

REGIONAL INTEGRATION PROVISIONS FOR EFFICACY OF CROSS-BORDER TRADE: ENHANCING LIVESTOCK MARKETING ACTIVITIES IN TRADE CORRIDORS IN THE TURKANA, KARAMOJA, EASTERN EQUATORIA, AND SOUTH OMO REGIONS

Ekiru Francis Anno^{1*}, Dorcas Lopua Nakeno²

¹Unicaf University (UUM), School of Doctoral Studies, Lilongwe, Malawi

²Egerton University, Department of Agricultural Education and Extension, Njoro, Kenya

Corresponding Author: Ekiru Francis Anno

Unicaf University (UUM), School of Doctoral Studies, Lilongwe, Malawi

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Abstract: Promotion of economic growth and increased commerce is one of the key advantages that may be gained from East African integration, where member nations access a broader market if they remove obstacles to trade and make it easier for services and goods to move freely across international borders. The study looked at considerations of such provisions in the context of cross-border livestock trade in the Karamoja Cluster region of the Horn of Africa (HoA). The study objectives were to (i) assess the potential of cross-border livestock trade in the region, (ii) investigate the social and economic factors determining cross-border livestock trade, and (iii) define the conduct of livestock marketing activities in areas along the borderlines. The study results indicate that for the East African Community (EAC) to benefit from the integrated services for cross-border trade, enhancing market infrastructure and marketing systems, formalisation of livestock marketing practices and adopting flexible production and marketing strategies will bolster trade potential. Additionally, addressing resource-based conflicts, livestock diseases, and climate change impacts and improving access to market information are important for regional economic development. Key considerations for effective cross-border marketing include competition management, adherence to standards, efficient border crossing, regional peace and security enforcement and an increase in banking services. High export taxes, low livestock productivity, and ineffective regulations, exacerbated by climate change and resource scarcity; unnecessary increase in commodity prices due to poor market surveys; competitive rivalry from external traders; and high illiteracy rates among traders hinder their understanding and application of knowledge essential for their competitiveness and profitability in the conduct of livestock business. The study recommends that improvements in veterinary services and personnel decentralisation are essential for enhancing livestock productivity and managing diseases. Agricultural research should focus on regional livestock development challenges, support agro-based marketplaces and organization of farming systems. Actions for sustainable management of cross-border trade include stakeholders understanding livestock marketing protocol, promoting regulations and awareness of trading policies, and access to credit, which are key. Fostering trade unions, ensuring a peaceful trading environment, and managing cash transaction risks will improve competition and market pricing, benefiting livestock farmers, traders and market operations.

Keywords: *Regional integration, Cross-border trade, Trade corridors, East African Community, Horn of Africa, and Organisation of livestock marketing.*

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Introduction

The 2007 briefing paper that followed a study commissioned by the UK Department for International Development's Africa Policy on East African integration and how it can contribute to East African development (Booth et al., 2007) shows that: (i) the East African Community's integration process has the potential to improve the prospects for poverty-reducing economic growth; (ii) the potential is greatest in two areas: cooperation in infrastructure and other public-goods provision and

growth-enhancing institutional change; and (iii) progress on institutions will occur if business pressure groups and other stakeholders interested in rule-governed policies participate actively in the upcoming negotiations on the creation of an East African common market.

There are four key pillars that serve as the strategic foundation for the East African Community (EAC) integration agenda. These pillars are the Customs Union, the Common Market,

the Monetary Union, and the Political Federation. In order to provide a comprehensive framework for regional unity and collaboration, each pillar builds incrementally upon the previous one. The Customs Union, which is the first pillar, encourages commerce by doing away with internal tariffs and establishing a common external tariff.

The Common Market improves the mobility of products, services, capital, and labour across borders, which in turn drives economic growth and interdependence. On the basis of these, the Monetary Union intends to simplify financial institutions and implement a unified currency, with the goals of lowering transaction costs and enhancing economic stability. As a final objective, the Political Federation intends to solidify these victories by developing unified government structures, enhancing peace and security, and amplifying the collective impact of the region. Together, these pillars direct the East African Community (EAC) towards the achievement of a regional bloc that is resilient, integrated, and competitive.

The markets and populations that reside in the border regions of Turkana (Kenya), Karamoja (Uganda), Eastern Equatoria (South Sudan), and South Omo (Ethiopia) stand to gain a great deal from the integration of regional economies. Animal husbandry is the primary economic activity in all of these regions, and the majority of the populations that engage in it are pastoral and agro-pastoral. When livestock producers and traders have access to markets, they see a rise in economic returns, which ultimately leads to a reduction in poverty through the process of progressive economic growth. By investing in livestock market infrastructure development and institutional change, regional bodies and governments will be able to encourage livestock production activities that are aware of best practices, standards, regional integration, and collaboration through policy-guided trade.

The market developments in the EAC and the Horn of Africa (HoA) regions will be accomplished through the facilitation of robust business programmes and delivery systems. Fostering trade entails removing market entrance barriers to encourage mobility of goods, services, and money, as well as stakeholder activities that are capable of producing a long-lasting and empowering financial solution for both producers and a multitude of livestock market actors. This is necessary in order to maintain market access initiatives. Peace and security along the border areas are of the utmost importance and should be maintained at all times in order for the East African region to collectively build economies that are robust, integrated, sustainable and dependable by all those involved.

Literature Review

A. Livestock farming and marketing in the HoA

The study by Roba et al. (2019) and Anno & Pjero (2021) depicts that the HoA region holds much livestock in Africa. However, communication and transportation networks are unsatisfactory, particularly in regions where livestock is produced and key markets are located. The study by Berihun (2019) found that the participation of livestock farmers and traders in livestock markets is being negatively impacted by weather patterns that are difficult to predict. For Turkana and Eastern Equatoria markets, it is confirmed in the Anno (2025) study on cross-border livestock trade that the days when the market is open are significantly

impacted when there is inclement weather. The intimidation of traders, excessive taxation, as well as the payment of bribes to law enforcement agents are also regarded in Watson and van Binsbergen (2008) as key obstacles that are slowing down the growth of livestock marketing activity in the region.

B. The livestock sector in Kenya and its role in development

At the expense of the traders that they profess to represent, brokers in livestock markets are reaping the benefits of their business. Illicit commercial transactions, as well as little cross-border learning and benchmarking from prosperous markets and livestock marketing techniques, are not carried out (Thornton, 2010; Anno, 2022). A total of 50% of Kenya's agricultural workforce, according to the Kenya National Bureau of Statistics (2018) and Kosgey et al. (2008), engaged in livestock, which generates 20% of the national economic output. The drylands yield 70% of livestock farming activities, a sector supporting over 10 million pastoralists in the poorest counties. Projections suggest growth in the livestock sector will continue over the next three decades, fostering a developed rural economy.

C. Overriding challenges and risks in livestock markets

Inadequate transportation infrastructure, inefficient marketing information systems, low and unpredictable prices, instability, the closing of borders and restrictions on domestic mobility, an absence of sufficient slaughtering, inadequate cold chain storage, and raids continue to diminish the expected gains from livestock production and trade (Quisumbing et al., 2015; Asfaw et al., 2018). Other issues include an inadequate system for the production and sale of livestock, drought and the below standard cooperation between the governments of the region over water supply, the production and delivery of feed, and the maintenance of veterinary and public health services in the border areas (Abebe et al., 2018). The trade of livestock across international borders is hampered by marketing obstacles such as civil wars, political unrests and an increase in the confiscation of goods and services by authorities working at the border areas (Anno, 2025).

D. Livestock marketing management by traders

In Eastern Africa, according to studies by Addis (2017) and Bonfoh et al. (2016), pastoralist traders are forced to travel extensive distances in order to reach marketplaces because they do not have access to transport systems that are dependable and efficient. Shibu (2017) underscores the insufficient market information among livestock traders as a factor leading to their exploitation by brokers. Also, due to insufficient livestock holding grounds and ineffective border clearance, livestock and other commodities for trade sometimes are subjected to access restrictions to markets.

On livestock farmers' and traders' knowledge, Isako et al. (2019) argue that there are insufficient agricultural extension services in pastoral regions, leading to limited information to enable farmers and traders to manage market dynamics and operations, and manage the behaviours in a number of markets they access for trade. FAO et al. (2017) and Anno et al. (2024) found that recurring droughts are a major bottleneck to livestock growth, resulting in significant livestock and livelihood losses.

E. Performance of cross-border livestock commerce

While pastoralism is vital for rural growth as communities rely on environmental resources for livestock production and resilience, it is presented in Thornton (2010) and Fan et al. (2015) that community-managed contingency and development plans are crucial for sustaining the livestock sector, pastoral livelihoods and market access and for responding to environmental hazards with weighty impact on livestock resources and markets. Asfaw et al. (2018) assert that effective cross-border trade could enhance livestock production and marketing in the Eastern Africa region, yet most livestock commerce remains informal. Roba et al. (2019) alludes to the fact that stakeholders struggle with understanding market dynamics and livestock trade principles. This is because the livestock trade is hindered by bureaucratic hurdles and high costs, with significant taxation and strict border protocols, making it burdensome, as argued in Watson and van Binsbergen (2008) and Anno & Pjero (2021).

F. Livestock production and marketing in rural areas

The enhancement of market access positively influences food availability, nutrition, and income in livestock-dependent regions. According to Adem's (2019) study on livestock production and marketing constraints, various factors, such as nonharmonised dryland development strategies, competitive rivalry among market actors and poor market infrastructure, hinder livestock production and trading activities. These challenges are echoed in Herzog et al. (2019) and Dantas-Torres (2015), where managing them involves the application of pro-livestock development policies capable of improving market access, although obstacles like drought and conflicts can hinder the expected progress.

Despite these challenges, drylands are crucial for livestock production and market access. Development of resilient urban food systems through organised livestock trade, according to Grace et al. (2015), can benefit from regulated market systems. Moreover, strengthening entrepreneurs' bargaining power and standardising livestock management practices are cited in Quisumbing et al. (2015) and Costa et al. (2020) to boost the value of livestock for effective trading.

G. Livestock market-access guidelines and standards

It is presented in FAO et al. (2017) and Yaméogo et al. (2014) that health and safety regulations play a vital role in livestock production and cross-border trading. The One Health approach integrates human, livestock, and environmental health, highlighting the importance of safety among farming communities and traders. It is further agreed in the Bombaj et al. (2017) study on marketing of livestock resources in the European Union market that compliance with health standards is essential for accessing cross-border markets, where non-adherence limits opportunities despite competitive advantages. Various studies indicate that livestock markets, particularly in the Horn of Africa, face issues like unstable pricing, high transportation costs, and inferior product quality (Addis, 2017; Adem, 2019).

To address these challenges, the recommendations presented in Anno and Pjero (2021), Roba et al. (2019) and Gjeçi

et al. (2018) underpin market stakeholders' empowerment through an increase in knowledge (what they know), perfection of skills (how they do things) and change of attitudes (what they believe in) for meaningful livestock production, marketing, investment of resources, management of risks and uncertainties and maintaining competitiveness and profitability of livestock development endeavours in different production and marketing contexts.

Methodology

To evaluate the extent of the integration principles enforced by the East Africa Community (EAC) on cross-border trade in the border regions of Kenya, Uganda, South Sudan, and Ethiopia, particularly the Karamoja cluster region, the research study combined case study and exploratory research designs. The case study methodology made it easier to learn about the tactics employed to empower livestock production and marketing operators in the area as well as other livestock development jurisdictions. The need to examine the extent to which integration principles are driving market access and livestock sector empowerment in the HoA countries, making their contribution to the economies significant, was highlighted by the exploratory research design.

The study sample, which included policy actors from the public and private sectors, was calculated statistically using a 95% confidence level, a 2% margin of error, a 50% population proportion, and a population size of N=215, resulting in N=198. In each of the four countries of Kenya, Uganda, South Sudan, and Ethiopia, 25% of the respondents were interviewed. While the data mobilized from study participants were mostly analysed through qualitative methods, demographic data was analysed quantitatively.

Results and Discussion

A. Demographics of the study participants

Among the 198 people who took part in the research, the majority were males, accounting for 69% of the total, while women made up 31% and young people (those under the age of 35) made up 43%. When it comes to education, the postgraduates made up 34% of the population, with the majority coming from Kenya and Ethiopia and the least coming from South Sudan. The bachelor's degree holders made up 57% of the population, with the majority coming from Uganda. Diplomas and certificates were held by the majority of South Sudanese individuals. In terms of their occupation, 46% of them were from the larger sector of agriculture, which includes crops and livestock development, with the majority of them hailing from Uganda.

There were 34% of people working in the field of business, 17% working in the social sciences, 2% from policy while 1% were from other relevant professions such as research and technology. In terms of experience, the minimum amount of time was five years, while the majority of individuals have more than ten years of experience supporting agricultural programmes through either direct implementation, research, or management.

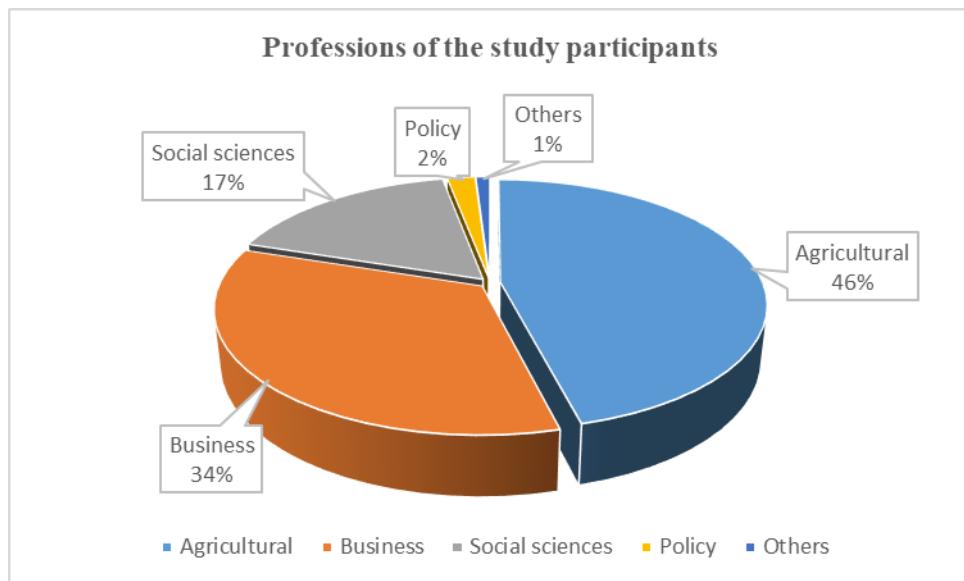


Figure 1: Professions of the study participants

B. Livestock market potential in the HoA

a. Development of livestock resources and marketing

According to the findings of the study, the livestock value chain in the HoA has evolved over the years into a complex structure that involves a wide variety of stakeholders. These stakeholders include producers (herders), brokers, feed and water suppliers, traders, transporters and trekkers, processors, exporters, and a diverse consumer clientele. Additionally, pastoralists and agro-pastoralists continue to be the primary producers and suppliers of live animals to trade partners. A strong and growing demand for meat and dairy products and opportunities for export to current and future markets in multiple value-addition and/or processing industries are evident. There is growing private sector involvement and investment in the livestock sector despite gaps in financing.

Inefficiency of livestock trade in the majority of trade corridors and relatively rapid changes in social norms and increased market demand for smaller ruminants are the critical areas for improvement towards stability of livestock markets in the

region. The study also found that informal trading of livestock across international borders is significant in the context of the HoA, and in many cases, it's worth surpasses that of official trade. When it comes to understanding the dynamics of cross-border trade, innovative approaches in livestock production and marketing are one of the most important factors. As a result of this move, the underperforming cross-border trading will be improved, and it will become a vital engine of growth through the creation of jobs and the eradication of poverty.

It is established, particularly through the policy focal points, that in order for the livestock trade in the HoA to be successful, the areas of the Middle East and North Africa are important destinations for product export. This is because intra-regional commerce continues to be marginal and disorderly. Despite the fact that unrecorded cross-border trade in the region is a significant phenomenon, countries in the HoA region primarily import manufactured goods into the global economy and export agricultural products to the global economy, which can benefit its growing livestock sector. The figure below shows the population of animals in the selected HoA countries.

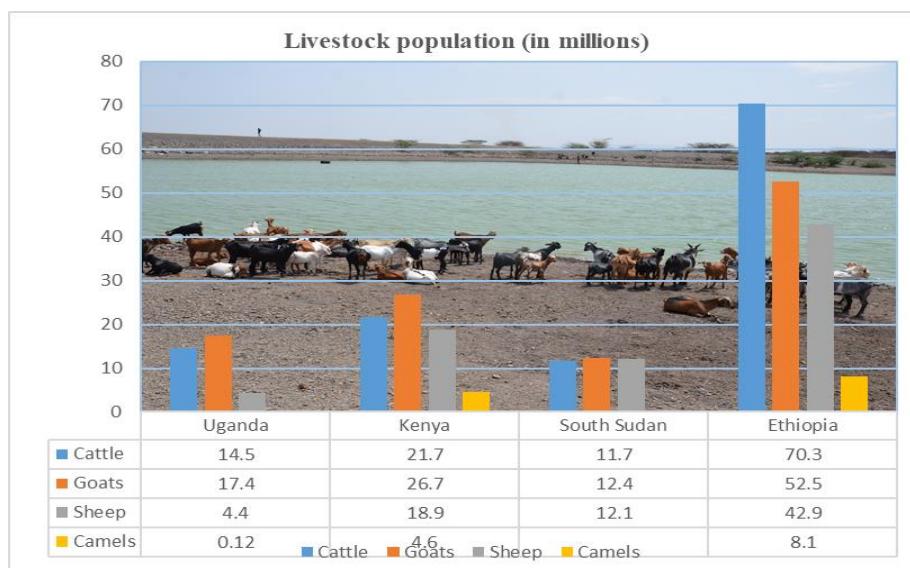


Figure 2: Livestock population in the HoA. Data on Camels population in South Sudan could not be found



Figure 3: Cross border livestock trade in the border of Turkana (Kenya) and Nadapal (South Sudan)

b. Formalisation and expansion of livestock marketing practices

HoA countries have a significant potential to expand their commerce in livestock, both within the region and with third countries. This is because there is a great opportunity for intra-regional trade to bring agricultural commodities to towns and cities that are quickly urbanising. The official figures on exports and imports, on the other hand, do not adequately depict the scale and significance of the trade in livestock and food crops in countries that are members of the HoA. During the course of the research, it was determined that Ethiopia is a significant supplier of cattle for Kenya. Additionally, Ethiopia is a significant source of other animals, including camels, sheep, and goats. Furthermore, there are large regional value chains that connect producers to the market in other countries.

A growth in the international market for donkeys has resulted in an increase in the cross-border traffic of donkeys from Ethiopia to Kenya. Ethiopia is a significant source of food in the borderlands of Kenya and South Sudan, particularly during times of severe weather. In light of the fact that climate change is projected to result in an increase in the frequency of extreme weather events, it is likely that international trade in maize and other agricultural goods will become increasingly significant in the study area. As a result of the strategic interventions that were implemented in the Horn of Africa Livestock Market Systems Strategy Brief (2022-2032) and the stakeholder consultations that were carried out, it has been demonstrated that to enhance the performance of livestock markets, it is necessary to improve production and productivity to overcome obstacles that prevent the majority of livestock producers, as well as small and medium livestock traders, from consistently supplying high-quality and high-quantity animals throughout the year.

c. Adaptive livestock production and marketing

The study established that stimulating climate-resilient production and market systems helps improve rangeland health and

forage schemes, which in turn helps to extend total land carrying capacity. This is accomplished by ensuring that all individuals have equal access to land and by constructing the resilience of natural resources and markets to the influences of climate change. Building the competitiveness of local livestock producers, traders, and the multiplicity of livestock-based entrepreneurs through inclusive pastoral markets enables producers to capture greater value and invest in expanded economic opportunities. This is accomplished through financial inclusion, a stronger market orientation, and the development of economies of scale.

Growth of pastoral economies' outcome is also accomplished by developing and improving partnerships between businesses, public-private partnerships, and other types of partnerships for the purpose of achieving greater social and economic benefits. The goal is to enhance partnerships with brokers in livestock market systems that are mutually advantageous. Export markets have the potential to stimulate sector upgrades, such as sector infrastructure, which are prompted by opportunities in export markets. These opportunities can also encourage governments, corporations, and producers to innovate, adapt, and invest in domestic markets, which will result in higher social and economic paybacks.

Improving the regulatory and business environment by means of norms and customs, laws, regulations, policies, trade agreements, and public infrastructure that are widely transparent and facilitate the movement and value addition of livestock inputs and outputs through trade corridors for the benefit of small and medium-sized producers and firms is a measure that can be taken to strengthen the regulatory and business environment. The study also determined the influence of international livestock commerce as an essential component of the economies of the HoA, which is essential for ensuring food security by enhancing food availability, food consumption, and stability in the region. It makes a contribution to the development of smallholder incomes and the alleviation of poverty, and it broadens work opportunities for both

men and women in border areas, thus increasing and expanding livelihood opportunities.

C. Social and economic challenges of livestock trade in the region

a. Resource-based conflicts and their effects

According to the findings of the study, there are a number of obstacles that are preventing the successful operation of livestock trade across international borders in the regions of Turkana, Karamoja, Eastern Equatoria, and South Omo. Among these are the effects of resource-based conflicts that are a result of rampant conflicts that are characteristic of the region, the complexity of pastoral production systems that are prevalent in the area, the clashing of pastoralists among themselves and crop farmers and livestock herders, conflicts, particularly during times of pasture and water scarcity, massive displacements as a result of insecurity and floods, and the increase in the cost of producing livestock and products, which is a key stress factor for pastoralists and agro-pastoralists.

b. Livestock diseases and pests

The study area is plagued by a high prevalence of livestock diseases and pests. In spite of the fact that there are numerous ways in which animals can become infected with diseases and pests, the study found that the most significant risk factor for animal stress, disease, pests, and fatalities in the HoA region was the frequency of animal mobility within and across the borders. Because animals move around a lot and interact with others in grazing areas, drinking spots, and livestock camps, the control of livestock diseases is made more difficult by the expensive management of the biophysical and socioeconomic repercussions of disease. This is because there are no rules in place to prevent the transmission of disease through well-regulated animal mobility.

The prevalent epizootics, notifiable diseases, zoonoses, and newly emerging transboundary diseases are all included in the list of disease ailments present in the area. The lack of data and records of disease emergence has made it impossible to control these diseases, which has resulted in their continued presence in the region. Disease threats have had a negative impact on livestock productivity and restricted access to markets. As a result of the ongoing impact of disease, milk output and meat quality continue to decrease, which leaves pastoral households without adequate

food throughout the seasons, and the economic value for livestock at markets is regarded as low.

c. Drought and climate change impacts

Both drought and climate change are very real problems in the HoA region. Due to the limited availability of water and pasture, as well as the increased mobility of pastoralists, the viability of agroecologies and pastoralist lifestyles is being negatively impacted by changes in land use and tenure systems. Occasional flooding results in the displacement of people, the destruction and loss of property, the spread of illness, and disputes between communities that are next to one another and those who are moving from cross-border locations. The scarcity of resources often leads to raids and conflicts that are carried out by criminals through the use of armed violence and highway robberies targeting livestock and goods in transit.

The study also established that the act of stealing animals is considered by those who engage in it a method of replenishing herds, acquiring wealth, and, in certain cultures, a rite of passage for young men. The act has resulted in the loss of human lives, the death of animals, and a persistent threat to the rule of law, among other negative consequences. It is precisely for this reason that the vast majority of pastoralist regions have either stayed underdeveloped or have evolved at a more gradual rate.

d. Livestock farming vis-à-vis land carrying capacities

In pastoral settings, the contradiction of having a high quantity of animals continues to exist. The fact that they believed in the quantity of animals would not have caused them to recognise the connection between livestock herds and the variables of production, particularly forages and water availability. The majority of the regions in the Horn of Africa are characterised by the fact that around 80 percent of the land is utilised for agro-pastoral and pastoral production systems, which results in the destruction of forests, excessive grazing, and the loss of vegetation cover. Both the quantity of animals and the capacity of the rangelands are not proportional, and the livestock farming operations are subpar because they are mostly based on traditional methods. Due to the fact that this kind of livestock production is not centred on the market, there are fewer animals produced for the purpose of selling them.



Figure 4: Livestock holding ground in the border of Turkana (Kenya) and South Omo (Ethiopia)

e. *Limitation of market information*

A lack of market information, which causes traders to take advantage of illiterate farmers; a slow transition of livestock from farm to markets, with the majority of livestock still being sold in informal markets; remoteness; insecurity; limited forage and water along livestock trade corridors; and the fact that livestock trading systems have remained the same for such a long time, meaning that they are done on the basis of willing buyers and willing sellers, are all factors that contribute to the region's poor transport and marketing services.

The region is associated with inadequate banking systems and financial resources, poor exchange rates, and a limited number of institutions offering digital and mobile banking options. All these gaps lead to poor information, rendering the capability of livestock marketing actors in the region too minimal. As a result, they cannot compete successfully with elite livestock traders from external markets, who have continued to dominate and secure large market shares of native markets within the study area.

D. **Conduct of livestock marketing activities along the borders**

a. *Competition management*

The competition that occurs between small- and large-scale traders in the HoA markets, whether it is between themselves or against brokers and other individuals, is often considered to be unhealthy. There are not many livestock traders who own their own vehicles and are able to purchase enough livestock to fill a truck all the way to capacity. The focal points interviewed reached a consensus that the government's duty is to safeguard its traders, regardless of their size, and that violations of the law, particularly those that occur in international trade, as well as unethical business practices, continue to be a source of frustration for the regional governments. Additionally, it was discovered that as traders engage in trade, they have a tendency to open new markets in regions where the government does not provide security and financial protection to traders, and there would be a need for safety and security for traders that are coming to buy directly from farmers and lorries ferrying animals to destined markets.

b. *Adherence to ethical and operational standards*

From the interactions with the policyholders, the study underscores the fact that regulations that control human relations and economic activities are essential components of every government. This assertion is premised on the fact that illicit firms in the livestock industry, which are frequently overlooked, may be eradicated if states strictly adhere to their rules. Individual and small trader groups are responsible for orchestrating illegal trading. These groups penetrate livestock production catchments and other markets in order to take advantage of livestock producers and traders who are also less knowledgeable. Protecting traders, trade routes, and goods falls under the purview of the government, which is responsible for security and coordination of development endeavours.

Trade that occurs across the internal borders is considered to be international trade, and it is vital to have adequate channels through which traders from different countries can connect with their counterparts. A security protocol needs to be established in order to get a consensus on how to manage cross-border trade and protect the parties concerned. This will allow for further

management of cross-border trade undertakings, including the management of the obstacles to entry into cross-border markets. These barriers might be legal, security, or economic in nature and amount to capital resources that an individual possesses for trade activity.

c. *Management of border crossing*

The study established that a significant number of international border crossings used to close around four o'clock in the afternoon before the current peace that is being enjoyed across the frontiers of Kenya, Uganda, and South Sudan. At this time, the majority of them close at six o'clock. In the case of the Nadapal border, it is not possible to close it at eight o'clock at night due to inadequate lighting. Additionally, the border area is bushy, which can encourage the movement of illegal goods and small arms. For livestock transporters, the rising security issues can put them in danger, particularly when they are crossing the border points at night because the security situation in the area is still quite unstable.

To ensure the safety of legitimate businesspeople, the government authorities have decided that the border crossings will be closed at the latest by six o'clock in the evening. The individuals who seek to transport animals across borders throughout the night are the ones who are not real traders. In addition, the study found that security and immigration staff at the majority of border locations do not remain at the border at close of business but rather in neighbouring established towns and trading centres. At the Nadapal border crossing, the Lokichoggio neighbourhood is home to authorities in charge of security, immigration, and customs.

d. *Motorcycle transport (bodabodas) for cross-border trade*

When it comes to the extortion of bodaboda drivers by security personnel, the majority of people who participated in the survey emphasise the significance of bodabodas in international trade. In the HoA, bodabodas are a critical entry point into the business world, and they, too, require protection from security, immigration and revenue officers at the border points. In the context of Kenya, the Border Management Committee (MBC) is comprised of security officers, tax officers, and immigration officers who are working together in a cooperative and synergistic manner to facilitate border operations.

In order to prevent accidents and thefts, one of the resolutions that the BMC has enforced is that animals should not be driven at night on the main routes that are congested. The practice of animal trekking ought to be carried out away from the main roadways, with sufficient safety measures in place. In order to prevent trekking at night, it is recommended that animals be taken on treks to markets during the day, when the times at which they would arrive at their destinations may be accurately anticipated. In light of the fact that traders employ individuals to transport animals to the market, it is imperative that they do so with due regard for the safety and security of those individuals along the trade routes.

e. *Regional bodies cross-border peace enforcement*

In the continuous peace meetings that are taking place across the borderline areas of Kenya, Uganda, South Sudan and Ethiopia, which are backed by the Intergovernmental Authority on Development (IGAD) and individual governments of the HoA, the

guns are being silenced. At this time, there are no large raids taking place across the borders. The remainder consists of minor cattle raids that are carried out across international borders by a small group of criminals. For the purpose of ensuring that the operations of the livestock market are not put in jeopardy by aspects of insecurity, the majority of the people who participated in the study suggested that the chairpersons of the various livestock marketing committees should be present at all of the meetings that are organised to discuss and plan activities related to cross-border livestock trade.

To accomplish a well-organised livestock marketing activity, it was severally submitted that traders, particularly those from secondary and tertiary markets, do not need to travel to livestock-producing areas in order to purchase animals directly from farmers. This was the consensus among the majority of those involved in the livestock trade. It is necessary for them to purchase animals from the market sale yards that have been established in the trading centres that are staffed by government and security apparatus, respectively. Also, the use of deception, such as selling sick animals, thievery, raids along trade routes, and the absence of truth in the information that is offered are all typical examples of unethical conduct that deprive both buyers and sellers of the opportunity to profit from the livestock trade as a result of the malpractices that occur in the livestock trading industry.

f. Managing the effects of taxation

Many of the market stakeholders who were interviewed believe that taxation is a need and is something that every government does, despite the fact that they have objections about the high rates. In the event that market participants have

complaints about government taxation, the most effective method proposed for resolving these issues is to file appeals with their respective governments and the management of border points for consideration. To increase awareness of taxation, livestock traders can gain knowledge through hands-on experience by visiting formal markets, which are considered to have appropriate and regulated taxing methods.

The study has demonstrated that the prices of animals at market yards are subject to change. In the various market jurisdictions, livestock traders should engage in trade that can help many people and the sector as a whole, rather than engaging in trade that can benefit individual egos. For local traders to be able to reach tertiary markets, they need to have a significant number of livestock and obtain the relevant papers, such as a movement permits and several veterinary and public health certifications. Large volumes of livestock traded may lead to tax reduction and discounts.

It was also suggested by several study respondents that fostering market development would involve managing the interests of middlemen in different market jurisdictions and recognising the impact of numerous business activities that enhance microeconomic and livelihood activities for livestock farmers and livestock sector entrepreneurs. Trading fairly creates a situation in which everyone benefits, thereby fostering peace among communities and traders, ensuring that markets are successful in attracting external traders, and using the provisions of the East African Community (EAC) protocol to reduce barriers to cross-border trade and avail both tangible and intangible resources that can increase participation and benefits of all actors involved.



Figure 5: Open livestock markets in the Karamoja Cluster region

Conclusion

The study concludes that East African integration provisions are beneficial to cross-border trading in the HoA. However, poor roads and limited market communication infrastructure are the key obstacles to cross-border trade in the region. Despite an improvement in communication infrastructure, especially in some secondary and tertiary markets, challenges

remain in place as expansion of the telecommunication network is still low in dryland areas. Insecurity is one of the major risks facing cross-border livestock trade corridors in the HoA. Even in relatively peaceful periods, there is the threat of confiscation of traders products by government machinery. Lack of access to market information is a well-known constraint to cross-border trade, and inadequate banking systems and limited access to credit effectively act as a barrier to entry for small entrepreneurs into the cross-border trade in the region.

Disease outbreaks constrain cross-border livestock trade, and animals and animal product exports are often subject to high taxes in the region. On livestock production, productivity remains relatively low, trading is retarded due to market information asymmetry, and there is weak and uncoordinated policy and regulation. Other factors that compound the livestock marketing challenges are lack/limited access to credit, climate change and recurrent drought, low adoption of improved technologies, limited access to feeds during dry seasons, water inadequacy, declining land base, and absence of value-adding practices. The differences in prices remain a critical hindrance, as the prevailing prices are not determined based on market information. Are based on sellers who propose prices for their animals presented to the market.

The pricing difficulties are sustained because of limited market surveys for better understanding of livestock business in each country and the state of supply and demand factors in targeted markets. It is worth noting that leadership representing the HoA countries in the study area have not agreed on the most sustainable model for cross-border livestock trade. The locally agreed policy that cross-border livestock trade between countries should be done at border points, not at inland markets, helps avoid unnecessary competition and also protects external traders. Since many traders, especially the itinerary traders, are illiterate and not well conversant with the laws of their countries due to high levels of illiteracy. All these challenges are systemic and would require expansion of the EAC protocol to provide sustainable solutions critical is building strong cross border business interventions.

Recommendations

- Trade development stakeholders to continue applying the provisions of the East African Community (EAC) trade protocol as a means of empowering trade and cross border relations in the HoA region.
- Improve veterinary services to combat animal diseases, enhance breeding, and promote livestock nutrition. Increase the number of veterinary and animal production personnel; decentralize services to livestock trade routes. Also, encourage privatization of veterinary services for long-term viability.
- Decentralize agricultural research institutions to address livestock sector issues in Eastern Africa's border regions and develop accessible agro-based marketplaces for producers, traders, and social welfare organizations.
- Implement intensive and semi-intensive livestock farming systems like ranching and regulated grazing and enhance understanding of livestock marketing regarding market supply, demand, and non-market forces.
- Invest in water resource management to address dry season deficits and regulate cross-border issues affecting traders and livestock traders protection through BMC.
- Ensure awareness of animal movement policies and trade permits among farmers and traders and increase access to credit and promote the formation of trade unions focused on export markets.
- Include genuine livestock traders in market planning meetings and ensure stakeholders comprehend taxation protocols in livestock marketing and maintain peace established in livestock trading corridors amidst shifting market dynamics.

- Recognize that sick animals lead to quarantines, restricting livestock movement and trade and address hazards of cash transactions in livestock trading, including risks of counterfeit currency.
- Mitigate hostility among traders due to irresponsible social media use impacting trading activities and support farmers, livestock traders, and market management structures in the implementation of market operations and capacity-building training for stakeholders. Foster honest competition, eliminating disruptive competitive rivalry methods and establish an international commerce committee to analyze market dynamics and devise management strategies.
- Determine proper markups in livestock pricing based on current market prices for various categories and ensure livestock trading routes contribute to export revenues, promote livestock production to enhance economic integration and improve farmers' and pastoralists' livelihoods.

Areas for Future Research

According to the findings of the study, further investigation into the application of East African Community principles of cross-border trade should be carried out in the context of various market categories that can be found in the border regions of the countries that make up the HoA. Increasing the level of understanding of cross-border trade among stakeholders and addressing the issues that are now being faced would be beneficial to the economic well-being of livestock farming and entrepreneurs.

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Interest Conflicts

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References

1. Abebe, B. D., Tadie, M. A., & Taye, M. M. (2018). Factors affecting market outlet choice of wheat producers in North Gondar Zone, Ethiopia. *Agriculture & Food Security*; London Vol. 7. DOI: 10.1186/s40066-018-0241-x.
2. Addis, A. B. (2017). Major constraints of livestock marketing in the lowland part of Ethiopia. *International Journal of Engineering Development and Research*. Volume 5, Issue 1. 489-499. ISSN: 2321-9939.
3. Adem, M. (2019). Production of hide and skin in Ethiopia: marketing opportunities and constraints: a review paper. *Cogent Food and Agriculture*, 5(1), 1565078.

4. Anno, E. F. (2022). The Effects of Traders Competitive Rivalry on Livestock Market Access in Pastoral Areas. A Case of Turkana County in Kenya, Munich, GRIN Verlag, <https://www.grin.com/document/1356828>
5. Anno, E. F., Cheruiyot, V. K., Etapar, S. E., Nakeno, D. L., & Lopem, E. C. (2024). Investing in Agriculture for Long-Term Food, Income, and Nutrition Security: An Economic Analysis of Crop Production and Marketing in the Refugee and Hosting Community Settings in Turkana. International Research Journal of Economics and Management Studies. Vol. 3, No. 5, Pg. 282-293. DOI: 10.56472/25835238/IRJEMS-V3I5P134
6. Anno, E. F. (2025). Advancing Entrepreneurship and Commerce in the Nadapal Cross-border Livestock Trade Corridor of Turkana, Kenya, and Kapoeta, South Sudan: Optimising Market Efficacy for Pastoral Economies. IRASS Journal of Economics and Business Management. 2(12), 1-7.
7. Anno, E. F., & Pjero, B. E. (2021). Impact of Traders' Competitive Rivalry on Supply and Demand Relations in Livestock Markets in the Drylands of Kenya. International Journal of Business and Economics Research. Vol. 10, No. 3, 2021, pp. 99-109. doi: 10.11648/j.ijber.20211003.13
8. Asfaw, S., Pallante, G., & Palma, A. (2018). Diversification strategies and adaptation deficit: evidence from rural communities in Niger. *World Development*, Vol. 101, pp. 219–234.
9. Berihun, T. (2017). Livestock Marketing Performance Evaluation in the Afar Region, Ethiopia. International Journal of Agricultural Marketing, 4 (2): 152-160.
10. Booth, D., Cammack, D., Kibua, T., Kweka, J., & Rudaheranwa, N. (2007). East African integration: How can it contribute to East African development? *Overseas Development Institute 111 Westminster Bridge Road, London SE1 7JD. P.8.*
11. Bombaj, F., Barjolle, D., Anthopoulou, T., & Michaud, G. (2017). Family farming in the Albanian mountainous areas: local agro-pastoral farming systems and market integration perspectives. *The Natural Resource Economics Review, Kyoto University*, pp. 41–52. Ffhal-02146763.
12. Bonfoh, B., Fokou, G., Crump, L., Zinsstag, J., & Schelling, E. (2016). Institutional development and policy frameworks for pastoralism: from local to regional perspectives. In *The future of pastoralism* (J. Zinsstag, E. Schelling & B. Bonfoh, eds). Rev. Sci. Tech. Off. Int. Epiz., 35 (2), 499–509. doi:10.20506/rst.35.2.2537.
13. Costa, L. et al. (2020). Standardising output-based surveillance to control non-regulated cattle diseases: aspiring for a single general regulatory framework in the European Union. *Preventive Veterinary Medicine - Elsevier*, Vol. 183, 105130. doi:10.1016/j.prevetmed.2020.105130.
14. Dantas-Torres, F. (2015). Climate change, biodiversity, ticks and tick-borne diseases: the butterfly effect. International journal for parasitology. Parasites and wildlife 4(3): 452–461.
15. Fan, S., Brzeska, J., & Olo-nbiyi, T. (2015). The business imperative is to help small family farmers either move up or move out, as discussed in the International Food Policy Research Institute's 2014–2015 *Global Food Policy Report*.
16. FAO, IFAD, UNICEF, WFP and WHO. (2017). The state of food security and nutrition in the world in 2017. Building resilience for peace and food security. FAO, Rome.
17. Gjeçi, G., Shytaj, F., & Biçoku, Y. (2018). The livestock sector in Albania: trends and challenges. *Albanian Journal of Agricultural Sciences, (Special edition – Proceedings of ICOALS, 2008)*, pp. 221–233.
18. Grace, D., Lindahl, J., Correa, M., & Kakkar, M. (2015). Urban livestock keeping', in *CGIAR Cities and Agriculture – Developing Resilient Urban Food Systems*, RUA Foundation, Oxford, UK: Routledge. pp. 255–284. www.ruaf.org/urbanlivestock-keeping.
19. Herzog, C. M., de Glanville, W. A., Willett, B. J., Kibona, T. J., Cattadori, I. M., Kapur, V., et al. (2019). Pastoral production is associated with increased peste des petits ruminants seroprevalence in northern Tanzania across sheep, goats and livestock. *Epidemiol Infect*. 2019; 147: e242. <https://doi.org/10.1017/S0950268819001262 PMID:31364555>
20. Isako, T., Kimindu, V., Amboga, S., & Tuke, G. (2019). Pastoral Livestock Marketing: A Case Study of Marsabit County, Kenya. *Journal of Natural Sciences Research*, Vol. 9 (6): 51-57. DOI: 10.7176/JNSR.
21. Kenya National Bureau of Statistics. (2018). Economic Survey. [online] Government Printer, Nairobi. <https://www.knbs.or.ke/download/economic-survey-2018/>.
22. Kosgey, I. S., Rowlands, G. J., Van Arendonk, J. A. M., & Baker, R. L. (2008). Small ruminant production in smallholder and pastoral/extensive farming systems in Kenya. *Small Ruminant Research*, Vol. 77 No. 1, pp. 11–24.
23. Quisumbing, A. R., Rubin, D., Manfre, C., Waithanji, E., van den Bold, M., Olney, D., Johnson, N., & Meinzen-Dick, R. (2015). Gender, assets, and market-orientated agriculture: learning from high-value crop and livestock projects in Africa and Asia. *Agriculture and Human Values* Vol 32(4). [online] <https://link.springer.com/article/10.1007/s10460-015-9587-x>
24. Roba, G. M., Lelea, M. A., Hensel, O., & Kaufmann, B. (2019). Elusive profits: understanding the economic performance of local traders in the pastoral small ruminant value chain in northern Kenya. *Nomadic Peoples*, Vol. 23 No. 1, pp. 78–105. DOI: 10.3197/np.2019.230105.

25. Shibri, S. (2017). A Review of Challenges and Opportunities of Livestock Marketing in the Southern Part of Ethiopia. *Journal of Marketing and Consumer Research*. ISSN 2422-8451 An International Peer-reviewed Journal. Vol. 34, 2017.
26. Thornton, P. K. (2010). Livestock production: recent trends, future prospects, *Philosophical Transactions of the Royal Society B: Biological Sciences*, Vol. 365 No. 1554, pp. 2853–2867. rstb.royalsocietypublishing.org/cgi/doi/10.1098/rstb.2010.0134.
27. Watson, D. J., & van Binsbergen, J. (2008). Livestock market access and opportunities in Turkana, Kenya. [online] ILRI Research Report 3, International Livestock Research Institute, Nairobi, Kenya. https://cgspace.cgiar.org/bitstream/handle/10568/238/Res_report_no3.pdf?sequence=1.
28. Yaméogo, N. D., Nabassaga, T., & Ncube, M. (2014). Diversification and sophistication of livestock products: the case of African countries', *Food Policy*, Vol. 49, pp. 398–407.
29. Lopez, A. R., Oforiwa, P., Achiampong, A. A., Adoba, P. & Acquah, R. (2025). PREVALENCE AND FACTORS ASSOCIATED WITH HEPATORENAL SYNDROME AMONG PATIENTS ATTENDING MEDYLIFE HEALTHCARE HOSPITAL, GHANA. *IRASS Journal of Multidisciplinary Studies*, 2(12),36-50.
30. Anno, E. F. (2025). Enhancing Competitiveness of Livestock Markets in Arid Regions: Focus On Livestock Production, Marketing, and Trade Systems in Turkana, Kenya. *IRASS Journal of Economics and Business Management*. 2(10),81-90.
31. Anno, E. F., (2025). Effect of Leadership and Management Inefficiencies on Employee Motivation and Engagement in Community-Based Organizations in Turkana, Kenya. *IRASS Journal of Arts, Humanities and Social Sciences*,2(5)11-18.