



Agriculture Investment Opportunities in Kenya

Livestock Production and Processing Investment Case

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Executive Summary



1

Market Opportunity



- Kenya's beef consumption is growing significantly at 24%, fuelled by a growing population as well as increasing incomes and urbanisation
- Up to 30% of Kenyan beef comes from illegally imported cattle, indicating a **large deficit in local production to meet demand**
- There is a **low degree of commercialisation** of the sector, highlighting the need for more large-scale cattle producers to expand to meet the local demand for beef
- Furthermore, significant opportunities for value addition exist in leather production

2

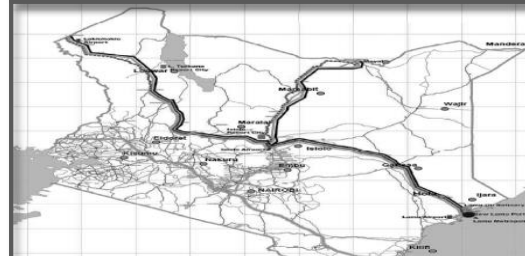
Investment Highlights



- Opportunity to invest **\$20 million into production and processing of cattle**, reaching 40,000 head by Year 5, up from 20,000 head in Year 1
- Investors can anticipate annual **revenues of \$8.4 million; and a Net Profit Margin of 31%** by Year 5
- Investment risks include bovine disease, drought, and environmental impact

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Enabling Environment



- The government of Kenya has several organisations which support the development of the livestock industry in Kenya's northern ASAL regions
- The **Taita Taveta county has been established as a Disease Free Zone for cattle production** and is stimulating livestock production through a Livestock Multiplication Programme and additional incentives to expand ranching potential
- The Kenyan government is considering **several interventions to enhance the enabling environment for investment in livestock**

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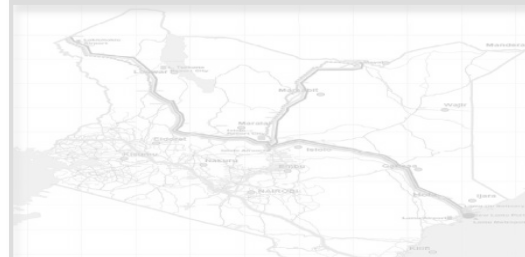
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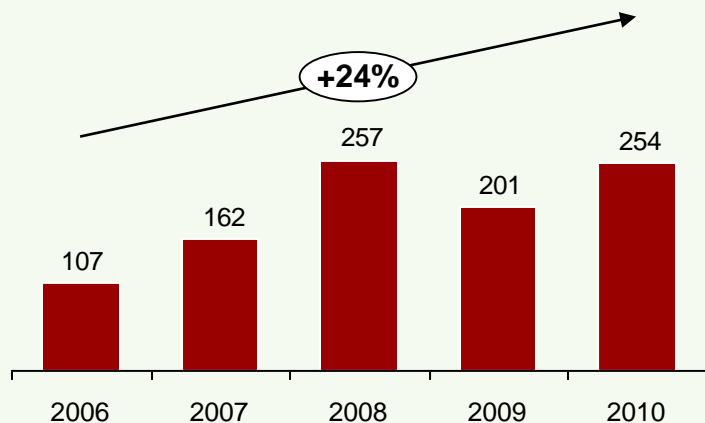
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Large, Unmet Demand for Beef in Kenya

Kenya's beef consumption is growing significantly at 24%, fuelled by an increase in incomes and urbanisation, while reports indicate that ~30% of Kenyan demand is not being fulfilled by local production

Growing Consumption of Beef

Beef Consumption ('000s MT¹)



- With growth at 24%, the beef industry has been **ranked as one of Kenya's fast rising sectors**
- Kenya **imports 25% to 30% of its beef** from illegal cross-border trading that is not tracked in official data sources, indicating that there is **strong local demand** for beef within Kenya that is **not currently being fulfilled domestically**

Sources of Increased Demand for Livestock

Growing Population of Traditionally Carnivorous Consumers

- Beef forms a significantly important part of the Kenyan diet, **with higher consumption per capita in Kenya than other EAC countries**. This population of traditionally carnivorous consumers is at 43MN and is set to continue to growing

Increased Urbanisation

- The **highest levels of consumption are in Nairobi and Mombasa**, where residents consumed **25.8 kg and 21.2 kg** per capita of beef, respectively, in 2011. Nairobi alone, consumed 43% of all beef consumed in Kenya

Growing Middle Class

- Driven by a growing middle class, evidenced by increasing per capita income, local consumption of beef is anticipated to grow as consumer preferences shift toward a **more meat-heavy diet**

An Abundant Supply of Cattle for Beef Production

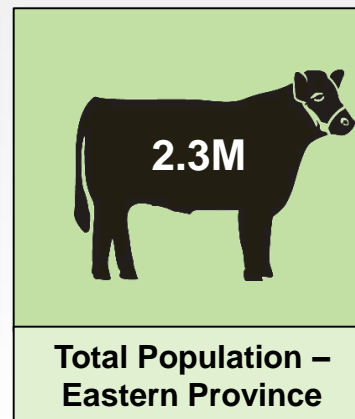
Livestock is one of Kenya's most important agricultural value chains with over 17 million cattle; 80% of cattle is produced in arid and semi-arid regions, which constitute 80% of Kenya's land

Importance of Livestock

- **Livestock is a major component of Kenya's agricultural sector**, accounting for :
 - 10% of Kenya's GDP
 - ~42% of the agricultural GDP
 - ~30% of the total marketed agricultural products
 - ~50% of the employment of the country's agricultural sector labour-force
- Beef is the most important source of red meat in Kenya, **estimated to account for 80% of all red meat** consumed in the country

Abundant Supply of Cattle

- The Kenyan livestock sub-sector is dominated by smallholder producers, with the **majority of the livestock population concentrated in the Arid and Semi Arid Lands (ASALs) which make up about 80% of the country.** There is **ample supply of livestock in Kenya**:
 - There are a total of 17.5 million heads of live cattle in Kenya
 - In the Eastern province, where this investment takes place, there are 2.3 million head of live cattle
 - With an average offtake rate of 15% for ASAL regions, there are an estimated 345,000 heads cattle in Eastern province being supplied to the market each year



Livestock Production and Processing Market Opportunity

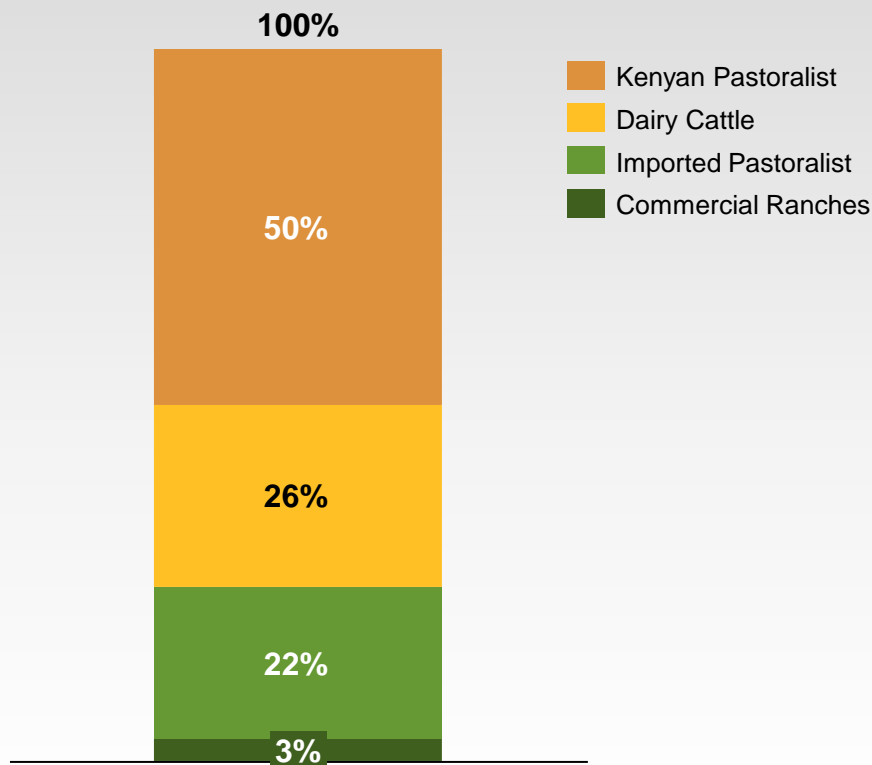
Opportunities for Large Scale Beef Production



97% of beef is supplied by pastoralists or from dairy cattle culls and as such, an opportunity exists for more commercialised and efficient livestock producers to enter the market

Sources of Beef Supply to Kenyan Market

% of Kenyan Beef Market



Local Production Landscape

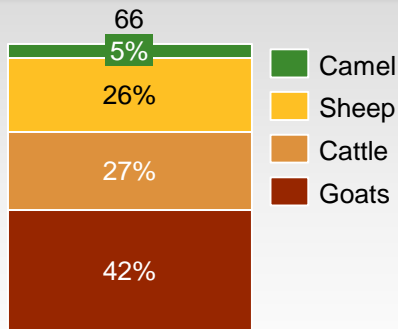


- An estimated **80 to 90% of the livestock population in Kenya is produced by pastoralists**
- In terms of **sources of beef** supplied to the Kenyan market, it is estimated that over 70% comes from pastoralists (Kenyan or from neighboring countries), 26% from culled dairy cattle, and **only 3% from commercial ranches**
- Overall, there is a **low degree of commercialisation in Kenya's livestock production sector**, indicating there is much room for private sector expansion into livestock production

Complementary Opportunity in Leather Production

Furthermore, the leather industry's potential is yet to be fully exploited as significant opportunities for value addition exist through increasing the processing capacity for finished leather and leather products

Abundant Supply for Leather Production



Total Livestock Population

- Kenya boasts a **sizeable livestock population**, the second largest in the EAC, which provides for an abundant availability of hides and skins, the main raw material for the leather industry
 - The bulk of leather production is accounted for by cattle hides (70% of all leather manufactured), sheep skins (20%) and goat skin (10%)
- **14 functioning tanneries are currently operational in Kenya**, the majority of which are equipped with wet blue leather processing technology, and very few tanneries with installed crust leather and finished stage leather technology

Potential Gains in Value Addition from Leather Processing

Semi Processed Leather ("Wet Blue")

Accounting for 90% of processing of skins and 60% for raw hides, **Wet Blue is the predominant form of processing by tanneries**, adding 80% to the value of skins and hides

Crust and Finished Leather

Finished leather accounts for 10% of current processing for skins, and 40% of hides, with the **potential to add 250-400% to the value of raw hides and skins**

Leather Products (including shoes)

Despite the **potential for over 800% value addition**, minimal production of finished products is occurring due to the high cost of technology required

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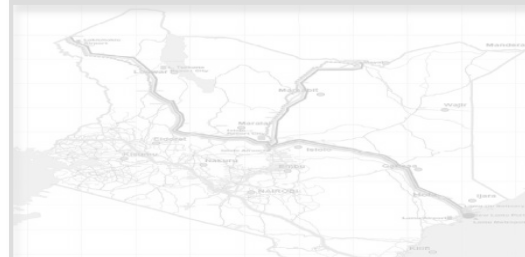
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Operational Highlights

Investment in livestock production and processing will source from pastoralists and ranches, and supply over 40,000 heads of cattle per year to local markets to meet growing beef consumption

Target Markets



- Beef will be sold to **Kenyan local markets**, where consumption is **growing at 24%** per year and 25%-30% of beef is illegally imported

Product & Price



- **Cold-dressed carcasses, offals, uncured hides, and bales of hay**
- Additional revenues from **slaughtering fees** for outside cattle
- Proposed **price of \$481.08 per carcass**
- Price will fluctuate given productivity, supply, and demand factors

Channel



- Majority of cold-carcass sales to **Nairobi butcheries**
- **Offals sold to Nanyuki and Nakuru and hides directly to traders**

Production & Processing



- **100,000 acre holding ground** with throughput of 40,000 cattle per year
- **Abattoir** will have capacity to process 300 heads of cattle per day

Sourcing Model



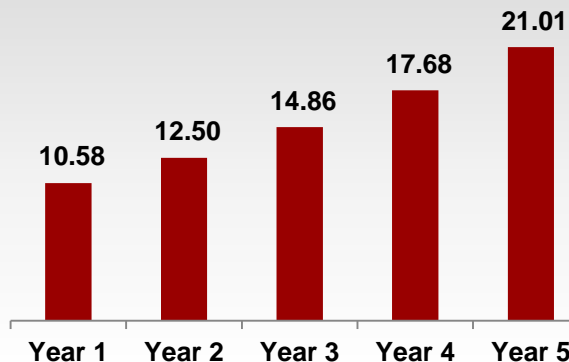
- **Cattle sourced from pastoralists and ranches**



Financial Performance Summary

The investment will reach revenues of \$21.01M when the model is scaled to up to ~40,000 heads of cattle in Year 5; cost assumptions for each head of cattle will generate a net profit margin of 31%

Revenue (Million USD)



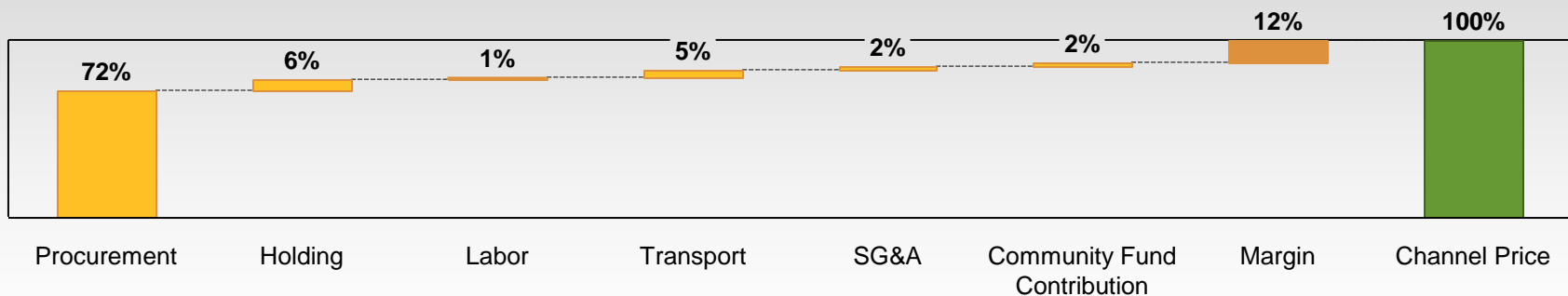
Investment ¹

Debt Investment	\$12M
Equity Investment	\$8M
Total Investment	\$20M¹

Expected Returns¹

ROIC	14%
EBITDA Return	\$9.43M
Net Profit Margin	31%
Operating Revenue	\$21.01M
Net Income	\$6.53M

Channel Cost Structure per Head of Cattle (% of Unit Price, Year 5)



Potential Ancillary Business Opportunities

The abattoir could partner with experienced companies to explore new business opportunities in hides and value-added beef product and consider expansion into smallstock

Hides and Skins

- By working with an experienced partner, **additional profits can be gained by either wet salting or air-drying raw hides**



Value-Added Beef Products

- By **partnering with an experienced meat processor**, there could be **expansion into value-added beef products** (e.g., special cuts of beef and sausages) with higher margins
 - Minced beef sells for as much as \$4.33 / kg while regular un-minced meat sells at \$3.13 / kg



Smallstock

- Could consider expanding its business model to engage in the **purchase, holding, and slaughtering of smallstock** (i.e. sheep and goats) from pastoralists
- Global goat and sheep meat **consumption is growing at a rate of 2% per year**
- Smallstock represent an increasingly important source of income for pastoralists



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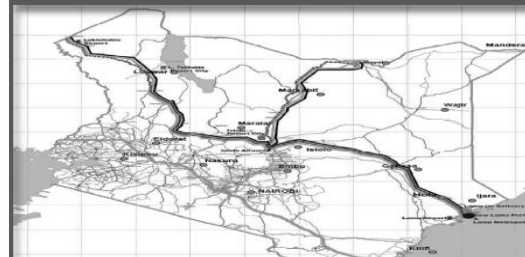
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Role of the Kenyan Government



Three key public sector organisations exist to oversee and support the development of the livestock industry in the northern ASAL regions of Kenya

Public Sector Support

Ministry of Livestock Development (MoLD)

- Provides research, extension, food security management, policymaking, and **support for livestock production and marketing**
- Within MoLD, the **Department of Veterinary Services** upholds the guidelines laid out in the Animal Diseases Act through disease control services and regulation

Ministry of State for Development of Northern Kenya and other Arid Lands

- The **Ministry of State for Development of Northern Kenya and other Arid Lands** was established in 2008 to coordinate efforts to address the unique challenges facing the ASAL regions

Agricultural Sector Coordination Unit (ASCU)

- Coordinates activities of the several Ministries and other stakeholders that are engaged in the agricultural sector and helps provide a **“one-stop shop” for agricultural activities**

Note: ¹ ASCU self defines their role as a one-stop shop for agricultural business and reform.

Source: Interviews with the Ministry of Livestock Development, Ministry of State for Development of Northern Kenya and other Arid Lands, and ASCU



Under Vision 2030, disease free zones are being established, including one planned for the Laikipia region where the investment is located, which will open up long-term potential for accessing export markets

Establishment of Disease Free Zones

- The Kenya government, **through Vision 2030**, has decided to **establish disease free zones (DFZ)**¹ to enable the country to export meat and improve earnings of livestock players in the value chain
- The GoK, as articulated in vision 2030, **also seeks to set up a DFZ in the Laikipia-Isiolo area**, where this investment opportunity takes place

Disease Free Zones

Long-Term Implications for this Investment

- Disease free zones will **allow Kenya to meet international market standards** for livestock products, and increase demands for Kenyan beef exports
- Ol Pejeta's can expand its operations to take advantage of this export demand by:
 - Upgrading to an export-certified abattoir
 - Selling live cattle to export-oriented meat processing companies²

Established Disease Free Zone with Ranching Potential

The government has begun to establish disease free zones and create incentives for cattle ranching, as evidenced by the Bachuma Holding Ground Livestock Multiplication Programme in Taita Taveta County

Taita Taveta County and the Bachuma Holding Ground

- **Taita Taveta County**
 - The County offers **significant potential for expanded cattle production and processing through its 28 ranches on over 1.4 million acres of land**, roughly 22% of the total county's land mass
 - Furthermore, the ranches in the county are **designated as a disease free zone (DFZ) in Kenya, which will enable significant expansion in the export potential of beef produced in the area**
- **Bachuma Holding Ground**
 - The Livestock Multiplication Programme at Bachuma Livestock Holding Ground is one of the projects the government has started in order to transform the livestock sub sector, through the breeding of quality livestock for beef and milk
 - The programme will help to **transform the county's subsector from subsistence livestock farming practices into commercially viable income generating enterprises**
 - The facility, on a **holding ground of 15,000 acres with a potential over producing over 3000 heads of cattle**, is to be used as a multiplication centre where breeds of superior quality livestock will be made available to farmers at a subsidised cost

Planned Initiatives



To boost productivity of these ranches, the county government of Taita Taveta is undertaking the following key initiatives;

- Restocking of livestock (with Boran and Sahiwal breeds)
- Pilot testing on Artificial Insemination
- Construction of water pans/ dams/ water reservoirs from road water run-offs
- Disease control via vaccination at subsidised rates
- Development of new and lucrative export markets for both meat and live animals



To create a favorable environment for investors, the Kenyan Government is considering several policy interventions to drive and encourage investment in the livestock sector

Existing Initiatives

- To **create an attractive business environment**, the Government of Kenya has implemented a number of strategies, including:
 - Increasing the country's political stability through more **equitable land distribution**
 - Prioritising the **construction and development of roads around Isiolo** to facilitate more efficient agricultural business development in these regions
 - Enhancing **quality of the labor force** through education and training
 - Reducing import tariffs, revoking export duties, and simplifying business license through the **Investment Promotion Act of 2004**

Further Considerations

- To **facilitate this livestock investment**, the Government of Kenya is considering the following strategies:
 - **Aid in the land leasing process** to provide 60,000 acres of land at a **low cost** in close proximity to OI Pejeta
 - Provide any additional support required from the Department of Veterinary Services to **manage disease control**
 - Provide **drought management systems** in northern pastoralist areas to help protect and ensure the supply of cattle
 - **Work with local governments to ensure support for OI Pejeta's operations** and support for NRT's work with communities
 - Providing **tax breaks on capital expenditure** and **tax holidays on revenues** (under discussion with the Treasury)



Abbreviations and Acronyms

ASAL	Arid and Semi-Arid Lands
ASCU	Agricultural Sector Coordination Unit
BN	Billion
CAGR	Compound Annual Growth Rate
DFZ	Disease Free Zone
EAC	East African Community
EBITDA	Earnings Before Interest, Taxes, Depreciation, and Amortization
GDP	Gross Domestic Product
GOK	Government of Kenya
IRR	Internal Rate of Return
Kg	Kilograms
MN	Million
MoLD	Ministry of Livestock Development
MT	Metric Tons
NPV	Net Present Value
NRT	Northern Rangelands Trust
ROIC	Return on Invested Capital
SG&A	Selling, General, and Administrative Costs
USD	United States Dollar
USAID	United States Agency for International Development