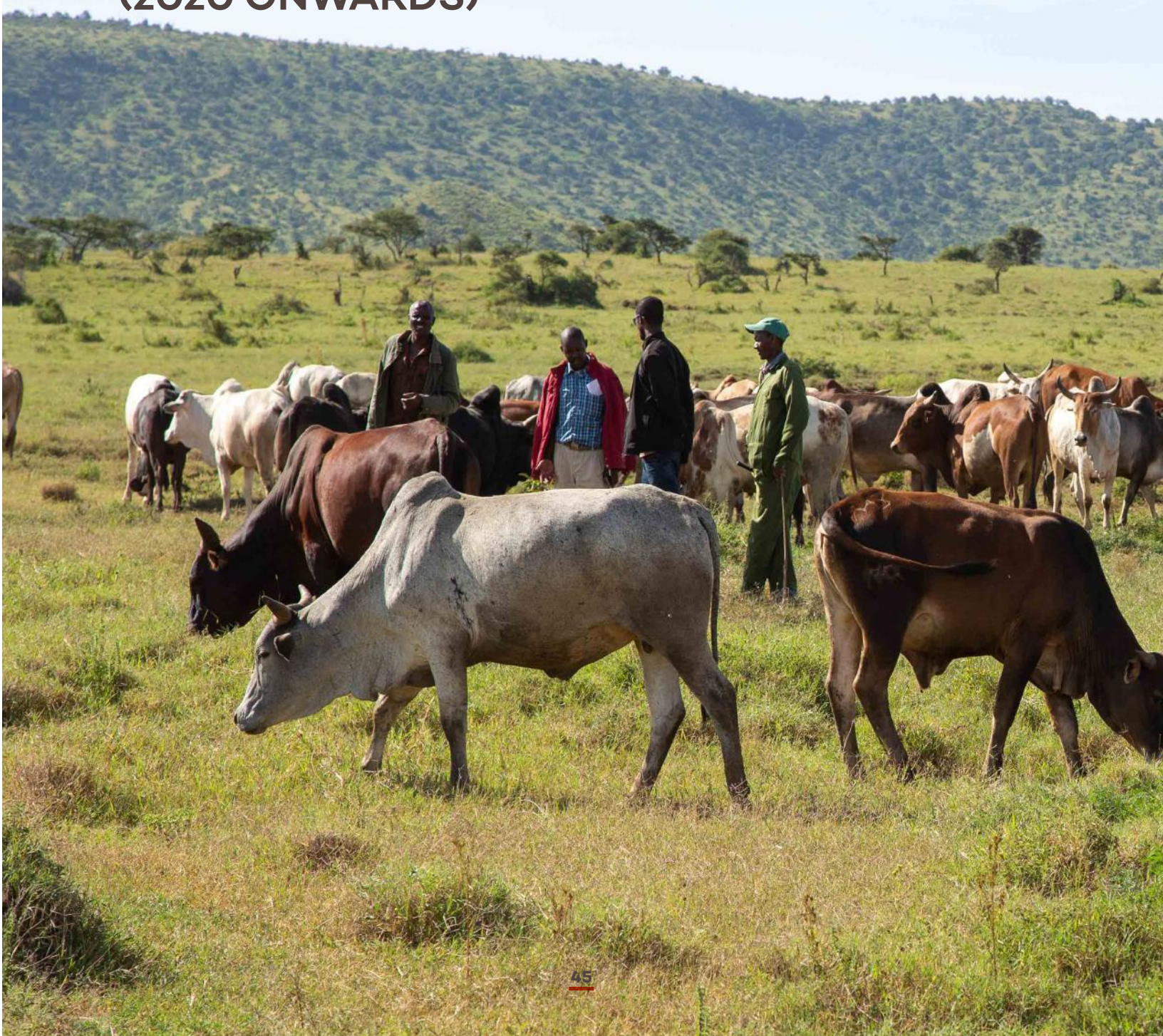
Increasing consumer awareness has put processors and retailers under significant pressure to increase standards, and KMT has helped first-movers in the market to adopt standards that have brought consumer confidence and opened new export markets for Kenyan products.

KMT has been dynamic in its approach to development in the livestock sector, reacting quickly to opportunities, and withdrawing support when they have lost traction in the market. This has worked well, allowing them to bring about systemic changes through the targeting of key stakeholders.



FUTURE PATHWAYS

FOR SYSTEMIC CHANGE
(2020 ONWARDS)



The livestock sector continues to develop rapidly, impacting the livelihoods of some of the poorest in Kenya. In the last seven years, the evolution of the sector has largely been positive. Investments in production are increasing the quantity of meat whilst achieving higher quality standards. Sector coordination and governance has improved through the introduction of international safety standards, the formation of a sector association of livestock processors and exporters (KEMLEIC) and the recently updated National Livestock Policy.

However, despite these early signs of the sector's transformation, significant challenges remain and the future is far from certain. Continued growth of the sector has begun to show signs of tension between the continued ability of pastoralists to access markets and the drive for higher safety and quality standards. The question of how to integrate these pastoralists into a modern, efficient and climate-smart livestock sector needs to be resolved.

To ensure the long-term future for the sector, a key focus needs to be on establishing sustainable growth pathways that address challenges related to water and land management practices and climate change impacts.

The current evolution of the system will have long lasting impacts on the potential for the poor to continue participating and benefitting from the sector's continued growth. Here are some of the key changes which will allow their participation to continue and deepen:

a. Continued integration of pastoralists into modernised and climate-smart production systems

Pastoralist communities that have benefitted from KMT models now have better access to animal health inputs and services, whilst being closer to formal markets that provide consistent demand and higher prices. However, there are still constraints to pastoralists' ability to meet higher production standards, particularly within practices for medicating animals and the end weights cattle can achieve. With increasing pressure for high-quality meat coming from consumers, pastoralists must have the information and tools available to allow them to meet these requirements.

The ability of pastoralists to adapt to climate change is essential to the long-term viability of the sector. This includes introducing a suite of interventions such as drought-resistant breeding programmes, optimal grazing approaches, and insurance and other solutions to adapt to climate risk.

Local agrovets and manufacturers of animal health products have a role to play, investing in their supply networks in rural areas. Increasing access to, and information on, animal health products will increase the productive capacity of pastoralists and the value of their livestock.

Aggregators also have a critical role to play. To meet demand from high-quality buyers, aggregators (such as ranches and feedlots) must be encouraged to invest in their knowledge of pastoralists, understanding of market requirements, and ways to make the best commercial returns from cattle.

KMT will continue to test and crowd investments into appropriate fattening and finishing production models and inclusively engage pastoralists as part of high-quality and commercial production systems. These models will seek to incorporate practices that are environmentally-friendly, and reduce wasteful production and consumption patterns, thereby building a sector that is climate-resilient.

b. Increasing education of consumers on quality meat and best practices, which in turn drives investment in improved quality, traceability systems and cold chain technology

The adoption of cold chain across the meat value chain is vital to reduce post-harvest losses and increase quality of meat. To drive these changes, it is important to educate consumers to demand improved quality meat from retailers and processors.

Efforts made to raise consumer awareness on the dangers of unsafe meat handling practices have resulted in positive changes in the market. Whilst the overriding direction is positive, there are cases where the information being given to consumers is not correct (for example, not accurately describing the safety risks of hot chain meat), constraining some of the positive impacts that greater awareness brings.

Retailers, processors and government have a strong interest in ensuring this new focus on the quality of meat is maintained. First steps have been taken, and stakeholders will need to continue to invest in educating consumers on the benefits of high-quality meat.

For retailers and processors, this offers a new way of competing, and may lead to significant future investments in supply chain technology, including cold chain processing and livestock identification.

The government must make sure it is monitoring the information being given to consumers, and investing in awareness campaigns has the potential to improve its ability to regulate the market, by enabling consumers to take an active role in encouraging high standards.



c. Building sector capacity to commercially produce fodder and manage rangelands while managing environmental impact and adapting to climate change

With better information to pastoralists impacting their ability to meet market requirements, the quality of fodder available to them has been identified as a new constraint. This is particularly experienced in the dry season where pastoralists rely on degraded rangelands that are experiencing increasing droughts. Without sustainable access to fodder, pastoralists increasing their production risk degrading land and risk losses during droughts. Building their ability to access good quality fodder can avoid this, and opens the door to pastoralists investing in better breeds of cattle.

Ranches can play a role by opening their land to pastoralists. There is now evidence that this approach provides commercial benefit to both ranchers and pastoralists, while significantly improving relations between the two. Commercial feedlots offer an alternative for scaling up access to finishing services. However, in ASALs, there is no established network of feedlots or model for new market entrants. For commercial feedlots to prosper, risks to first movers need to be reduced by reducing costs, for example with established business models to use, and strengthening demand through measures similar to those KMT has already engaged in.

There is already some progress here. The State Department of Livestock have issued tenders to support entrepreneurs to set up feedlots in 14 counties. However, these efforts can be built upon to help establish a network of feedlots accessible to pastoralists. Technical assistance can accelerate this process further, by ensuring that new entrants to the market are supported to test and develop working business models. Beyond this, it is essential that sustainable water, land and waste management practices are adopted, and that the climate change impact of different feed regimes is evaluated.

Another alternative is for pastoralists to invest in their own rangeland management systems and community feedlots. This is done by some cooperatives, but there is the potential for these systems to benefit significantly from low-cost grass feedlots, that are being tested in ranches with promising results. Developments here will make pastoralist communities more self-sufficient, more attractive to external investors, and better able to cope with climate events.

d. LITS is the next step in providing high quality information in the sector

Livestock Identification and Traceability System (LITS) has been repeatedly trialled in Kenya, with these trials consistently failing to develop a commercially sustainable mode. However, in recent years, significant steps have been taken to create a policy and legal framework for national implementation. For this to be successful, there are investments required in infrastructure, including: a national database, capable of maintaining data securely; robust equipment that can be easily used in rural locations; and a network of trained field staff who can supervise the tagging of the many animals roaming Kenya.

Success will also require collaboration between the public and private sectors. The national government must provide clarity on rules and regulations, using an approach that does not put too much strain on pastoralists facing a brand-new system, whilst encouraging private sector participation where appropriate. County government support will also be critical, to ensure that the required infrastructure is maintained and that information is updated consistently. Education campaigns can ensure the population is informed on what LITS is and why it is necessary.

e. Fostering increased cooperation and self-organisation

With quality of meat becoming a significant factor for consumers amid the growing meat deficit in the country, there are increasing calls for institutions within the sector to better cooperate and coordinate to drive the needed improvements in quantity and quality, while managing environmental impacts. Key institutions are becoming stronger, with increased commitment from the State Department of Livestock, the creation of KEMLEIC (the industry association for exporters and processors), and the re-awakening of RETRAK (the industry association for retailers). Retailer and processor associations are implementing certification standards with members and investing in the sector on behalf of their members. These changes show a change in retailer and processor norms, with a focus on quality of production and using this as a key marketing tool.

This is a significant shift, and needs to be embedded. Increasing the capacity of key actors to cooperate and self-organise has the potential to further improve standards, whilst reducing the costs of regulation for the government. One area where government can play an important role is the introduction of policy and regulation related to environmental performance and climate impact of the sector.

ENDNOTES

1. Kenyans.co.ke. (2018). Uhuru Buys Ksh1.1 Million Dairy Cow. <https://www.kenyans.co.ke/news/35208-uhuru-buys-ksh11-million-dairy-cow>
2. FAO. (2019). FAO's role in animal production. FAO, Rome.
3. FAO. (2016). Pastoralists' complex tenure rights are key to community resilience. FAO, Rome.
4. FAO. (2020). FAO's role in livestock and the environment. FAO, Rome. <http://www.fao.org/livestock-environment/en/>
5. Otte, J.; Costales, A.; Dijkman, J.; Pica-Ciamarra, U.; Robinson, T.; Ahuja, V.; Ly, C.; Roland-Holst, D. (2012). Livestock sector development for poverty reduction: an economic and policy perspective - Livestock's many virtues. FAO, Rome.
6. FAO. (2017). Africa Sustainable Livestock 2050 - Country Brief: Kenya. FAO, Rome.
7. CELEP. (2017). Recognising the Role and Value of Pastoralism and Pastoralists. The Coalition of European Lobbies for Eastern African Pastoralism, Policy Brief.
8. Herrero, M.; Havlik, P.; McIntire, J.; Palazzo, A.; and Valin, H.; (2014). African Livestock Futures: Realizing the Potential of Livestock for Food Security, Poverty Reduction and the Environment in Sub-Saharan Africa. United Nations, Geneva.
9. Engida, E.; Guthiga, P.; Nyota, h.; Karugia, j.; (2014). The Role of Livestock in the Kenyan Economy. ReSAKSS, Nairobi.
10. KMT. (2019). The Economics of Modernizing Meat Industry in Kenya: Untapped potential of meat industry in Kenya. KMT, Nairobi
11. The "hot chain" refers to processing without refrigeration. Given meat's high perishability, animals are slaughtered and meat is transported and sold in a short space of time, typically in one or two days.
12. KMT. (2015). Animal Health Baseline Report. KMT, Nairobi
13. D'Alessandro, S.; Caballero, R.; Lichte, J.; Simpkin, S.; Swift, J.; Nzuma, J.; Mirage, A.; Njue, E. (2015). Kenya - Agricultural sector risk assessment. World Bank, Washington D.C.
14. Hazell, P.; Sberro-Kessler, R.; Varangis, P. (2019). When and How Should Agricultural Insurance be Subsidized? - Issues and Good Practices. World Bank, Washington, DC.
15. Mahul, O.; Stutley, C. (2010). Government support to agricultural insurance: challenges and options for developing countries. World Bank, Washington, DC.
16. Jensen, N.; Barrett, C.; Mude, A. (2015). The favourable impacts of Index-Based Livestock Insurance: Evaluation results from Ethiopia and Kenya. ILRI Research Brief. 52.
17. KMT. (2014). Index Based Livestock Insurance - Baseline Report. KMT, Nairobi
18. FAO STAT. (2020). Accessed on: <http://www.fao.org/faostat/>
19. I-Dev. (2014). Livestock & Meat Investment Analysis. I-Dev International, San Francisco
20. Roba, G. (2018). Food Policy, <https://doi.org/10.1016/j.foodpol.2018.01.013>
21. Carcass yield represents the proportion of the carcass after removal of low value parts, including the blood, head intestines etc.
22. KMT. (2019). A mapping and analysis of livestock finishing enterprises and business models in Kenya. KMT, Nairobi.
23. Reuters. (2018). Deadly ranch invasion shows land-use conflicts in Kenya. Thomson Reuters Foundation, November 28, 2018

24. FAO STAT. (2020). Accessed on: <http://www.fao.org/faostat/>

25. Kago, J.; Roesel, K.; Kang'ethe, E.; Wangoh, J.; Makita, K.; Grace, D. (2015). Food and Safety in Informal Markets – Ch 14 Beef in Kenya contaminated from the start -. Routledge, Oxford.

26. Cook, E., de Glanville, W., Thomas, L. et al. (2017). Working conditions and public health risks in slaughterhouses in western Kenya. BMC Public Health 17

27. KMT. (2019). The Economics of Modernizing Meat Industry in Kenya: Untapped potential of meat industry in Kenya. KMT, Nairobi.



Better Markets, Better Lives

CONTACT US



14 Riverside, Cavendish Block,
2nd Floor, Suite B, Riverside Drive.



+254 20 2588343
+254 722 201233



info@kenyamarkets.org
www.kenyamarkets.org