

A Review of Co-managed Kenyan livestock markets: Enhancing operational management for widespread adoption



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Acronyms and Abbreviations

CSO	Civil Society Organization
CMM	Co-management Marketing Model
CLMC	County Livestock Marketing Counsel
KLMC	Kenyan Livestock Marketing Counsel
LMA	Livestock Marketing Association
MOU	Memorandum of Understanding
NGO	Non-government Organization
SAP	Structural Adjustment Program
/=	Kenyan Shillings

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Executive summary

Co-management of livestock markets has proven to be a solid idea that should be promoted throughout pastoralist areas of Kenya. Integrating local livestock market associations and relevant county officials into joint management of these markets generally enhances tax revenue collection, operational efficiency and increased social spending for the community. In short, co-management generally leads to more vibrant livestock markets and enhances, among other things, resilience for livestock buyers. However, simply having a co-managed market does not guarantee these benefits. Co-management implementation needs to be part of an integrated package that emphasizes true community representation of the livestock marketing association as well as transparency regarding revenues and expenditures. An annotated set of recommendations are listed below, and a more comprehensive set is provided in the conclusion.

- Assist in the implementation of true representative elections of LMAs. Codify possible recall strategies of representatives that are not performing their duties.
- Create an operational manual for periodically auditing LMA accounts.
- KLMC/CLMC, working with the counties, should project the market size, operational costs and feasibility of implementation of co-management in all relevant livestock markets.
- For those counties without sales yard bills, coordinated efforts to get inputs from stakeholders on designing and implementing county sale yard bills.
- KLMC/CLMC should develop a working MOU template of revenue and expenditure responsibilities that could then be adapted to local environments.
- Review and edit the hierarchical success indicators (Figure 5) by KLMC, CLMC, County Gov't, LMAs, and other relevant stakeholders to create viability and buy-in of the methodology.
- Using success indicator methodology (Figure 5), rank current operational co-managed LMAs and review reasons (such as spatially clustering) for relative success.
- An extensive review of county CLMC's operational capacity to assist and mentor local LMAs.
- Working with relevant stakeholders, design and institutionalize market day LMA data collection with committed periodic evaluations. Data could then be used to evaluate market operational efficiency, evaluating LMA goals, tax planning and monitoring overall livestock sales and prices.

Objectives

The purpose of this document is to determine the current and future role of the co-management market model in managing pastoralist livestock markets in Kenya. In theory, a locally managed market will exhibit greater vibrancy, enhanced market participation, increase livestock prices, and generate more tax revenue for both county and local community use. Put another way, pastoralists should see greater prices for their livestock, enact trades in a safer environment and pay taxes that will, in part, pay for self-directed social programs in the community. All of this will lead to enhanced resilience for the local community, particularly in the face of increasing worries around climate change.

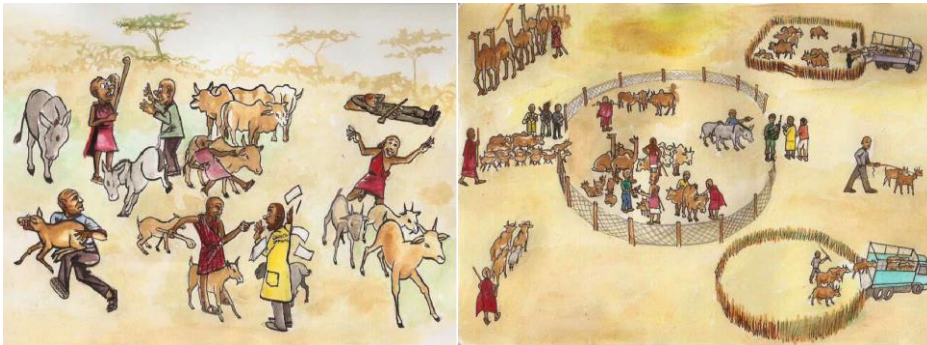
As directed by the Kenyan Livestock Management Council (KLMC), the specific objectives of this document include conducting an in-depth assessment of the effectiveness and efficiency of the livestock market co-management model (CMM) in providing services and promoting livestock marketing in pastoral counties and to recommend possible remedies to identified challenges as well as additional strategic directions that the CMM model should possibly consider/incorporate in the future.

1. Introduction and background information

1.1 History of co-management and issues of decentralized revenue collection in Kenya

There is a long tradition of devolving elements of tax authority to local administrators and livestock co-management has been around for about a decade. The results are decidedly mixed and rolling out further CMM has, until recently, been relatively slow. However, legislative impetus, as well as local momentum, appears to be building and it is hoped that this document can assist in helping make this initiative more successful. For example, the recent development of sale yard bills, such as the one in Isiolo, has generated enthusiasm in other counties to begin considering the adoption of CMM legislation.

The purpose of conducting this assessment is to determine the relative status of co-managed livestock markets in pastoralist areas of Kenya. More specifically, a review of relevant literature combined with a field study helps to inform this in-depth assessment of the current effectiveness and viability of rural co-management livestock markets in providing services and promoting enhanced market vibrancy. Careful contrasts to what was expressed to be achieved by advocating parties, such as KLMC, to the actual current operations are performed as well as the relative strengths and weaknesses of county managed and co-managed markets. The goal is to critically evaluate the contribution of the co-management model to overall resilience and sustainability of the community. Finally, a series of actionable recommendations, including possible remedies to identified challenges, are provided in the conclusion.



Source: Chege, 2010

Figure 1: Visualization contrasting poorly run versus well-run livestock market

Before co-management, all livestock markets were administered from a distance by county/district officials with little direct local oversight or involvement. On market days, county/council tax collectors collect taxes and submit revenue to the county/district with a general lack of community awareness of what the funds payed where specifically used for. The disconnect between tax payments and county spending has led to suspected evasion of tax compliance by both livestock producers and buyers as well as little local interest in maintaining livestock market infrastructure. Deteriorating infrastructure and wide-spread tax evasion have meant a lack of livestock market vibrancy and overall market development. The marketing problem has been aggravated by the poor state of infrastructure, which increases the cost

of transaction for the pastoralists. This lessens most pastoralists' ability to respond to economic shocks or, put another way, reduces economic resiliency.

Within the context of Kenyan pastoralist livestock markets, CMM was considered a valuable strategy because of several issues identified below. More specifically, KLMC has identified at least 7 major issues that informed creation of CMM (Owino & Abdulkadir, 2013):

- i. the county was deemed unable to provide adequate services and management of livestock market infrastructures which lead to relatively dilapidated market infrastructure;
- ii. reduced central government resources to manage these markets because of structural adjustment programs (SAP);
- iii. lack of local involvement in decision-making and management of tax resources;
- iv. reduced county livestock tax revenue from non-compliance of tax payments;
- v. corruption and misuse of the livestock revenue by a few county government staff;
- vi. poor market area natural resource management;
- vii. underreported spread of livestock disease and poor disease outbreak control.

The co-management initiative is planned in such a way that the county councils and the livestock marketing associations (LMAs), which are affiliated with local county livestock marketing councils (CLMCs) and KLMC, come together through a binding mutual agreement and share the revenues collected on an approximate 50-50 basis. The income from revenue shared would be used to promote livestock marketing and provide the required services to all stakeholders. Therefore, sustaining the markets to provide long term benefits to the communities and all stakeholders, including the county councils.

The sub-optimal operation of livestock markets, identified by KLMC, created the need for an enhanced strategy to build a more vibrant livestock market that would not only benefit the local community but also enhance revenue and management of livestock markets from the county perspective. In suggesting this course of action, KLMC drew upon several theoretical foundations including fiscal decentralization literature. The next section outlines a relatively newer development strategy, fiscal decentralization, that promotes the idea that local authorities have a better knowledge of expenditure needs as well as local personal knowledge that can enhance revenue collection.

2. Theory for co-management—Strengths and challenges of fiscal decentralization

What are the major advantages to be captured? The first, and most important, are the gains from moving government closer to the people. [T]he potential benefits include better public services, better accountability..., more willingness to pay for services, and hopefully "development from below". (Bahl, 1999)

One of the theoretical foundations for the co-management model is based on the concept of fiscal decentralization situated in public finance literature. The general idea is that devolving the responsibilities of both tax collection and expenditure, closer to those that know the local needs of the community as well as those that pay the taxes, will enhance economic efficiency by improving accountability and compliance of the local community (Hart and Welham, 2016). As outlined later in the paper, sharing tax collection resources, with a locally elected administration for running the livestock market, is designed to enhance revenue, increase local social spending and reduce maintenance costs of the market.

Public finance literature has identified three interrelated dimensions that need to be considered for implementing decentralization and which include political, administrative and fiscal considerations. For purposes of the CMM, the political dimension is deemphasized because most of the focus is on the technical administration of the livestock market. However, later success indicators (Figure 5) recommend that the LMA should take on more active roles in advocating and working in the community and go beyond simply managing the livestock market. The latter two issues, administrative and fiscal considerations, related to hiring staff and implementing taxation within the market, respectively. These activities can be quite varied and rely specifically on local administrative capacity, social and cultural aspects as well as specific objectives and local needs. The detailed administrative roles and specific tax sharing agreements should be jointly determined with county government and this is a main challenge of effective decentralization. Put another way, there needs to be a careful balance between county oversight and local autonomy (Hart and Welham, 2016).

As evident from the fieldwork (Appendix I), there are many significant variations of LMA market operations which need to be allowed for when negotiating with county government on decentralization. Too much restrictive oversight or, conversely, too much local autonomy will create problems for efficient operation and possible mismanagement or corruption due to lack of oversight. The goal is to make best use of the technical capacity of government but, at the same time, rely upon the greater local knowledge and accountability of local staff (Hart and Welham, 2016).

This document outlines several strategies for potential successful co-management but recognizes some challenges that can be seen in the actual operations. For example, a lack of transparency for elections can mean that co-management LMAs financially enhance themselves (ie. so-called “capture” in the literature), rather than the community, given the lack of local accountability. What this suggests is that co-management needs to be carefully considered as part of a coherent implemented package and is not necessarily adopted in name-only as a relatively superficial solution to solve identified livestock market problems. Overall, decentralization does have several identified challenges and care must be given during implementation. Many of these challenges are identified in the fiscal decentralization literature.

Fiscal decentralization has several potential challenges for successful implementation which include, transparency and clear guidelines if changes in MoUs are needed, balancing higher-level oversight with local autonomy, beginning with relatively simple agreements that consider local capacity, further developing local capacity for administration as well as trust between parties, true representative local leadership and avoiding local elite “capture.” In addition, as is the case for these livestock markets, decentralization works best where the benefits of paying taxes are directly seen by local taxpayers. Finally, a strong internal champion who understand the costs and benefits of establishing such a program is valuable for longer-term success. Most of these identified issues suggest taking a dynamic approach to CMM and not just setting up a one-time intervention. Overall, we recognize the need for an “adaptive” co-management and that co-management should not be considered a static concept. This adds a significant layer of complexity as it is likely that local co-management will evolve at different speeds. Simply creating and executing an MoU that divides the tax collection proceeds between the county and the LMA, and not planning for further development of the relationship, reduces the potential success of CMM in the medium to longer term.

Adaptive co-management can be considered a knowledge partnership between the county and LMA where trust, learning-by-doing and a collaborative relationship is established. In the early stages of CMM, the legal aspects of collaborative arrangements are emphasized but, as time goes on, this evolves into a

greater emphasis on process and learning. The general lesson is that the interplay, or two-way feedback, between government and local institutions is necessary for the evolution of co-management and networking plays a major role. Trust is the major determinant of success in many cases of co-management. But getting to effective co-management involves institution building, trust and social capital, and generally a significant amount of time that can be as long as 10 years to effectively develop (Berkes, 2009). Seen as collaborative problem solving, co-management is task-oriented, concentrating on the function, rather than the formal structure of the arrangement (Carlsson and Berkes, 2005). In the case of developing countries, these networks can include a surprisingly large number of support organizations, not only NGOs, CSOs and aid agencies but also local and regional government agencies. While many of the issues identified for running the CMM have been explored in the fiscal decentralization literature, the unique aspects of these livestock markets also need to be explored and contrasted to the broader literature. KLMC identified the pressing need for livestock co-management because of several identified shortcomings of the county administered markets and believed they could be run in a far more effective manner that would benefit both the local pastoralist community as well as county government. The next section identifies the specifics of CMM and Kenya.

2.1 Kenyan livestock markets and the co-management model

The co-management market model is relatively complex and involves a variety of actors engaged in a myriad of activities. Figure 2 depicts the basic framework from which this document will draw upon in greater detail but is meant to provide an overview of the operational aspects of CMM.

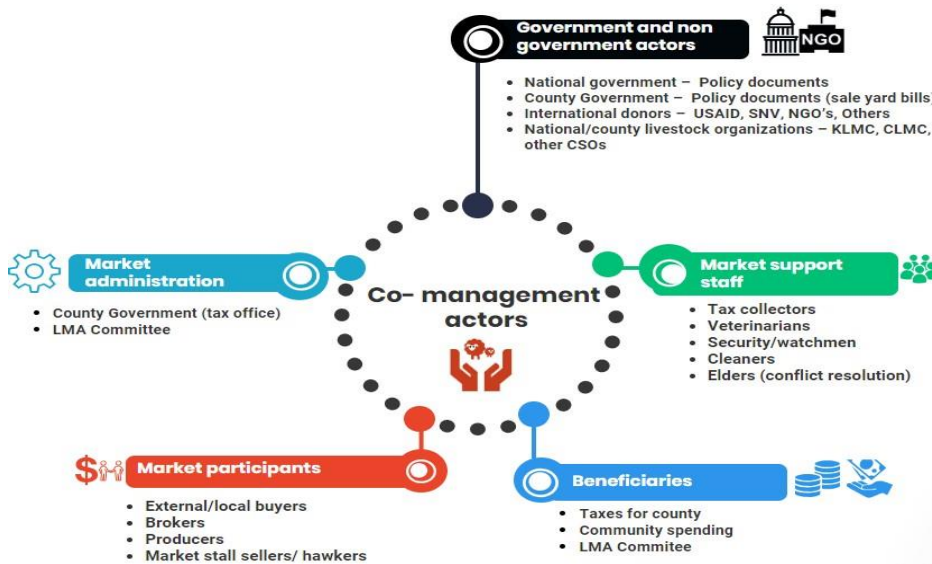


Figure 2: Co-Management Actors

The CMM was envisioned to be a joint local partnership between the County Government and communities represented by the LMA with support from the CLMC. The goal is to make sure the model works and is beneficial to all the stakeholders involved and that it contributes to building resilience of

pastoral communities. More specifically, the county would provide technical expertise and negotiate, in a responsible manner, a viable local structure for revenue enhancement that benefits both the local community and the county. The LMA, community representatives elected in a clear and transparent manner, would negotiate for the local stakeholders. CLMC would advocate for CMM and provide capacity building and assistance for all co-managed markets. The basic goal was for livestock taxes (cess collection) to be equally split 50% - 50% between the LMA and county government, and by virtue of this local management, increased market participation, with greater compliance, and subsequently benefit both parties. More elaborate aspects of the agreement included LMA market operation.

The KLMC concept seeks close collaboration between the communities and the county government in the provision of services in order to improve the conditions of doing business in identified markets. Several components of these services for managing livestock markets include (Owino & Abdulkadir, 2013):

- Revenue collection
- Management of infrastructure
- Development and maintenance of markets (eg. setting market days)
- Record keeping and disseminating market information (eg. prices, emergencies, etc.)
- Disease surveillance and mitigation
- Maintaining cleanliness and hygiene of the market area
- Security, conflict resolution and related services required to facilitate livestock trade

With local administration of the markets, KLMC suggested a variety of benefits that improve both community and county objectives. Most notably, the equal 50% split would enhance county revenue. It was envisioned that while the percentage of revenue would drop from 100% to 50% for the county, increases in compliance and market activity would increase the amount of revenue for the county. In other words, while a reduction in the marginal rate of tax collection for the county would decrease revenue, increased takeoff and subsequent increase in animals traded in the market, would more than make up the difference¹. While this was a primary benefit advocated by KLMC to the county, there are a variety of additional benefits that they envisioned.

Total benefits of the CMM that KLMC envisioned include (Owino & Abdulkadir, 2013):

- Enhanced revenue for county government (as noted above)
- Improved tax compliance by market participants
- Better upkeep of the market infrastructure,
- Improved market dispute resolutions
- Enhanced security
- Community revenue for school fees, health, etc.
- Increased community employment (tax collectors, watchmen, cleaners, etc.)
- Protect the interests of livestock traders
- Instill and sustain an improved entrepreneurial culture in livestock markets
- LMAs engaging in broader community development

¹ Mathematically, assume the county collected 50,000/= a week selling 500 shoats and collecting 100/= equally from buyers and sellers using the non-co-managed 100% revenue collected. If they share equal percentages of the tax revenue with the LMA and do not change the amount collected (100/= per shoat), then an additional 500 shoats need to be sold in the market for the county to remain at the same level of revenue. While this is somewhat difficult to ascertain from the field visits, there is ample evidence that market sales increased significantly. In addition, if other benefits are included (improved maintenance, local employment, etc.) then the benefits are enhanced to a greater degree.

KLMC argues that the co-management model is a comprehensive management model that involves all relevant stakeholders including the community, LMAs, county administration, traders, producers, local and Kenya livestock marketing councils. The model benefits livestock producers, traders, LMAs and the county government in terms of cess collection and effective market management. As a result of the steady collection of tax revenue and its transparent use in the maintenance of the livestock markets, traders and producers can access essential services that encourage them to increase market participation, which is critical to their livelihoods.

3. Field Work—Review of field visits and thematic descriptions of major aspects of co-managed vs. non-co-managed markets

In order to better understand the current livestock management processes operating in pastoralist areas of Kenya, field work was undertaken as a joint project between IFPRI (James Warner) and ILRI (Nelly Njiru). The field work covered 5 counties, a total of 11 livestock markets (6 co-managed and 5 counties managed) and was undertaken in 2 separate field visits during a total of three weeks in May and August of 2018. Field visits included at least one co-managed and one non co-managed market in each county. The counties visited include Isiolo, Marsabit, Baringo, Wajir and Samburu (Figure 3). More specifically, in Isiolo count—Isiolo & Oldonyiro markets, Marsabit—Merrile & Jirime, Baringo—Nginyang & Emining, Wajir—Wajir & Bute and in Samburu—Lolkuniani, Maralal and Lekuru. Extensive field notes, concerning individual market information, are provided in Appendix I. The fieldwork revealed a great deal of variation of how both co-managed and non-comanaged markets are administered. All these insights provide valuable input into understanding the successes and challenges of livestock co-management markets. **Taken as a whole, we believe that co-management is an effective strategy for enhancing both local community and county interests. However, the shallow application of co-management does not necessarily guarantee co-management benefits. We believe co-management should be part of an integrated and coherent package for successful implementation. In other words, the management structure of co-management is a necessary but not sufficient structure to guarantee benefits of local administration.** Put another way, a well-run county market can be operationally superior to a poorly run co-managed market if the implementation is poorly conceived and undertaken. The broad goal of this work is to create a framework for successfully expanding co-management for local community benefit.

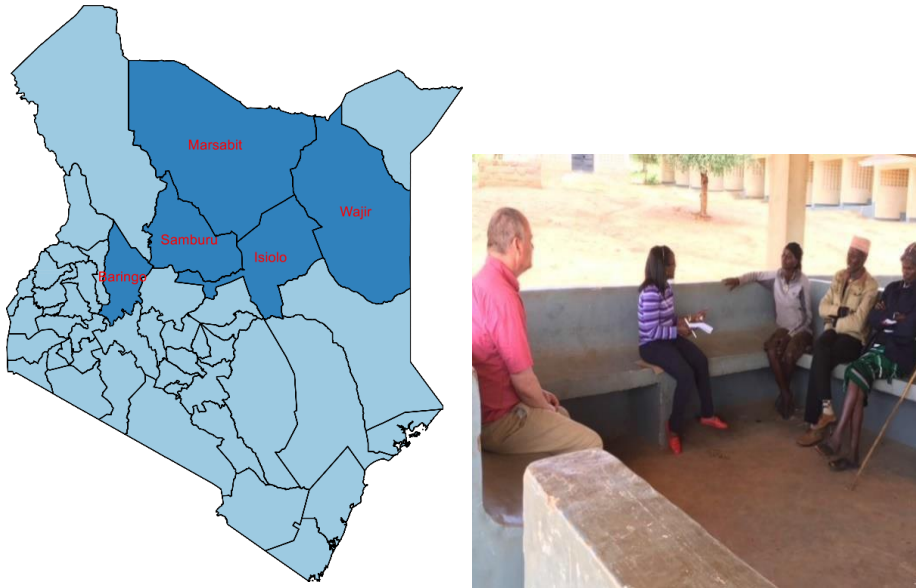


Figure 3: Counties visited for livestock co-management review

Overall, we found that most co-managed livestock markets are better managed than county managed markets but there is a wide variation in operational styles and successes. It seems indisputable that local management is a good idea when it is operating well but the challenge remains that when it is operating poorly it has demonstrably negative impacts on the local community. Fortunately, this field work reveals many aspects of how livestock markets are managed and why they are relatively successful or not. We begin with some descriptive analysis of the varying differences in the markets, concerning three key objectives that include revenue operations, expenditures and overall market/community management. Finally, a thematic review of generally successful co-management strategies is presented.

3.1 Variations in revenue collection

Enhanced revenue collection is the stated primary goal of the co-management model and it does seem apparent that most co-managed markets have improved livestock tax (cess) collection over county managed collection. However, there are many diverse strategies to collect additional revenue that vary from market stall rentals to the sale of fodder and water. In addition, the co-managed markets have implemented a variety of different types of cess collection strategies that might be useful for improving the design of the CMM. However, care should be given regarding the actual benefits and some contrast to revenue potential is encouraged. In other words, all the benefits should be placed into the context that livestock markets do not have the same revenue potential and therefore should not be subject to absolute comparisons either between co-managed markets or between co-managed and non-co-managed markets. Issues that affect potential revenue include, the number of animals in the area for potential marketing, regional conflicts can reduce access to markets, difficulty to access the market because of poor road or

market infrastructure issues, poor location of the market, relative lack of awareness or tradition for using other markets, migration of animals during drought, as well as other issues. These issues are important for addressing how much revenue could be collected in individual markets and one of the principal recommendations regarding the implementation of the CMM is viability at the market level. With this in mind, we now outline variations in revenue collected.

Perhaps the most important source of revenue is the cess collected from livestock sales. For co-managed markets, which are the markets that share this revenue with the county, field work revealed that values range between 25% to 50% for the LMA with the remaining going to the county. While there is no optimal fixed percentage, the relative share should be based, at least in part, on the projected expected capacity of the market. In addition, the operational costs, expenditure responsibilities as well as other sources of revenue should factor into the negotiations between LMAs and the county. While there are significant variations in markets, the percentage appears to be equally applied at the intra-county level. Of course, individual variation at the market level, especially within a county, should be carefully considered because of perceived fairness and ease of operation. This suggests balancing local variations of revenue and expenditure responsibilities, due at least in part to market size, with ease of county administration.

Markets like Oldonyiro received a high of 50% while Baringo county markets receive 25% (10% of this is paid to the CLMC as membership dues). Some other visited markets receive 30% with discussions to increase to 40% of total cess collected. Importantly, several of the co-managed markets reported large amounts of increase in cess once the CMM was implemented. In Merrille market, an increase of 80% was reported to have occurred. Some Nginyang' market interviewees reported an increase of about 70% almost immediately and suggests that local management can increase tax compliance relatively quickly. Nginyang' tax collectors estimated an increase of 100% in this market as their revenue increased from 40,000/= to 80,000/= on a typical market day. Most of these increases seem to be coming from increased tax compliance as well as, to a lesser extent, increased buyers of livestock in the market. Several co-managed LMAs were relatively circumspect concerning actual revenue collected and we found at least one case where an LMA was claiming to receive less cess proceeds than they were actually receiving to prevent some stakeholders from complaining about a perceived lack of community spending. Interestingly, the seemingly better run co-managed markets are more open about revenue and expenditures. For example, in Merrille market, LMA staff gave rough approximations of typical market day revenue collected (17,000/=) and expenditures (9,000/=). This suggests awareness and transparency of market costs and revenue collected and this openness should be encouraged for better community engagement.

The collection of cess does involve various tax collection strategies as well. The most common, particularly in non-co-managed markets, is that county tax collectors collect revenue on market days and return to the county tax office with their payments. Co-management models involve using just county tax collectors and splitting the proceeds, using both county and local LMA hired collectors on market days. In some cases, rotating either county or local collectors depending on the market day or using solely locally hired tax collectors. Payments to county tax collectors seem to be based on a fixed wage with some travel allowance, although this was not always the case. Local tax collectors were paid in a variety of methods, including fixed payment, percentage of tax collected and incentive bonuses for the individual that collected the most during the market day. In addition, at least one co-managed LMA rotate youth tax collectors and temporarily drop those that do not perform well on the market day. Finally, Maralal market LMA is assigned two market days to collect revenue for themselves with the remaining days going to the

county. The LMA complained that the two market days are lower volume days and so their revenue is insufficient. Exploring different payment methods for cess collection is important and experience sharing would be valuable for improving tax compliance and revenue for the LMAs. Currently, most counties have MoUs which were drafted with the help of KLMC which stipulates the specific amounts of the livestock tax by animal. In cases where the buyer pays at least a portion of the amount, this is determined locally.

In terms of who actually pays the cess, the typical payment is usually split between buyer and seller and amounts to about 300/= for cattle and 100/= for shoats split evenly between buyer and seller. However, there are cases where sellers pay two-thirds and sometimes tax discounts are given for larger sales. The highest tax assessment from the field work was found in Bute market where a total of 680/= was paid per camel. Payment was equally shared between buyer and seller with 480/= going for taxes and 200/= paid directly to the LMA.

Developing a more strategic approach to cess collection was discussed by the Samburu LMA and they revealed they have determined an annual target for revenue collection. These types of strategic longer-term objectives are encouraged and represent higher level operational objectives for further developing LMAs (discussed using Figure 5). This type of forward-thinking objectives represents open and transparent bookkeeping, as well as targets and presumably, strategies to achieve these goals.

There are several other potential sources of revenue in livestock markets that are briefly identified in Figure 4. One of the more important revenue sources are the market stalls that exist, particularly in the newer livestock markets. For example, Oldonyiro charges 600/= and 400/= a day for large and small market stalls, respectively. While non-livestock market activity, and supporting infrastructure, varies significantly by market, the tax amounts are large enough to matter to both the county and LMAs. Clarity in this revenue assignment is important enough that policy should address not only cess allocation but these other supporting activities. Therefore, it is unfortunate that at least one relatively well-run market has a market stall tax dispute that remains unresolved and so no tax collection is taking place.


Source of Revenue	Expenditures
 <p>Cess - buyer/seller livestock tax</p>	 <p>Market operation (LMA administration, other staff, water electricity, fodder, etc)</p>
 <p>Market stalls (hawkers)</p>	 <p>Infrastructure repair (e.g. fence, road, etc)</p>
 <p>Loading ramp</p>	 <p>Infrastructure construction (Toilet, market stalls, shade, generators, etc)</p>
 <p>Water</p>	 <p>Community expenditures (Bursaries, hospital, orphans, etc)</p>
 <p>Fodder</p>	 <p>CLMC dues</p>
 <p>Hotel/ restaurants</p>	 <p>County government</p>

Figure 4: Possible revenue and expenditures in a livestock market

Other revenue collected in these livestock markets include things like water and fodder for animals. The existence of these was relatively infrequent and most markets expressed a desire to develop these revenue generating activities but did not actually have them. Formal restaurant service (fixed building with tables and kitchen) and a hotel only existed in one market that was visited but this is also a potential revenue enhancement that should be more generally explored.

Overall, there is good evidence to suggest that significant revenue enhancement is achieved with the implementation of the co-management model. Traders admitted that they tended to under invoice the number of livestock transacted to avoid paying taxes before co-management was implemented (although it is still a problem). In addition, future targeted research of other benefits likely to have incurred include reduction in maintenance, security, local employment as well as community benefits.

This is not to say that cess collection and overall revenue enhancement is universal to markets with co-management. Places like Jirime, there is a clear acknowledgement, by LMA, traders and county officials, that revenue generated by LMA is not being spent in the community. A fundamental reason for this is a lack of transparency that ultimately hurts the scaling-up of the co-management model in the county and elsewhere. This is where some guidance and potential intervention by county officials or KLMC/CLMC needs to be undertaken to assist the community to improve LMA operations.

Non-co-managed LMAs struggle with operating revenue and specific mandates for managing markets. Many of these LMAs are loosely affiliated with the livestock market and their role is relatively unclear. Most rely on smaller incomes and are relatively marginalized. Isiolo, a non-co-managed market, sells water and charges for the loading ramp and livestock pens but the revenues are much smaller than potential sharing of the cess.

While revenue sources and amounts are diverse, it seems relatively clear that, on average, co-managed markets seem more vibrant and experimenting with a variety of collection methods. Local variation in revenue collection methods suggests LMAs adapting and adopting innovative strategies. These strategies could be studied, and experience sharing might benefit other co-management markets. A more vibrant role of CLMCs to compile these experiences is recommended.

3.2 Variation in expenditures

The financial role of LMAs that are co-managed includes both day-to-day market management and longer-term strategic issues. Market management potentially incorporates a variety of goods and services that can include, paying cleaners, watchmen, providing ancillary livestock supplies like fodder and water, small market repairs, security and settling of disputes, disease monitoring, as well as dissemination of market information (including prices, security concerns, and generally creating an awareness of the importance of payment of livestock taxes). More strategic issues may include, community planning and monetary disbursement, market construction (such as toilets, shade from the sun, etc.) and creating local SACCOs for savings and payment of dues to county CLMC. Creating the environment for other business activities, like mobile health clinics, entrepreneurial services (like vegetable sales, clothing, instant photography), etc. are being encouraged by a few relatively forward-thinking LMAs.

The day-to-day operational management of the market includes a variety of costs that can be paid by the county, the co-managed LMA or a combination of the two. One co-managed market splits revenue with the county after all costs had been paid at the end of the market day. Most of the costs to manage markets are labor costs and include cleaners, tax collectors, security and watchmen (who make sure the market is safe during non-market days and at night), elders who help with disputes and occasionally some youth to load animals and help find animals that have strayed. Smaller costs such as cleaning products, bookkeeping ledgers, etc. were seldom mentioned but do comprise some expense. These costs should be placed within the context of operational size of the market, but smaller markets will inevitably have larger percentage of administrative costs relative to revenue collected. Creating a template of expected relative percentage costs to projected market size would be useful for gauging relative co-managed efficiency and should be developed by KLMC in collaboration with established co-managed markets.

Probably the second most common cost for LMAs is minor livestock market repair. Generally, most stakeholders reported faster repair and general improved maintenance and care than when the market was co-managed. As the construction of a modern livestock market, a very large capital investment, general upkeep is essential for longer-term sustainability/viability of the market. There are countless examples of valuable projects being neglected and damaged because of a general lack of accountability for maintenance. Localizing responsibilities of overseeing the market seems to be rarely mentioned but could be a large economic benefit, beyond the direct increase in tax collection, in a cost-benefit ratio analysis of the co-managed market. Of course, local preventative maintenance should be

placed within the context of the actual age and condition of the market. An important issue arises regarding what constitutes minor or major repairs to a market.

Field visits revealed an almost universal response that LMAs from co-managed markets are responsible for minor repairs and the county is responsible for major repairs. While this designation is appropriate, there could arise an issue of designating what constitutes minor/major repairs in the market. At least one LMA indicated a lack of clarity on this issue between themselves and the county and some dispute regarding who should pay. The issue is important enough to draft some guidelines and responsibilities in either sale yard bills or MOUs. Some innovative ideas on payments include cost-sharing between the two, with LMAs putting up a percentage of the funding to be supplemented by county funds. The issue of what constitutes minor or major repairs is an important one to consider before the repairs are needed because a dispute concerning who should pay could result in a delay in repairs and a less efficient operational market. Besides operational expenses, community benefits would likely be the third biggest expense for LMAs and financial outlays range from hundreds of thousands of shillings to literally no disbursements at all.

Community expenditures cover a wide area of assistance, but most seem to focus on education fees. These fees range from primary school students to university and include less fortunate students such as orphans and the disabled. Support to students ranged by financial generation of the market but the highest figure we encountered was 200 students receiving 2,000/= each for a total of 400,000/=. Hospital payments are occasionally also made. Money can be lent with the understanding that sales of livestock will be used for repayment but sometimes the money is not repaid. It should be pointed out that at least one co-managed market admitted that while they had approximately 200,000/= in a bank account they had not made any community payments.

Disease surveillance was frequently mentioned as an important activity where many LMAs were charged with observing the health status of livestock being brought to the market. Some LMAs reported that they worked with county veterinarians, but our field work seemed to indicate that many were not in attendance, at least on the days we were present. Some LMAs reported incurring costs for this service but most did not. The importance and cost of this activity is a little unclear and more research is needed to see if co-managed markets effectively better manage diseases than just county managed markets. Generally, LMAs report disease to local veterinary services and discourage community members from bringing sick livestock to market to lessen the spread of the disease.

Occasionally, co-managed LMAs take on capital expenses that they use for generating income. In one case an electric generator was purchased to provide power to pump water for schools and hospitals as well as provide power to a polytechnic. One dynamic LMA was considering purchasing a truck for vegetable purchase at possible rental. Given the cost, they were looking to partner with donors for supplemental investment funds. One LMA was purchasing land and developing hotels and restaurants but they seemed to rely on SACCO money to perform these activities. Developing fodder and water services in the market was frequently mentioned but not actually implemented in many markets. Overall, most co-managed activities focus on market tax collection, but additional investment projects could be considered to diversify revenue sources and enhance the LMA operations in the community.

The implementation of SACCOs should generally be seen as an advantage for the market community. The development of a formal savings organization, with subsequent lending capabilities, can assist in the development of additional business activities for the members. There is at least one case where a co-

managed market LMA initiated a SACCO for community development over and above funds distributed to the community. However, in a different market we visited, the co-managed market was run mostly for the benefit of the SACCO and tax revenue generated was not used to directly support the community. This is a concept that needs to be better explored and concrete reasons for LMAs that provide money to the community over LMAs that merely represent the SACCO should be considered. It is a fair question to ask why livestock markets are not run by those that most directly use the markets to benefit those that use it. Professionally, traders and producers are considered the local experts most qualified to run the market and by running the market efficiently might they also get to keep the benefits? If the market creates ancillary benefits such as additional market stalls, restaurants, etc., and enhances cess revenue for the county, a different co-management model could be considered where a trader co-op is formed that places their revenue principally back into the market rather than providing revenue for social spending in the community as is commonly performed by most co-managed LMAs. KLMC needs to be able to sufficiently refute this argument before it gains wider attention and adoption.

Overall, co-managed LMAs should be encouraged to keep track of their expenditures and revenues via general accounting rules. Operation costs should be reviewed frequently (LMA fees/revenue collected) and the percentage should be reasonable and decreasing if possible. Baringo LMA suggested that a 30% cost of administration is their general actual expense amount. Typically reported cost of LMA members to oversee market day was 500/= for each member. Targeted growth rates and reducing operational percentages are encouraged.

3.3 LMA market management – capacity and accountability

This section reviews different management strategies encountered during the field visits. As an aside, there is no doubt that not all markets should be co-managed. The operational costs as well as time dedicated to operationalizing an LMA may not be suitable for seasonal or low volume markets. Developed templates on operational costs and local and county benefits should be considered. Management of LMAs, in both co-managed and non-co-managed markets, is varied and reflects local characteristics and the strength of co-management implementation.

Perhaps most important to management are clear documents that establish the specific roles and responsibilities of those involved in the livestock market. In particular, two support documents seem critical and include a county-wide sale yard bill and specific MOU between the county and the individual livestock market. In general, the sale yard bill provides a framework that can be made more specific within the context of a developed local MOU. A lack of clarity can mean a breakdown of responsibilities and conflict among parties. For example, clear codification should be made regarding the roles of expenditures and revenues as a lack of clarity can create disagreement between local and county officials. In the relatively well-managed Merrille co-managed market a disagreement over tax revenue collected on market stalls has meant that neither the LMA nor the county collects the money. Clearly, this is a sub-optimal outcome and could have been prevented by better documented responsibilities. As mentioned in the theoretical literature, adaptive co-management, and the building up of trust could also help mitigate these types of issues but this takes time. Overall, while all potential roles and responsibilities cannot be captured in documentation, broad assignment of repair responsibilities on a physical and cost basis would be an important element for successful implementation of the CMM. Designating which documents, and what specific content is needed, is important for the CMM.

A well-designed sale yard bill should provide an essential framework of roles and responsibilities that can be more carefully negotiated by individual MOUs to account for local variations. The additional benefit of signed and implemented sale yard bills is some stability in co-management operations in the case of county political changes. For example, the lack of a sale yard bills allows for large, potentially disruptive, changes to operational management, and control of tax revenues, by newly elected county governments. Placing a legal framework, in the form of a sale yard bill, can provide stability, transparency, and trust between county officials and LMAs. This trust also enhances efficiency and longer-term effectiveness. The negotiation of a county-wide MOU should be undertaken with wide-ranging input from existing LMAs and the local CLMC as well as the national KLMC. This input helps create an operational MOU and buy-in by all stakeholders. Given the wide variations of present co-management implementation strategies, this MOU must be sufficiently flexible to allow for local variations for effective local management

For LMAs to effectively implement a county MOU and manage the livestock market, significant capacity building for the LMAs and other local community members is needed. The field visit revealed a variety of donors, government and KLMC/CLMC trainings did not appear to be coordinated or reviewed for either effectiveness or appropriateness. In addition, most LMAs noted that they have not received experience sharing visits with other co-managed markets. This seems like a lost opportunity to promote potential best practices.

A variety of courses have been given to many of the LMAs visited and include leadership, accounting, financial management business development skills and budgeting to name a few. Several institutions were involved from donors to government to KLMC or affiliates. These seem like necessary components for managing the markets and given the relative stability of these LMAs memberships, training would not have to be given very often. However, a “core curriculum” is advised that should serve as a basic training minimum. KLMC and the counties themselves should discuss what this curriculum should entail. Some form of evaluation should also be considered to make sure the lessons are effective. Of course, additional trainings should be welcome but “management literacy” is needed for LMAs to be effective. Ranking LMA members should have the chance to visit other livestock markets for exposure visits. Given the diversity observed in just visiting the 11 markets in this field work, it is clear that a great deal of experimentation is being undertaken. This needs to be shared and promoted for avoiding pitfalls as well as promoting best practices.

There seems to be a wide variety of LMA membership size, representative strategies (both in terms of community representation and type of member) and elected length of term. While most LMAs had between 10 – 15 members and approximately 5 officers there is significant variation. One non co-managed LMA reported a total of 45 members split into two groups. This seems number of members is clearly unmanageable and suggests the need for clarity on how LMA membership is elected. Most of the members are elected based on tribal, population and geographical representation. Members generally were comprised of livestock traders and producers. Most committees had minority female representation (around 30% or less) and a couple had no women on the committee. Interestingly, one market discussed dropping the number of LMA members from 17 to 10 to reduce expenditures and operational management costs. There is a general need for codified documents to guide the election of the LMAs but flexibility concerning local representative needs is important. Length of terms were approximately three years, but the actual length of service of many members interviewed varied widely. There were references to poorly run LMAs being replaced but the actual strategies for how this was accomplished were a little unclear. There was also some evidence of political interference influencing LMA membership. In other words, county

party officials influencing who would be candidates for the LMA. This is not a positive development for community representation. Consistent with transparency issues, those LMAs that seemed to managed markets more effectively, where much more open about specific details regarding elections and membership.

Most LMAs interviewed met weekly to discuss operational issues and had community meetings up to four times a year. Minutes of meetings were generally kept but we saw no actual evidence of these notes. At least one co-management LMA could provide no evidence of ever actually meeting with any members of the community. This situation should not be allowed and accountability, through public meetings as well as more formal auditing processes, should be codified in formal documents developed for co-management implementation.

Given that many evaluating indicators of effective co-management revolve around revenue and expenditures, transparent auditing has been relatively underdeveloped. At one extreme, one LMA member in a co-managed market kept a small notebook in his pocket and occasionally wrote something regarding tax collection and quickly put it back in his pocket. This notebook was not shared with us. However, at least one co-managed LMA had begun implementing a relatively intensive auditing system to evaluate disbursement for bursaries. This LMA has a bank account with 3 signatories. Before any withdrawal, the 3 signatories must sign. When disbursing the bursaries money each parent signs and their ID number is taken/recorded. Regular audits are performed by experts in the community working with elders. As this is public money collected for local benefit, these systems are highly encouraged to both prevent corruption as well as build confidence in the community about the effectiveness of taxes as well as enhance tax compliance. Making these financial decisions more public could also enhance transparency and accountability. For example, a simple template for meeting notes could be developed and important decisions/updates for the market could be posted, so people are generally better informed.

Managed security in most of the co-managed markets, like Oldonyiro and Merille, has improved safety and growing security has enhanced the vibrancy of these markets. The LMAs have used some of the revenue shared to pay additional security guards during the market days who also escort external traders from the markets. In markets that are poorly co-managed and where co-management is not implemented, sale of stolen animals is relatively more common. Additionally, conflict resolution, using either elders or LMA members or both, enhances operational efficiency of the market. With improved security in these markets, women participation has also increased, and notably external traders have increased resulting in increased offtake. However, insecurity was reported to be high in less efficiently co-managed markets.

Regarding CLMC's role in these various counties, our field visits indicated a relatively passive role for local CLMCs and they seem involved in some data collection but not taking on a more advisory/mentoring role. KLMC needs to seriously consider the role their county counterparts play in the ongoing design and implementation of co-management. In the case of one county that pays 10% of its revenue to their CLMC, value for these dues should be demonstrated regarding operational assistance by KLMC/CLMC. In conclusion, two general field observations regarding the effective operational management of co-managed markets include overall vibrancy of the market and operational transparency. We identify the two concepts separately, but they are intertwined in our field visits. While a little difficult to objectively categorize, a vibrant market has a growing number of external and internal traders and sellers that creates a competitive market environment with growing numbers of transactions and rising livestock prices. Ancillary items include good infrastructure and enough security. This vibrancy was

captured by a general positive feeling among all the stakeholders as to the effectiveness of the market and its value to the community. Secondly, these well-run co-managed markets usually exhibited an open and transparent set of operating objectives, as well as supporting paperwork which was openly discussed and provided. Overall, openness and transparency are both a cause and consequence of a well-run market.

4. Developing success indicators for co-management

This research indicates there are several positive aspects of local management of pastoralist livestock markets. However, it is also clear that a simple dichotomy between county and co-managed is not reasonable to demonstrate effectiveness. While, on average, co-managed markets are superior to county run markets this is not always the case. Delineating what constitutes successful and less successful co-managed markets is important for wider adoption, growing pastoralist resilience and community development. This section seeks to make a more nuanced approach to co-management and identify a tentative ranking system for what stage each co-managed market currently exists. In addition, these indicators seek to provide an aspirational guide development assessment plan for the stages of operation for effective co-management that current markets have not yet achieved (Figure 5). For new co-managed markets, this success indicator template could serve as an operational guide to implementing co-management. However, this success indicator guide is meant as an operational template to be further developed with collaborative meetings between, KLMC/CLMC, county officials, local LMAs as well as other relevant stakeholders. Grassroots feedback is essential for this type of initiative to be effective. Imposing this guide, without buy-in from local LMAs, would likely result in resistance and ineffective adoption by local LMAs.

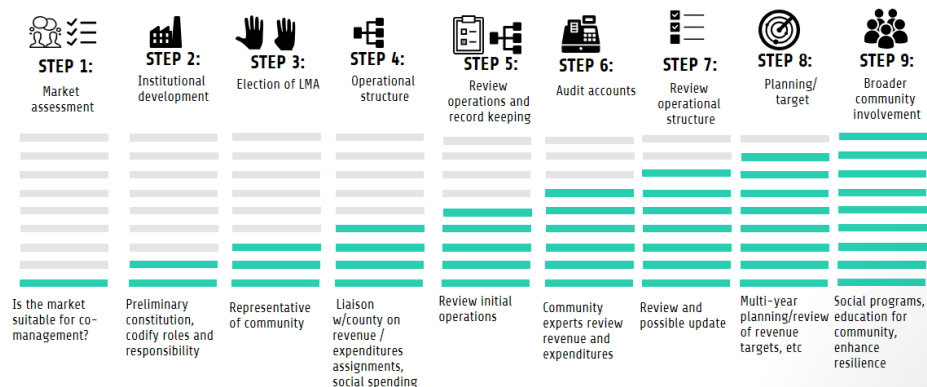


Figure 5: Co-management success indicators for LMAs

As has been mentioned earlier, Step 1 is a relative market assessment of the overall feasibility of the local market and whether it is suitable for co-management. Given the operational costs of local management the projected size of the market should be large enough to provide sufficient revenue over and above payments for LMA to manage the market. Seasonal and relatively low livestock volume markets are probably not good candidates for co-management.

Institutional development, or Step 2, involves setting out a general framework of operations for a potential LMA to co-manage the market. This document should be a tentative outline of LMA roles

and responsibilities generated from the sale yard bill (if exists) and other operational aspects of current co-managed LMAs in the county. For instance, if the percentage shared revenue of cess has been established county-wide then it is likely that that should be agreed upon for this new market as well. It is critical to understand that these are preliminary determinations that should be agreed upon after the election of the LMA.

The election of the LMA, Step 3, should reflect true community representation and include the right to recall members of the LMA in the event of misappropriation of funds or other unacceptable behavior. The size of the LMA should be relatively limited in size and resistance to too large, unwieldy LMA membership size should be avoided. Clearly designated office positions and roles for these LMAs is also important. This step is critical for effective operational management and appears to be one of the more essential aspects of what exists in current well-run co-management markets. True community representation by tribe, gender and geographical representation should be the goal. Step 4, involves the negotiation between the LMA and the county on specifics of operational procedures. General guidelines concerning sources and uses of revenue as well as collection and allocations of expenditures should be agreed upon. The goal is to set up LMAs with a clear mandate of managing the most important aspects of the market. This should be done in close collaboration with CLMC and other designated participants. The actual management of the market should be reviewed after 6 months of operation (Step 5) and consensus should be determined to make necessary adjustments for going forward.

After a pre-determined period of market operation, perhaps a year but no longer than two years, an expert committee should be formed to review the accounts kept by the relatively new LMA (Step 6). The committee should be comprised of local accounting experts (if available), respected elders in the community and county experts. Step 7 is a collaborative systematic review by all relevant stakeholders regarding the operational efficiency of the market that should be undertaken every few years (2-3 years). Step 8 involves multi-year planning by the LMA and rolling evaluations and targets to determine if the objectives have been met. For example, assume that the LMA decided upon a projected three-year review process. In January of 2019, the LMA would set targets for 2019, 2020 and 2021 and hopefully devise strategies to achieve these targets. In January of 2020, a review of 2019 targets would occur along with planning for 2022. Specific issues that could be targeted include cess collection, market infrastructure development (collaborating with county government and/or donors), ancillary market development (farm produce, consumer items, etc.), as well as amounts and types of community spending (bursaries, health, etc.). This type of rolling review would create a more strategic, longer-term, vision of managing the livestock market.

A well-run co-managed market includes a representative body that effectively oversees a major economic hub in the pastoralist community. Building on this success, the LMA could engage in broader community development. Step 9 is where the LMA begins to actively plan for community development on its own as well as forming cooperative relationships with other relevant stakeholders. For example, if the LMA observes perennial livestock disease outbreaks, a task force could be created to seek ways for eradicating these illnesses. Collaborating with veterinarians, national and international health experts, donors and government officials, effective strategies could be developed to mitigate the problem. While just one example, the bigger idea is to make the LMA into a community advocate for resilience beyond just a vibrant livestock market.

Ultimately, we see the development of a co-management manual where a strong KLMC/CLMC could assign values indicating where they are in the process and further assist in developing strategies

for moving forward. For example, a well-run co-management market, with audited books, could be assigned either a 6 or 7 value. Having expressed an interest to move to longer-term targeted goal strategies (step 8), the local CLMC could work with them to build their capacity to provide effective revenue targets. Again, it should be stressed that this is a prototype that should be developed with both expert insights as well as LMA input.

5. Conclusion and recommendations

The goal of this document is to critically evaluate both the present and future contribution of the co-management model to building overall resilience and sustainability of the pastoralist community through local co-management of livestock markets. Co-managed livestock markets have proven to be a solid idea that should be promoted throughout pastoralist areas of Kenya. Designating specific responsibilities to both local livestock market associations and relevant county officials creates a joint management of these markets generally enhances tax revenue collection, operational efficiency and increased social spending for the community. Put another way, pastoralists should see greater prices for their livestock, enact trades in a safer environment and pay taxes that will, in part, pay for self-directed social programs in the community. All of this will lead to enhanced resilience for the local community, particularly in the face of increasing worries around climate change. In short, co-management generally leads to more vibrant livestock markets and enhances, among other things, resilience for livestock buyers. However, simply having a co-managed market does not guarantee these benefits. Co-management implementation needs to be part of an integrated package that emphasizes true community representation of the livestock marketing association as well as transparency regarding revenues and expenditures.

Seeking to redress the weaknesses of a county/district run livestock market, KLMC with support of SNV and others, designed and implemented a locally co-administered model. Overall, the model seeks to improve tax collection and overall livestock market vibrancy. A fair assessment is that the model has met with mixed results which was confirmed by field visits. Drawing on these observations, this document analytically reviews the current successes and challenges to draw out themes that should be considered regarding how LMAs could successfully co-manage livestock markets. Most importantly, a hierarchical success indicator was developed to capture the relative stages of effective co-management. Finally, a series of actionable recommendations, including possible remedies to identified challenges, is provided.

The development of the co-management model emerged from a growing dissatisfaction concerning the operational ability of the county to manage livestock markets. SNV felt that the disconnect between tax payments and local county/district spending led to tax evasion by both livestock producers and buyers as well as little local interest in maintaining livestock market infrastructure. Deteriorating infrastructure and wide-spread tax evasion have meant a lack of livestock market vibrancy and overall market development. The co-management model was implemented to better address these issues but has met with a varying degree of success that depends on more than just the simple implementation of co-management.

Fieldwork, reviewing the successes and challenges of co-management, reveals that an integrated package should be implemented to improve the chances of successful co-management. Details include supporting documentation that delineates clear revenue and expenditure responsibilities between the

county and the LMA, representative election of LMA members, capacity building to enhance the LMA operational capabilities, joint reviews of operational structures, and periodically auditing accounts. Developed strategic longer-term targets and broader interaction in the community seem important but are more aspirational in nature given the relative level of co-management at this time. Given this review we believe that the following objectives should be considered to move the co-management agenda forward:

- Assist in the implementation of true representative elections of LMAs. Codify possible recall strategies of representatives that are not performing their duties.
- Create an operational manual for periodically auditing LMA accounts.
- KLMC/CLMC, working with the counties, should project the market size, operational costs and feasibility of implementation of co-management in all relevant livestock markets.
- Undertaking a critical review of existing sale yard bills to understand critical components necessary for effective implementation in remaining counties that do not have them.
- For those counties without sales yard bills, coordinated efforts to get inputs from stakeholders on designing and implementing county sale yard bills.
- KLMC/CLMC should develop a working MOU template of revenue and expenditure responsibilities that could then be adapted to local environments.
- Review and edit the hierarchical success indicators (Figure 5) by KLMC, CLMC, County Gov't, LMAs, and other relevant stakeholders to create viability and buy-in of the methodology.
- Using success indicator methodology (Figure 5), rank current operational co-managed LMAs and review reasons (such as spatially clustering) for relative success.
- An extensive review of county CLMC's operational capacity to assist and mentor local LMAs.
- Working with relevant stakeholders, design and institutionalize market day LMA data collection with committed periodic evaluations. Data could then be used to evaluate market operational efficiency, evaluating LMA goals, tax planning and monitoring overall livestock sales and prices.
- Review current livestock market locations, sizes, and relevant infrastructure (roads, size and quality of markets) for county and national livestock efficiency.
- Develop a public campaign on revenue collection and expenditure (posters, meetings, etc.). Details include, revenue collection, local employment generated, managing the market, distribution to community, savings, etc.
- Create a platform to leverage well run co-management markets by experience sharing with others
- Develop and implement a "common core" of educational objectives for capacity building LMAs.
- Beyond cess revenue collection, clearly identify the specific benefits of co-management for the county.
- Build better coordination and collaboration mechanisms between the CLMC-Donor-CSO-NGO network.
- Real-time market data should be better coordinated and publicly available via WhatsApp and other internet-based platforms.
- A draft document of a well-designed constitution and delegation of roles and responsibilities of LMA committee and county government
- Using adaptive co-management methodologies, consider strategies for building trust for more efficient operations over time between county government and local LMAs.
- A survey of what each market group (traders, producers, County, LMA, etc.) would like to see in improving the operational efficiency of co-management.

6. Appendix I—Specific details on field visits

Evaluation of co-management model in 5 Counties—Field Notes

ISIOLO LIVESTOCK MARKET:

Interview with LMA

Overview: According to LMA members, their role includes: market repairs, security, market management, selling water supply to market actors and settling of disputes. On market management; they share information with traders through WhatsApp and phone calls. Mainly traders come from Meru, Nanyuki, Moyale, Wajir, Laikipia, Nyeri and Nairobi. There are 45 LMA members but only 15 of them are active. The LMA has been trained by KLMC, Regal AG, SNV and IIRR. They are still in need of further training in the following areas: linkages with financial institutions, balance sheet, market data collection, record keeping, good governance, environmental impact, leadership, market management and LMA's roles and responsibilities. The LMA has five officials, i.e. 2 women (treasurer and vice secretary) and 3 men (chairman, vice chairman and secretary). Regarding the education level of LMA members, 3 of the LMA officials have form 4 certificate, the secretary has a diploma in automotive engineering while the other LMA members are either class eight dropout or completely illiterate. The market is not co-managed simply because of lack of legislation, politics and disagreements between the LMA and the county government. The LMA officials meet once a week but the big LMA meeting is once a month. They mainly discuss; projects that they can undertake, conflict resolution, and other market related activities. They keep minutes of these meetings. Election of LMA committee is every three years. The LMA comprises of traders, brokers and 3 community members. During elections, these are the considerations made when electing LMA members: gender to enhance gender equity, age so as to include the youth, religion, tribe affiliation (this is because Isiolo county has different tribes). They further said that women mostly are found in trader and producer roles and not as brokers. Further saying that women are more straight forward yet all brokers are not very straight forward.

Perceived benefits of co-management: LMA members feel that security will be enhanced since they will be able to employ or engage security guards especially during the market days. Minor repairs in the market can easily be done (currently repairs are done by the county government and they take too long before approval). Cleanliness in the market will be enhanced. Revenue collected from the livestock markets will also increase. The LMAs feel that with co-management they will come up with programs that can assist the community. Some of these could be paying school fees, giving loans to market actors. LMAs can also write proposals to development agents for extra support.

Catchment areas: Isiolo county, Samburu, Marsabit county, Ethiopia through Marsabit traders and Laikipia county.

Revenue: Currently the LMAs sell water to market actors at 5/= per animal. They also collect money from the loading bays at 400/= per lorry which is paid by transporters. Per market day there are about 10-15

lorries at the loading bay. Small vehicle entering the market are charged 50/= per vehicle. They receive about 15 small vehicles per market day.

Expenditures: The LMA monthly expenditure includes: water bill of 5000/-6000/=-, cleaning the market 1,000/= per month, and electricity bill 1000-1500/=.

Challenges: Some of the challenges encountered by the LMA while managing the livestock market is that there are many conflicts that arise in the market and so the LMA plays in conflict resolution.

Interview with revenue officers

Overview: The revenue officers said that all the tax revenue collected from this market goes to the county government. The LMAs collect rent from 7 currently operating stalls in the market. The rent per stall is 400/= and 1,000/= from two stalls. All the rehabilitation in the livestock market is done by the county government. The market days are: Monday and Friday for cattle while Monday, Wednesday and Friday are market days for sheep and goats.

Education: The education level of the revenue officer was: 1 supervisor who is a degree holder (Bachelor of Commerce-Finance option and has a diploma in business management. Two revenue officers are diploma holders and the other two are form four educated. The revenue officers are rotated from one market to another every three months.

Cess and other revenue: Cattle/Camel, Total 200/=, shared equally by buyer and seller. Shoats Total 80/=, shared equally by buyer and seller. In addition, the traders pay a movement permit of 100/= per animal. The officers further said that, on average, 40,000/= and 20,000/= tax revenue is collected from cattle and shoats respectively per market day.

Prices of animals

Animal type	Weight (Kg)	Price (in 1,000s ksh)
Sheep	5-10	2,000-3,000
	10-30	4,000-5,000
Goats	26-30	7,000
	5-6	3,000
Cattle		20,000-40,000

Interview with traders

Overview: They said that an MoU was signed in 2013 on co-management but it has not yet been implemented. All money from the tax revenue is collected by the county government. They felt that if co-management model is implemented it can be very helpful in terms of: performing minor repairs in the livestock market, enhancing security in the livestock market, local employment creation especially for casual workers (ie. cleaners). Conflict resolution would be enhanced. Increased feeling of ownership of the market by the community. Collection and dissemination of market information would be improved. Overall, the services offered in this market would be enhanced. Traders said that the community is not aware of how tax revenue collected in this market is utilized. Traders in this livestock market mainly come from: Chogoria, Meru, Nanyuki and Ethiopia.

Challenges: Politics prevent implementation of co-management model. Inaccessibility of the market during the rainy season. Lack of water in the toilets. Illiteracy of market actors. Producers mainly want to sell the animals based on the age of the animal, yet the traders want to buy based on weight of the animal. Animal diseases. Sale of stolen animals. Insecurity within the livestock market. Lack of external traders. High supply of animals and low demand

Cess and other revenue: Camel/cattle 300/=, buyer 100/=, seller 200/=. Shoats 120/=, 40/= (from the county), 80/= buyers (outside the county). On average 300-400 cattle are supplied to the market and an average of 230 cattle are sold every market day. The traders pay 50/= for the veterinary doctor and 200/= for trekking. No receipt is given for the vet fees paid.

Livestock Prices

Animal type	Animal Type	Price sold as reported by traders
Cattle	Bull (big)	45,000-50,000
	Uncastrated Bull (medium)	45000-48000
	Cow (big)	40,000-45000
Goats	Male (biggest) castrated	10,000
	Small	6,000-7,000
	Male (biggest) uncastrated	5500-6000
	Small uncastrated male	3500-4500
	Female (biggest)	6000
	Female (medium)	5000-5500
	Female (small)	4000-4500
Sheep	Male (biggest)	6000
	Medium	5,000
	Small	3500-4000

Interview with Local Official

Overview: LMA is in place but he said there is need to scale-up co-management model so as to benefit the community and enhance their ownership of the livestock markets. This would also enhance revenue collection in the livestock market.

LMA training: Market management and bookkeeping, leadership skills, timeliness of sales so that they can be able to sensitize the community members, their roles on the LMA committee

Reason why not co-managed: Lack of legislation, lack of skills on co-management, lack of real time data collection, security and the need for a multi-agent approach, poor infrastructure like roads, mobile network, etc.

Interview with producers

Overview: The key challenges experienced in this market is price fluctuations due to changes in volumes of animals supplied and demanded high transportation cost. The producers said that it's only the county that benefits from the livestock market. They would therefore, prefer co-management model implemented.

Benefits of co-management: Possible uses include, construct a bridge to the livestock market, give scholarships to needy students, establish a revolving fund where actors can get loans, do minor repairs within the market, create employment and enhanced conflict resolution. Currently, the LMAs help with conflict resolution, they monitor systematic flow of animals into the livestock market, awareness creation and now the market actors have formed a SACCO /savings group where they are saving 500/= per person every market day. The group has 40 members. Other traders have formed another savings group where they currently save 500/= a week.

Merille Livestock market

LMA members

Overview: The LMA was formed in 2004 and co-management began in 2008 the era of the county council. At that time, tax revenue was shared at 40:60 for the LMA and the county government respectively. Currently, the tax revenue is shared at the ratio of 30:70 for the LMA and the county government, respectively. This resulted from a series of negotiations between the county government and the LMAs with assistance from SNV which saw formation of a new MoU in September 2014. The LMA elections are held every three years. There are 13 villages and so each village selects 1 member to represent them in the LMA, then other 4 members are selected from the community during a community baraza to be members of the peace committee who are also LMA members. So, in total the LMA has 17 members. The current LMA has 5 women. Before election the community considers the following attribute; opinion leaders, level of education, individual's understanding of the livestock market and a person who is kind at heart. They further said that education is not strongly considered. In terms of education level, the current LMA are as follows:

Education level of the current LMA members

Position	Education level
Chairman	Certificate course in medical laboratory
vice chairman	primary school
Treasurer	Form four
Vice treasurer	A certificate course from polytechnic and primary level certificate
Member	Diploma in community development
Other members	Illiterate

The LMA meet with the larger community at least 4 times a year.

The existence of this new modern market. Land is plentiful in the area. The market is situated near the tarmac road (Isiolo - Marsabit road). Presence of full security force within the livestock market. The market is near watering points so even during drought they get animals for sale which come to look for water. There is a conservancy (Melako conservancy) with grazing management committee and hence good flow of animals.

After the implementation of co-management there was about an 80% increase in tax revenue collection since the LMAs now actively participate in tax revenue collection. Market management is now enhanced. Community benefits in many ways.

Before co-management: They mainly depended on well-wishers and donors to even handle the minor repairs in the livestock markets. Therefore, repairs were difficult to address. There was no motivation for the LMA to participate in revenue collection since nobody could pay them.

Expenditures: Payment of bursaries/fees. They cited that in 2017 they gave out bursaries to 60 students amounting to 240,000/= and that since 2016 the LMA has been supporting 2 secondary school students. They are also supporting 1 disabled student in a private school where they pay 2,000/= every term. They undertake minor livestock market repairs. They assist with paying hospital bills for the very poor families. They have created employment since they pay casual revenue clerks, the cleaners and the watchman. The LMA meet twice a month and hold an annual general meeting annually every December. They have a bank account with 3 signatories. Their budget is activity based. Before any withdrawal, the 3 signatories must sign, then present the minutes and the names of all the members. A social services officer must sign and give a letter to allow for withdrawal of the funds. When disbursing the bursaries money each parent signs and their ID number is taken/recorded.

According to the LMA, the tax revenue collected is about 17,000/= per market day. Their market day expenditure is about 9,000/=. Their expenditures per market day are as follows:

LMA's expenditure per market day

Officer	Number	Payment per head (in ksh)	Total (in ksh)
Security officers	3	500	1,500
LMA members	10	500	5,000
Cleaner	1	1,000	1,000
Chiefs	3	500	1,500
Total			9,000

Challenges: There are stalls within the livestock market but currently there is no rent collected from stalls operators due to disagreement between the county government and the LMA on how to share the rent collected. The LMA is trying to lobby through the area MCA for them to share this revenue in a ratio of 50:50 for the county government and the LMAs respectively. The locals lack awareness on the importance of this livestock market. Most producers do not want to pay the tax revenue. When the LMA lends money to some community members they fail to pay. Sale of stolen animals is still a big challenge. Sometimes it results to fighting in the livestock market. Sometimes they experience cases of people who steal animals even within the livestock market and sell. They experience 2-3 such cases in one year and once a month for the petty theft cases.

Training: In the past the LMA have been trained by Regal AG, the county government and IIRR. These LMA members have not had a chance to visit other livestock markets for exposure visits. Desired further training on: breeding, business skills, leadership, role of officials, finance management, record keeping, visit to other well performing LMAs like West Pokot, Marigat, Suswa, etc.

Way Forward: The LMA wants to grow fodder for sale. They are targeting to grow this fodder on previous livestock market grounds. They have been trained by GIZ on fodder production and value addition and packaging. They would like to form a cooperative which will include all the market players. They would like to change the breeding of their animals to produce what the market demands.

Interview with revenue collectors

Overview: Eight revenue officers in the market that day. The revenue is shared at a ratio of 30:70 between the LMA and the County government respectively. There are 8 revenue clerks collecting revenue for shoats and 3 clerks who collect revenue for camel and cattle. In this market, there are 2-3 county revenue officers and 8-9 casual revenue clerks every market day. A receipt is always issued to the seller or buyer after making payment for the tax revenue. The education levels of the revenue clerks are as follows: the supervisor from the county has a bachelor's degree in accounting and business administration while the other county clerks have form four level of education. For the casual clerks, some are form four graduates while others are class eight dropouts. The market operates once a week every Tuesday. End market players mainly come from Nairobi (mainly shoats traders), Meru (mainly cattle traders), Nanyuki and Samburu.

Cess and other revenue: Camel/Cattle total 200/=, split evenly between buyer and seller. Shoats total 100/=, split evenly between buyer and seller. The vet (animal health) movement permit is 300/= per vehicle/consignment. While the county movement permit is 200/= per head of cattle/camel and 50/= per head of shoaat.

Average number of animals per market day

Animal	Number supplied as per the revenue officers	Number sold as per the revenue officers	Number supplied as per LMA	Number supplied as per LMA
cattle	150	80-100	150	80
camel	50	30	70	35
goats	1500	800-900	1500	1000-1200
sheep	400	100-200		

Average animal prices

Animal type	Animal Type	Price sold as reported by traders (ksh)	Price sold as reported by producers (ksh)
Cattle	Uncastrated bull (big)	45,000-50,000	40,000
	Uncastrated bull (medium)		28,000-30,000
	Castrated bull (big)	40,000-48,000	30,000-38,000
	Castrated bull (medium)		18,000-22,000
	Cow (big)	40,000	26,000-30,000
	Cow (medium)		16,000-20,000
	Cow (small)		10,000-15,000
Camel	Calf	12,000-15,000	10,000-15,000
	Bull	60,000	
	Medium bull	45,000-50,000	
	Small bull	20,000	

	Female (biggest)	30,000-40,000	
	Female (medium)	25,000-28,000	
	Small	15,000-20,000	
Goats	Male (biggest)	7500	9,000
	Medium	6,000	1,800-2,200
	Small	2,500	1,000
	Female (biggest)		5,000
	Female (medium)		3,500
	Female (small)		1,500
Sheep	Male (biggest)	5,500	7,000
	Medium	4,000	5,000
	Small	2,000-2,500	2,500
	Female (biggest)		3,000
	Female (medium)		1,800-2,000
	Female (small)		1,200-1,300

NB: Female sheep do not fetch a high price.

Benefits of co-management model: Co-management began in 2015 in this market. The community benefits by getting bursaries to cater for school fees, this is done for especially needy students. It is also a source of employment for revenue clerks, the cleaners and the watchmen.

Challenges of co-management: Tax evasion: there has been a lot of ongoing sensitization in the community. Insecurity: the LMAs and the County government have engaged about 10-15 Kenya police officers and pay them 500/= per officer. Conflict: this mainly results due to stolen animals and the LMAs help in conflict resolution. Diseases: FMD though not common.

Interview with local traders

Overview: The traders are aware of the co-management model. They pay tax revenue of 50/= per goat/sheep and 50/= for the movement permit. One of the interviewed trader sells in Nairobi-Kiamaiko livestock market. Perceived benefits of co-management model: money left with the LMAs is used to give bursary and pay fees for needy students and help with payment of hospital bills.

Challenges experienced by traders: The movement permit paid to the county government is too high. In other counties e.g. in Rift valley region, the movement permit is 3,500/= and 7,000/= despite the number of animals bought. Too much competition from neighboring countries like Tanzania where cheap animals are coming from there yet Kenyan traders are not allowed to go there and purchase animals. Road blocks: The traders pay 500/-700/= per lorry at any road block. In fact, there are policemen who stop just after the exit from the market who ask for 700/= per lorry and they still pay again 700/= at the usual road block. Sometimes the patrol police charge 2,000/=. Shortage of animals and sometimes the animals are expensive. Restricted animal movement: the current regulation of moving animals from 6am to 6pm. This forces them to pay an extra 200/= per road block for moving animals at night. There are about 8 to 10 road blocks from Merille to Nairobi. Before co-management, they used to evade payment of the tax revenue. For example, they could declare half the number of animals and not declare the other half. In addition, no assistance was offered to the community. In some counties, if one buys 10 goats, 8 are receipted and two are not receipted. They would also prefer and request for such a treatment.

Interview with producers

Overview: Producers interviewed are aware of co-management model. They are happy with the current tax revenue being charged, they do not feel oppressed. The LMA meets with the community to discuss how to spend the revenue co-shared. The LMA calls everybody in the community (at times they meet 2-3 times a month). They select one or two people per location to be part of the LMA. The interviewed producers said that they are happy with the market location since the previous market location was at times marshy and they were also frequently attacked by raiders. They further said that the current model of selling animals is okay and they would not prefer auction model.

Benefits of Co-management: Some benefits highlighted: Sponsorship of needy students. Some needy community members are stranded with hospital bills, the LMAs lend money to such individuals who pay later upon sale of an animal(s). Money has also been used to buy a generator which is used to pump clean water to schools and hospitals (3 days a week). The water is also pumped to a local polytechnic three days a week. Water is also pumped to the community. The LMAs also use money to provide security to the livestock market during the market days and other days of the week. They pay the watchman and the police officers (home guards and the Kenyan police officers) to guard the livestock market during the market days. The LMAs also pay the casual revenue clerks. They also pay youths who load the animals, sand and grazers. Because of increased security in the livestock market, the livestock market is more vibrant and animal prices have also increased since now there are many livestock traders coming to the market. Women participation in the livestock markets has increased. The market infrastructure has also improved. Repairs within the livestock market are performed more quickly with co-management in place.

Before co-management: Some issues: The rate of school drop-out was higher. There was greater insecurity in the livestock market. Animal prices were lower. There were few external livestock traders. The producers either travelled to Isiolo or Lolnguniani to sell their animals.

Challenges: They have a water tank in the livestock market but there are no taps. There is not enough shade. There is a lot of dust in the livestock market especially during dry spells hence the need for marram in the livestock market. Although they are happy with the current LMA, the community is not aware of how much revenue is left with the LMAs although the elders are aware.

Catchment areas: Korr, Baragoi, Illaut, Barsim, Gurnit, Ndonyowasi, Kargi, South Horr and Marsabit.

Jirime livestock market (Marsabit county)

Interview with LMA members

Overview: There are 12 LMA members in total with 4 officials (Chairman, vice chairman, treasurer and secretary). The LMA was formed in 2013 but began operations in 2014 and the revenue sharing 30:70 for the LMA and the county government, respectively. The LMA was registered with the ministry of social services in 2013 and they have a constitution. The LMA composition includes 11 traders and one broker of which 9 are men and 3 are women. The LMA were selected from community members. The community

considered tribes, individual commitment and then included one butcher. The livestock market was constructed by Food for the Hungry (FH) and they were forced to relocated to this new market in 2004. Before they were selling from someone's plot near Marsabit town. The LMA was formed to manage the livestock market and enhance security, ensure the animals that sleep in the livestock market are secure and solve conflict in the livestock market. There is a current sale yard bill being discussed which is proposing a ratio of 40:60 ratio for the LMA and county government respectively. Tax revenue in this market is collected by county revenue clerks and the LMA chairman follows the revenue clerks to ensure the revenue is collected from all the market players. The market operates on a daily basis. The LMA pays a watchman who guards the livestock market 4000/= per month. The LMA proposed that elections should be done every five years. The LMA have a bank account where currently they have saved/banked about 200,000/=. The LMA are never paid anything even when they hold their monthly meetings. The main end market users are local butchers. They are happy with the current location of the livestock market.

Cess : Cattle/Camel, Total 200/=, shared equally by buyer and seller. Shoats Total 100/=, shared equally by buyer and seller.

Animals supplied and sold

Animal	Number supplied as per the producers	Number sold as per the producers	Number supplied as per LMA	Number sold as per LMA
Cattle	5	5	20 once a week	20
Goats	40-50	40-50	60	60
Sheep	-	-	40	40

Animal prices:

Animal type		Prices as per LMA	Prices as per traders	Prices as per producers
Sheep	Mature male	3,500	5,000	4,000
	Mature female	2,500	2,500	2,500
	Immature sheep	2,000	1,500	1,500
	Female (big)			3,000
	Female (medium)			2,500
	Female (small)			1,500
Goats	Male (big)	7,000	8,000	7,000-8,000
	Male (medium)		6,500	4,500-5,000
	Male (small)		3,500-4,000	2,500-3,500
	Female (big)	4,500		5,000-6,000
	Female (medium)			3,000-3,500
	Immature	3,000		2,000-2,500
Cattle	Bull	35,000-40,000	50,000-60,000	40,000-50,000
	Bull (medium)		30,000-40,000	25,000-30,000
	Bull (small)		15,000	
	Cow	25,000-26,000	25,000-30,000	
	Calf	17,000		10,000-12,000

Challenges: No water in the livestock market. There are no shops or even a hotel where players can buy food. They often experience clashes amongst tribes which makes the market operation difficult. Drought and death of animals. No store for fodder which they can use during the dry spells. They do not have an office for LMA, not even for meetings. Cases of stolen animals are very common (6 times a month). Normally the LMA try to resolve such issues where they give the animal to the person claiming ownership then the buyer and the seller share the loss. The issue of double taxation when they take animals to other markets like Isiolo they are forced to pay tax revenue again. Due to insecurity, they are forced to use escort where the charges are 5,000/= for two Kenya police officers. The movement permit is 1,000/= and an export fees of 7,000/= for shoats and 8,800/= for cattle per lorry.

LMA Training: The LMA has attended a seminar for one day on market management and how to take care of the assets. They were trained by FH and PACIDA two years ago. Some of the training needs they highlighted include: regulations for market management, how to best manage the livestock market, integration and relationship amongst members of the community (Group dynamics), business skills, roles of LMAs and the constitution, need for exposure visits to other counties to see and learn more on market management.

Way Forward: Seeking financial support for undertaking activities. Desire to be a leading livestock market in the county. Install water in the livestock market.

Interview with traders

Overview: The traders indicated that they mainly sell their animals in Kiamaiko in Nairobi, Kariobangi, Karatina, Nyeri, Eldoret and Nakuru. They mainly deal with shoats. Their target customers are mainly individuals and butchers. The catchment areas for the animals traded in this market are: North Horr. Ndukana, Maikona, Hurr Hills and Sololo. The revenue co-sharing began in 2014. Previously buyers and sellers paid 20/= for shoats and 100/= while the export fees they were paying 30/= per head.

Challenges: Conflict among traders especially women and young men. When animals are few in the market, the women are not able to walk for long distances outside the market to get the animals being brought to the market. Lack of fodder and water to feed the animals after purchase which at times results into poor animal body condition. Few animals supplied to the market each day. High animal prices in this market yet prices in Nairobi are lower. They do not benefit from the tax revenue paid in this market especially the 30% co-shared by the LMAs. They further said that repairs in the market are done by the donors (eg. FH, VSF, etc.). In case of an accident, when animals are on transit, there is no compensation. Even during drought when the animals die, they are not compensated. Double taxation. High transport cost. For example, they pay 30,000/= to transport animals to Nairobi. They also pay 5,000/= per lorry to escort security officers. Road blocks are a problem. Traders pay 200/= in every road block and at times 3,000/= to avoid straining the animals. Insecurity in the livestock market. They felt that recently there is reduced security within the livestock market. For example, recently there was conflict in the livestock market where one person was killed. For the tax revenue, buyers pay 50/= and 7,000/= per lorry at the county barrier. There are many inefficiencies in management of this market. The current LMA operates the LMA as a SACCO. Only the LMA officials know about the revenue collected while the other LMA members are not aware. In the absence of the county revenue officers, the LMA collects the tax revenue. There were no elections held to select the current LMAs. The market is officially locked at 11am every day and traders are not happy with this arrangement.

Way forward: Reduction of cess. Provision of water in the market and a fodder store. Increase security in the livestock market. Change of the current LMAs since they never hold any meetings with the community members or even interact with the larger community.

Interview with producers

Overview: They felt that there is currently some slight improvement in the livestock market, since there is even a fence which has been constructed. Producers are not aware about the LMA. They only hear that there is a market committee, but they do not understand the role they play in this market. However, the only role they have witnessed is conflict resolution by the committee members. The LMA has never held a meeting with the community to create awareness about co-management. They would like to have new LMA which incorporates producers as members. Tribalism is also common in the livestock market and this affects animal pricing.

Challenges: There is limited control of livestock in the market. There is no market day, the market runs every day of the week. They would prefer at least a market day twice a week preferably Monday and Thursday. They don't understand why they pay 50/= for shoats when they sell their animals and they do not see the benefit from the revenue charged and collected. There are many brokers in this market forming very strong cartels and making livestock sale difficult. Hence, conflict in the market. There are many incidences of stolen animals.

Interview with county revenue officers

Overview: The revenue clerks work on a rotational basis every two weeks from one work station to another. One of the revenue clerks interviewed has a diploma in community health while 3 other county revenue officers have a diploma and all the others are form leavers. These officers are not given any transport allowance in spite of the rotational arrangement every two weeks. In the sub-county (Saku sub-county) only Jirime livestock market is co-managed. The daily tax revenue collected is about 3,000 (30% which goes to the LMA).

Challenges: Sale of animals outside the livestock market. This is mainly to avoid payment of the tax revenue also because of brokers who hinder the direct contact between the seller and the trader. Tax evasion by traders and brokers. Producers are not market oriented. They suggested the need to increase the market hours and stop limiting the market operations by closing the market by 11am.

Interview with county livestock production officer

Overview: He indicated that livestock marketing is not very strong in the county. In some cases, there is poor market infrastructure while in others the markets are underutilized/ unutilized. Merille is the most vibrant livestock market in entire Marsabit county. Through assistance by development partners, the county government is constructing modern livestock markets in: Ndukana, Forole and Sololo. The ongoing livestock market and trade bill being enacted will help to check the 30% LMA share. It will capture co-management model and give a provision that the market can be managed by a private entity.

Benefits of co-management: Increase livestock volumes and volumes sold. Increased catchment areas. Increased revenue. Increased number of traders. Increased services like Mpesa. Reduced insecurity in the

livestock markets and disruptions. Previously such incidences were very common up to 3-4 cases a month. Other businesses have developed in these livestock markets like; supplies, food items, clothes, etc. and this is mainly due to increases security in these markets.

Implementation of co-management: Co-management is a good model and can work but, a lot of capacity building for the LMAs and the local community members is needed/critical. Evasion in payment of tax revenue by both the traders and the producers is common. People managing the livestock markets are not salaried and there is need to have salaried staff who manage the livestock markets for them to be able to enforce the payment of tax revenue. There is an MoU between the county government and the LMA and the revenue sharing ratio is 30:70 for the LMA and county government, respectively. There is however a suggestion to change this ratio to 40:60 for the LMA and county government. He further said that communities served by these markets have many challenges like lack of pastures and water. Some of the LMAs use their share of revenue to meet some of the community needs. There are two major market in the county, i.e. Merille and Moyale livestock markets. There are 10 other small livestock markets in the county. In total only 3 of these livestock markets are co-managed. Moyale livestock market is currently much affected by what is happening in Ethiopia.

Some markets should not be co-managed/selling outside markets: Seasonality of the livestock markets (e.g. Turbi), small sized livestock markets, some people prefer to take the animals to terminal markets. Bush livestock market at the watering points and grazing areas are active. Reasons for people selling outside livestock markets include: lack of market information especially for producers, presence of brokers and middle men (offer market information and translate in cases of language barrier), lack of legislation and unorganized livestock markets.

LMAs Capacity needs: budget development against which they can be audited. Strong emphasis on an audit system.

Way Forward: Complete the enactment of the bill which will regulate some of the above challenges. Registration of all the brokers and license them. Propose sale of animals by weight/weighing scales. This is already being done by Ethiopian traders who are currently buying only young animals especially the black head Persian of less than 30kg. Enhance access to market information especially on quantity and prices. Push to have a market day especially for Jirime livestock market this can increase the volume of animals in the market and subsequently increase the number of external traders. There is a need to harmonize the levies charged to sellers, buyers and transporters. Capacity building of the community on the bill once it is finalized. Need for cross county negotiations on levies charged to reduce double taxation. Need to change some of the old legislations like the 6am to 6pm transportation law because some of the costs are passed on to producers who eventually reap lower market price. Per market consideration where some of the livestock markets require higher levels of management based on the market size.

OLDONYIRO LIVESTOCK MARKET

Interview with LMA members

Overview: There are 13 LMA members (12 from Samburu community and 1 from Turkana community). The LMA has 10 men and 3 women. They were elected based on the clusters, tribe and villages. Each

village selected one representative (but near and small villages were asked to select one member) there are 13 clusters in Samburu community but Turkana's are few. Turkana's live near town but Samburu's live far from town. The current LMA came to office in 2013 and were selected by the community. They replace the livestock marketing councils (LMC). The LMA has a constitution and was recently reviewed in October 2017. The current LMA comprises of 5 producers and 8 traders. The LMA has the following roles: organization of the livestock market in terms of security, cess collection and employment of cess collectors, minor repairs and maintenance in the market, dissemination of information concerning security, business opportunities, mobilization of buyers, mobilizing producers to bring their animals to the market, collecting and dissemination of market information including prices, assist in revenue collection, record keeping, conflict resolution and disease surveillance. They help in doing quarantine of infected animals not to get to the market then they normally call the veterinary officers to come and attend to the sick animal. They also are involved in environmental matters where they check people not to cut down trees. The LMA also handles any visitor that comes to this market and help mobilize the community when needed as well as overall market vigilance.

Other revenue: The revenue collected includes that which is collected from the stalls within the livestock market. There are 21 stalls whose rent is 600/= and 32 smaller stalls whose rent is 400/= each. The merchandizers who sell in the open spaces in the market pay 20/= each per market day. All this revenue is co-shared between the county and the LMAs.

LMA training: The current LMA has been trained by IIRR, Regal Ag on record keeping in 2018, leadership and formation of the constitution in 2017 and on market management in March 2018. Mercy Corps trained them on environmental management in April 2018 and minute taking by Regal Ag in 2013. Training gaps include: record keeping, leadership, market management, environmental management, group dynamics and people relations, business development skills and budgeting. The LMA said that, for the areas where they had already been trained, they were still not clear on all the key concepts.

Challenges: Insecurity: minor theft/stealing within the market. Some people present stolen animals for sale. They gave an example where 36 dorper had been stolen from Laikipia but the LMA was able to recover them. Such cases occur once a month or, at times, twice a month. Cess collection: Some people evade the tax revenue. This is especially so with the producers. Normally, the LMA talk and then charge a penalty of double payment. Sometimes the LMA tell the suspects that they will not allow the animals coming from their counties especially when they come from other counties. Sale of other people's animals at unfavorable prices: the LMAs have to intervene. Conflict among the many traders. The Morans are very harsh to women. They refuse to pay cess and at times they insult the women LMA members.

Way Forward: Assist youth and women through the SACCO (Oldonyiro livestock marketing SACCO) so as to enhance vibrance of the market. The current SACCO membership is 80 members. The SACCO was pioneered by the LMAs in 2016. Individuals pay 1,000/= membership fees and 1,000/= for a share contribution with a minimum saving of 300/= per month and no maximum amount has been set. The SACCO meetings are twice a year. The SACCO is giving loans to the members at an interest rate of 1% and members are given three times of the individual's savings. Buy a lorry which they can be hiring out to transport animals to other markets. The plan is to hire it out to any interested market actor. Financial support: Writing proposals to increase their financial assets in the SACCO and targeting donors and the county government. They are also planning to construct a lodging where the market actors coming from

far can sleep. The market has about 20 acres allocated to it and this land is underutilized. They are also thinking through how they can have a permanent water supply in the market. Saying that they would shy away from using the community money to sink a borehole.

Revenue sharing: Currently the revenue is shared at a ratio of 50: 50 for the county government and the LMAs. The LMA bank the money in Equity bank and use this money to help the community with bursaries. They give bursary to 60 students every year where they give the cheques directly to the schools. Every year they spend about 300,000/= for the bursaries. They also do minor repairs in the livestock market. On average they spend about 50,000/= either once or twice a year depending on the nature of repairs that need to be done. The LMAs also pay the market workers like: 4 cleaners who are paid 2,100/= every week, 2 watchmen who are paid 2,500/= per market day although they guard the market every day, 6 cess collectors who are paid on commission of 10% of the total revenue collected per market day. There are also 4 security officers who paid 8,800/= who give escort to the end market players and enhanced security in the livestock market during the market day. The local chief is also paid 400/=. The LMAs members are given an allowance of 300-500/= which depends on the amount of revenue collected per market day.

Animals supplied

Animal	Number supplied as per the LMAs	Number sold as per the LMAs
Cattle	2-10	2-10
Camel	0	-
Shoats	600-800	400-600

Interview with producers

Overview: The producers indicated that the catchment areas include: Laikipia county, Samburu county and Isiolo county. Catchment areas in Isiolo include: Kipsing', Longopito, Lambasherek, Twale, Ntepes, Kambi ya juu, Kambi soko and Rap. When producers fail to sell their animals in Kipsing' livestock market they bring the animals to Oldonyiro livestock market and the opposite is true as well. Traders prefer Oldonyiro livestock market because it is nearer than Kipsing' livestock market and the prices are higher than Kipsing' market. The livestock market has got many brokers who also fuel the animal prices. Producers selling few animals find it difficult to sell their animals but those that sell many animals find it easier to access the end market traders and can be able to sell their animals "kwa jumla". At times, the brokers buy from the producers at a very low price (e.g. 1,200/= for shoats) then sell to the trader at 4000/=. However, these brokers are important because they help those selling few animals or one animal at any given time. The producers said that they would like to be trained on groups formation, so that they can be able to form groups and possibly be able to sell in groups and reach the traders directly without relying on brokers as well as access the end market. They further noted that, most of the brokers present in this market come from other areas outside Oldonyiro livestock market. They further said that shoats are commonly traded in this livestock market with only a few traders trading cattle. Chickens are also traded in this market and demand is now very high.

Cess and other revenue: Cattle/Camel, Total 200/=, shared equally by buyer and seller. Shoats Total 60/=, shared equally by buyer and seller.

Prices for Animals

(ksh)	Animal type	Prices during dry season	Prices during wet season (ksh)
Sheep	Mature Male (big)	5,000	8,000-9,000
	Medium	2,000	4,000
	Immature	2,000	1,500
Small sheep not sold in this market			
Goats	Castrated Male	7,000-8,000	12,000-15,000
	Uncastrated Male	4,000	6,000-7,000
	Male (medium)	3,000	5,000
	Male (small)	1,000-1,500	2,000-2,500
	Female (big)	3,500-3,800	4,000-5,000
	Female (medium)	2,800-3,500	4,000-5,000
	Immature	2,500	3000-3300
Cattle	Castrated Bull	40,000	70,000
	Uncastrated Bull	20,000-30,000	50,000
	Medium	15,000-20,000	30,000
	Calf	10,000-12,000	15,000-20,000
Camels	Bull (big)	30,000-37,000	70,000
	Female (big)	50,000	50,000
Chickens	Jogoo	600-700	1000-1500
	Female (big)	300-350	400-600
	Small	200-250	N/A

NB: Young animals are expensive in this market since they are used for breeding purposes.

Animals supplied

Animal	Number supplied as per the producers	Number sold as per the producers	Number supplied as per LMA	Number sold as per LMA
Cattle	7	Many do not sell	20 once a week	20
Camel	3-5	May sell or not	0	0
Shoats	2000	1000	60	60

View and benefits of co-management: The producers felt that the current LMA are trying in terms of market management. The LMA have been trained on market management and they have been taken for exposure visits. They said that the previous LMA were very corrupt. The current LMA began operations in 2013. Previously the county council was collecting all the tax revenue and only paid cess collectors, security officers and the cleaners. Bursaries; the LMA gives bursaries to about 50 needy students every year. They disburse an average of 6,000/= per student for secondary school students. Security; security in the livestock market has improved. Previously traders were attacked at least once a month. The market days were two in a week. Due to improved security, there are very few incidences of traders being attacked by raiders, saying that they may experience only one such an incidence in one year. The LMA pays the seven security officers 500/= each per market day while two watchmen are paid 1,500/=. The LMA does minor repairs in the livestock market. The LMA also pays cleaners who keep the livestock market clean. As a result of LMA, there is now a SACCO whose membership is the various market actors. The membership fee is 2,000/= and a minimum contribution of 300/= per month. Today the

SACCO has a membership of 70 people. Accessibility of other products like: fruits, clothes, etc. Other services like photography (instant photos), mobile clinic, etc. are also available. Veterinary services by private investors are also available, although the producers are not very sure of their qualifications.

Way Forward: More development in the livestock market like water. Transparency concerning the exact amount of tax revenue collected in the livestock market and the amount that remains with the LMAs. The LMA should be more open with the community members and especially disclose the amount of money that the co-share with the county as well as be more involved in decision-making. They would like to hold more meetings with LMA. The LMA should organize to have rangers from the community to enhance security. They would appreciate if the community can be trained on business skills. They would like the LMAs to also pay fees for college students.

Challenges: Tax evasion where traders collude with brokers to leave the market pretending the animals have not been sold then they transact in the bush. Lack of water in the livestock market. Water is not collected from the decra roofing used in the livestock market. Election of LMAs is influenced by the current MCA (member of the county assembly). Producers are not aware of how many LMA members are on the committee. LMAs do not hold meetings with the community when making decisions and sharing the tax revenue. Fodder services are not available.

Interview with traders

Overview: They are aware of co-management model, but they are not aware of how much money is left for LMA. The MA call the community when they are disbursing the bursaries. The LMA only call the village representatives. They are called once a year. They know that the current LMA has 12-15 members.

Animals supplied

Animal	Number supplied as per traders	Number sold as per traders
Cattle	40	15
Camel	10	0
Shoats	>1000	1000 (i.e. 6 lorries each carrying 200 animals)

Benefits of co-management: Bursaries to needy students. The LMA pays the watchman, cess collectors and security officers as well as pay the LMA members about 500/= per market day. There is improved security in the livestock market. The LMA also organizes peace meetings with chiefs, village managers and the assistant county commission. Traders have increased in this livestock market. Most of them come from Samburu, Laikipia, Nyeri, Nairobi, Karatina and Meru. They, however, don't think the volumes traded have increased. The LMA through the SACCO give loans to members. They give 3 times of a person's savings. The security of the animals is also improved. Reduced raiding.

Challenges: Soil erosion in the livestock market, no water in the livestock market and insecurity are experienced when going to other livestock markets like Samburu, Kipsing and Mabati. Traders think that a service term of 5 years for the LMAs is too long. They suggested a service term of one year for the LMAs.

BARINGO COUNTY

Overview

Baringo County has an active co-management agenda. There are 25 total livestock markets with 8 co-managed livestock markets in and 5 more livestock markets that are undergoing training for co-management. Thus, 50% of all markets are, or are becoming, co-managed livestock markets. Baringo county also has a sale yard bill which is in a draft stage.

Revenue collected from the livestock market is taken by the county government who then provides a cheque worth 25% of total revenue collected to CLMC on a quarterly basis. The CLMC then distributes the money to each LMA but retains 10% of the released money (2.5% of the total revenue collected) for their own operations. However, this mode of payment has challenges because money is not always released by the county in a timely manner.

Nginyang' livestock market

Sources of Tax revenue collected: Cattle and camel: 150/= buyer and 150/= for seller, shoats: 50/= for buyer and 50/= for seller, Other traders/ businesses around the market: 50 – 250/= per trader. There are several assorted businesses around the livestock market including the sale of cereals, vegetables as well as others. The cess paid by each small trader is 50/= while those who use pick-ups/Nissan are charged 250/= per day. The key challenges experienced by these traders include: lack of infrastructure (ie. stalls), rain during the rainy season and no fence which would protect them from the animals being marketed.

Interview with LMA Members

Overview of LMA operations: The livestock market began 1987 and LMA co-management was initiated in 2011. Before the market was managed by the county council. LMA was initiated by Arid Land in collaboration with KLMC and SNV with an aim to help the community. The revenue sharing agreement is 75%:25% for the county government and the LMA respectively. The LMAs have a constitution and they meet once a week on Tuesdays. There are 15 LMA members out of which 9 are the executive members. Out of these 15 members, 4 are women and 11 men but only 1 woman is an executive member. All LMA members are producers. The last LMA elections were held in 2013. The chairman replaces inactive executive members with any willing community member without the involvement of the community. Minutes are only taken when they are discussing financial matters. The LMA has only met with the larger community twice and they do this through chief barazas. There is an MoU between LMA and the county government operating for the last 3 years. The MoU stipulates the operational roles of the LMA, county government and CLMC.

Role of the LMA: Oversee revenue collection, ensure that producers are not overtaxed or taken advantage of by traders, assist in searching for lost animals and do minor repairs. The LMA are also involved in disease surveillance and they report to vet department. In case of disease outbreaks, they report to the vet office and they also insist on the community not to bring animals to the market to avoid the spread of disease.

LMA Expenditure: Their self-described spending breakdown is as follows: 20% repairs, 30% disease control, 30% administrative costs and 20% given to CLMC. Fencing of the market was supported by SNV. LMA lunch (500/=), minor repairs every week (5,000/=) and occasionally buy drugs to help the community.

Benefits realized because of co-management model implementation: More traders and improved livestock prices.

Challenges: Tax evasion with some people trading outside the market to evade payment of cess. Theft inside the livestock market and sale of stolen animals, LMA has been doing community sensitization on the need of cess payment. Sometimes the revenue clerk's records do not tally with LMA records on collected revenue per market day, but this is a very common occurrence. Outside political interferences especially during election of the LMA. Some livestock diseases are common. Fodder is a big challenge and the LMAs are now producing fodder in two different plots near the market but have difficulty acquiring seed, tools and equipment to harvest. Water is a big challenge in the market. Payment delays from the county government is also an issue. The livestock market is partially fenced, and they would like to have a permanent market structure covering the entire market.

LMAs training and requested training: Leadership, group dynamics, resource mobilization, constitution design, market linkages, record keeping, and disease surveillance. Training requested: Disease surveillance due to the many emerging diseases, Market management due to low levels of education continuous training is needed, experience-sharing visits to other livestock markets, better understanding their roles (LMA roles).

Market Structure: The main catchment areas are: Silale, Ngumoro, Riko and Konoa. End markets include: Nairobi, Eldoret, Nakuru, Laikipia, Marigat, Mogotio, Kabarnet and Isiolo.

Interview with CLMC

Benefits of co-management model: The revenue collected has increased. The revenue collected from Nginyang' livestock market increased significantly. Security has also improved. The LMA sensitizes the community on the trouble created by livestock theft. Disease surveillance has also improved following the training given to the LMAs who are now able to send alerts to the department of veterinary services in case of disease outbreak. Overall market operations have also increased/ improved since the county government and the LMAs work closely together and this has increased efficiency in the running operations in the livestock markets. Minor repairs in the livestock market are done by the LMAs using a portion of the revenue shared to them by the county government. Employment creation, with a focus on youth, workers are mainly recruited to offer security in the livestock markets.

Increased livestock prices: This is due to an increased number of both external and internal traders in the livestock markets. Increased number of both buyers and sellers of livestock has a positive impact on volume of transactions as well as price. However, prices are mostly determined by the age and size of the animal. Group pricing is commonly practiced especially in Nginyang market where animals of the same size are grouped and given the same price. There is an agreement form normally signed at the end of the market day between the LMA and the county government indicating the amount of revenue collected per market day. In Nginyang', after the introduction of co-management in 2011 (with SNV assistance), the first-year monthly collection was about 100,000/= but is currently about 170,000/=.

Challenges encountered: The current MoU between the LMA and county can be changed by any incumbent county government, hence the need for a sale yard bill to provide stability and transparency for the revenue collected. Some markets in the district are in distant locations so monitoring by CLMC is a challenge, especially with poor road infrastructure to get to some of the livestock markets There can be political interferences of LMA elections where some political leaders can seek to replace LMAs which are not in their favor and replace them with LMA members who better support them.

Interview with traders

The catchment areas for this market include: Kapendo, NASoroti, Aquichatis, NAdome and Lokis. The market supplies by this market mainly include: Yatia, Mogotio, Kabarnet, Kipsalam and Kabartoch

Average number of animals supplied to this market per market day: Shoats: 500-1000, Cattle:100- 250, Camels: 50- 80, Donkeys: 50-300, Chickens: 50-80. Of the animals supplied approximately 90% are sold.

Market prices (per animal in Ksh):

Animal	Animal type	High price (ksh)	Low price (ksh)
Goats	Castrated (big)	10,000	7,500
	Medium	6,500	5,000
	Small	6,500	4,000
	Female (big)	5,000	4,000
	Medium	4,000	2,500
	Small	3,500	2,000
Sheep	Male (big)	7,500	6,000
	Medium	5,000	4,500
	Small	3,500	3,000
	Female (big)	4,000	2,500
	Medium	3,500	2,000
	Small	2,400	1,500
Cattle	Male (big)	45,000	40,000
	Medium	35,000	35,000
	Small	28,000	20,000
	Calf	15,000	12,000
Camels	Big	80,000	60,000
	Medium	50,000	40,000
	Small	40,000	30,000
Donkeys	Big	17,000	9,000
	Medium	14,000	7,000
	Small	8,000	4,000
Chickens	Big	700	500
	Medium	500	250
	Small	250	200

Role of LMA: Market management, ensuring that all animals are sold within the designated livestock market and not outside the market, minor repairs (eg. mending fences), information dissemination. the link between the county government and the community and the current LMA constructed their office.

Challenges: The challenges are language barriers, stealing within the livestock market, sale of stolen animals and disease outbreaks. LMA helps in mitigating these challenges. They also discourage traders from buying animals from traders who refuse to pay cess. All the revenue collected goes to the county who later give 25% to the LMA. The traders are not aware of how the LMAs are elected although the LMAs have 3-year term of office.

Way Forward: There is a need for codified documents to guide election of the LMAs, improved disease surveillance and treatment is needed, sensitization and advocacy against cattle theft and giving alternative viable and lucrative options that the community members can engage in.

Interview with producers

Overview: The market is managed by the LMAs and the county government. Revenue is collected by county revenue clerks assisted by LMA members. The construction of the livestock market was undertaken by both county government and LMA with funding from donors.

Role of the LMAs: Market management, construction of the market office and handling of minor repairs in the market.

Challenges: There is only one toilet facility in the market which is not enough, no water in the livestock market, here are few vet doctors yet there are many diseases occurrences in the county (e.g the blue tongue disease in sheep is very common) and the 25% given back to the LMA is only left in the hands of the LMA officials and the community does not benefit. The producers feel that the revenue collected from the markets is high, but the bursaries given to the community are low. Hence, producers feel there is little consideration of the community, yet they are the contributors of the tax revenue.

Election of the LMA: The community is never involved in the election of the LMAs. There is no public awareness of when elections are to be held and therefore no transparency in LMAs elections. There are no annual meetings between LMA and community members. Most of the current LMA members are illiterate hence need for change.

Opportunities for improvement: Water installation, advertisement of the market, improvement of market structures (e.g. the dilapidated structures which are used as the hotels near the market and stalls for trading other products).

Interview with county revenue officers

Revenue collected: Eighty-six percent of the revenue collected is from livestock but the county also collects revenue from sand sales, market producers, and single business permits, as well as movement permits. The veterinarian also collects for diphtheria shots: 20/= and 50/= for shoats and large herd respectively.

Livestock/Other tax revenue amounts: Cattle/camel/donkey: 150/= (paid by buyer) and 150/= (paid by seller), Shoats 50/= paid by the buyer and 50/= paid by the seller, Chicken 5/= paid by traders (buyer). Other tax revenue: Hotels 30/= per market day, Fruits 20, 30, 50/= depending on the quantity of

produce, Nissan full of luggage 500/=, lorry 1200/= and pick-up 200/= per market day. Exception is given to disabled persons.

Market Structure: The main end market areas: Mogotio, Kabarnet, Marigat, Nyahurur, Eldoret, Nairobi and Nakuru. Other mini-end markets include: Koloa, Ameyan, Akwichattis, Kamrio, Chapkalacha, Natorot, Tot, Riong’o and Churo.

Challenges: Some market players are not willing to pay the cess as required, lack of perimeter fence especially in areas with open air market stalls around the livestock market, no water in the market, lack of conducive environment where the revenue officers can sit while collecting the revenue, complaints from market actors that the tax revenue charged is too high, substandard work done by contractors who fenced the livestock market, and insufficient latrines.

Opportunities for improvement: Provide water in the market. The LMAs can sink a borehole from which they can be selling water to the market players and to the community for sustainability purpose. Need to construct a modern and standard market infrastructure. Construct stalls for supportive businesses around the market

Role of the LMA (and other observations): Sourcing of funds e.g the fencing funds, assist with revenue collection especially in controlling animal movement, monitoring and controlling sale of animals outside the livestock market (ie. on the periphery). Help with market management during the market days. The fencing of livestock market and regulation of opening and closing time helps with identification of stolen animals. The local chiefs and the LMAs also help in identification of stolen animals. The revenue officers are not clear about utilization of the 25% ploughed back to the LMAs. The market began in 1995 at a different location but in 2004 the market was moved to the current location. LMA began in 2004/2005 and there was an MoU with the county council. By then there were no control points and so revenue collection was low. Fencing was done in 2005. The highest amount of revenue so far has been 170,000/= and lowest being 24,000/= per market day with an average of about 80,000/=. Revenue collection has increased from an average of 40,000/= to 80,000/= per market day after implementation of the co-management model.

LMA improvement: LMA election: there is need for the process to be more transparent. Involvement of the community should be considered. Transparency in utilization of 25% co-shared with LMA should be enhanced. Currently, the LMAs tell the community that they are only given back 5% of tax collection and not the actual 25%. The community believes that the rest is left with CLMCs.

Volume of animals supplied per market day:

Animal	Price Highest (in ksh)	Price Lowest (in ksh)	Supplied	Sold
Goats	12,000	2,500	70-1000	50-800
Sheep	6,000	2,000		
Cattle	55,000	18,000	50-80	30-60
Calf	12,000	8,000		
Camel	60,000	18,000	5-25	3-12
Donkey	15,000	6,000	4-100	3-86
Chicken	800	100	N/A	N/A

EMINING LIVESTOCK MARKET (BARINGO COUNTY)

Overview: Operates an auction system for cattle but shoats are negotiated. Animals breeds in this market are upgraded /cross breeds and hence fetch a higher price. The price is influenced by: breed types and pricing system (auction versus negotiated). All the collected cess goes to the county government. In the last four years the market performance has improved (producers claim). There is high tax evasion and bush selling (outside the market) aimed at evading taxes.

Interview with producers

Challenges: The market actors are not united and do not have an LMA or Society (SACCO). There is a market monitor who is supported by the Resilience project. The monitor collects data on prices and take-off since 2017. Relatively lower prices since there are usually no external traders. Between January and August, relatively lower prices are expected. However, between September to October prices start to increase because external traders come from Nairobi and Athi river. During this period, animal numbers increase and are bigger and this attracts external traders. The community is not willing to sell animals that are small. They would prefer a grading system, especially during the dry season. There is need for market awareness creation and to inform external trader from Eldoret, Maralal, etc. and that the market is an auction market. Traders from this market move to other markets to sell animals in those markets. Drought incidences and farmers have little ability to restock after drought. They would prefer co-management so that the community can benefit from proceeds realized from this market. They would prefer LMA which is governed by by-laws/ Constitution. When LMA is in place, they would prefer a transparent system where the community is made aware of the revenues collected /retained by LMA as well as the LMA's expenditure.

Tax revenue collected: Cattle: 300/= where the producer pays then the buyer pays/refunds the producer 100/= which is added in final animal price. In this case it is felt that the producer suffers since they have no one to negotiate for them. The producers would appreciate having an LMA who can advocate their grievances. Goats: 100/= (both buyer and seller pay 50/=).

Suggested reasons for few animals in the market: Producers are currently keeping few animals; human population is increasing hence small number of animals especially goats. People /producers are now growing fruits land other crops, and this reduces grazing area (land use changes). Change in land tenure system: where land is now fenced leaving limited grazing land. Presence of other nearby slaughter houses in Mogotio and so producers prefer not to sell in this auction market since weight/grading system is not followed. In Mogotio the animals are weighed. Deforestation is now on the increase due to charcoal burning and so goats have little to feed/ forage on.

Moving forward: The auction system for the cattle is ok and they would like to have a similar system for the shoats. They feel advertising the market may create more awareness and subsequently attract more market players. Brokers from this market prefer to sell shoats in other markets where there is no auction

system. They proposed also the need for community sensitization to be more market oriented, this will help change the mindset and need for sensitization on fodder production.

Challenges: Diseases have recently led to market closure. There is therefore need for increased vaccinations. Producers are not aware of market requirements hence need to have producer sensitization

Average animal Prices and number sold

Animal	Size	Highest Price (in ksh)	Lowest Price (in ksh)	Supplied/Sold
Cattle	Big	60,000	50,000	60-100
	Medium	40,000	25,000	
	Small	20,000	8,000	
Shoats	Big	6,500	4,000	70-1000
	Medium	4,800	3,500	
	Small	2,500	1,500	

Interview with revenue clerks

Challenges: Beginning in 2014, the challenges are few. This is because sensitization has been done in the community. In addition, the market is fenced so there is less tax payment evasion. County revenue officers were not willing to discuss further, so the interview was stopped.

Interview with traders

Challenges: The county council does not help with stolen animals, even when an animal has been sold through the auction system. Sellers are left to handle the case by themselves. There is no transparency in pricing. At times a buyer hires people to inflate the prices and this is exploitative to the genuine buyers. At times the price agreed upon in the auction is not followed (the auction price is 20,000/= but when buyer is paying the price is less, like 17,000/=). General lack of transparency since there is no law and order followed. Traders feel if there is co-management and LMAs are in place, then, some of these challenges may be mitigated. Traders feel that the tax revenue of 300/= is too high compared to other counties where cess paid is 200/= for large herd. At times, the buyer and trader agree to each pay half.

Cess Cattle: total 300/=, shared equally between buyer and seller, Shoats: total 100/=, shared equally between buyer and seller.

Average animal prices

Animal	Size	Highest Price (in ksh)	Lowest Price (in ksh)	Supplied	Sold
Cattle	Big	50,000	35,000	50-70	5% are not sold
	Medium	20,000	12,000		
	Small	15,000	7,000		
Goats	Big	7,000	5,000	20	All sold
	Medium	5,000	3,000		
	Small	2,500	1,500		

Way forward: Improve market linkages, improve the current lack of transparency, improve market infrastructure (ie. move to metallic fences). Create an auction market for shoats. Traders are happy about the location of the market but, they are not aware of co-management model.

SAMBURU COUNTY LOKKUNIANI MARKET

Interview with LMA

Composition of LMA: This committee started in 2018. Ten members are elected, one from every village (there are 10 villages) from two sub location (Yoltim and Likisi). The LMA comprise of 6 producers and 4 traders. All the LMA members are men (No women). They have a constitution drafted in 2004 and an MoU with the county government also agreed to in 2004. The LMA is elected for a 3-year term but an LMA can be returned in the office after election based on their performance.

Volume of animals supplied and sold per market day

Animal	Supplied	Sold
Cattle	200	120
Goats	4500	3000
Sheep	300	200
Camel	100	50
Donkey	0	0

NB: Donkey are very useful, but the culture prohibits the sale of donkeys.

Revenues collected/sources: Cess collected is 300/= for cattle and 100/= for shoats split equally by both the buyer and seller. Sometimes, a discount is given to big buyers e.g. one who buys 100 goats is given a discount of no more than 10 goats or the equivalent of 10% (but 10 goats is the maximum). Livestock tax revenue, export fees- 7,000/= per lorry, movement permits.

Revenue sharing: The revenue sharing ratio is 50:50 (50% to the county government and 50% to the LMAs. Unemployed youths are also involved in revenue collection e.g. they are given a commission. The youths alternate on a weekly basis. Movement permit is collected purely by the county government. The county government also collects revenue from nearby kiosks. However, the shared revenue is only collected from sale of animals.

Expenditures: Some expenses are shared. These include money paid to: 1) security guards (2) revenue collectors (3) cleaners (4) watchmen. Expenses are settled first before sharing the revenue. Security: There are about 10 men every market day who are paid 4,000/= every market day from the shared expenses. Revenue collectors: Approximately 15 revenue collectors, from either the community or LMA, who are paid on a commission basis (15% of total individual collection or about 1,000 to 1,500/=). (Note: The commission motivates excellent competition/efficiency among revenue collectors by awarding the highest collector an extra 2000/= over and above the 15% commission paid. Cleaners: Four cleaners are

paid on a weekly basis. Each is paid 300/=. Watchman: One watchman who is paid 6,000/= every month. Chiefs and villages administrators: Usually there are 3 chiefs and 2 village administrators who are each paid 500/= each per market day. Data monitors: 2 data monitors are each paid 200/= per market day. Fuel for water pump (borehole): The fuel cost which is about 7,000/= for the generator and is co-shared by county government and LMA. The market has two data monitors paid by DRSLP- Resilient project (World Bank).

LMA expenditures: LMA (lunch allowance): Paid from LMA'S 50% shared revenue. Each of the 10 LMA members is paid 500/= for their attendance on market day. LMA allowances 500 for each member (10 members). Community peace makers: 4 men are each paid 400 every market day. Gateman: One gateman is stationed at the shoats' gate and is paid 400/=. He ensures that the animal cess is paid. Help to a 7- year-old orphan girl child. She is given 500/= each market day. She is also given an extra 1,000-1,500/= twice a year to buy clothing. The amount given is based on LMA assessment. Office stationary (record books, files, notebooks). The cost is about 2000/= every 3 months. The LMA shares the remaining funds with the community. They give bursaries, pay hospital bills, take care of emergencies. For example, every year they give bursaries of 2,000/= to about 200 students (400,000/= total).

LMA Meetings: The LMA have a self-assessment meeting every 5 months unless there is an emergency. Every week they have performance meetings (morning and evening on the market day). LMA holds an annual general meeting once a year. The agenda mainly are: Updates and to evaluate performance, challenges, areas of improvement and how to share the savings. LMA has a savings account with TAWA Sacco

Challenges: *Sale of stolen animals:* To mitigate this, they take individual details of each buyer and seller. All these details are contained in the receipt and they work closely with the local chiefs and village administrators to follow up on stolen animals. The receipt details are as follows: Name, Id. No, Location of origin, Sub location. *Unemployed youths:* Too many youths seek opportunities to collect revenue. The LMA recruits them based on previous performance (as revenue collector) and on a rotational basis. *Tax evasion:* Mainly the Morans want to pay lower than the stipulated amounts. The LMA uses peace makers. The peace makers may curse those who fail to comply. Some local traders buy the animals and agree with sellers to walk the animals outside the market as though they have not been sold. In this case, the LMAs try to be very vigilant. This has increased the revenue collected. *Rainy Season:* During the day season animal shift to look for pasture and water so few animals are brought to the market. *Poor Sheep Market:* This is a poor market for sheep and sellers evade the tax. The sheep breed in the area is not preferred in the market. The preferred breed is dorper.

LMA training needs: The LMA is newly elected and they have not been trained since they assumed office. Training requested, enhanced market orientation for producers, financial management, record keeping.

Future Plans: The county government plans to construct a modern/metallic livestock market. The LMA has set an annual target for revenue they need to collect. Their target is an average of 3 million shillings annually. Their current average weekly collection is about 45,000 – 100,000/=. They plan to reduce LMA members from 17 to 10 to reduce expenditures/costs.

Catchment areas: Sarara, Gilai, Ngoroni, Serolifi, Nanyuki, Swari and Merille.

End markets: Meru, Nairobi (Kiamaiko), Isiolo and Nanyuki

Interview with village administrator

Overview: The co-shared revenue is only collected from sale of livestock. Revenue from stalls /other product not co shared. Co-sharing is done after all the expenses at a ratio of 50:50. Revenue collection process is alternated between the county government collectors and community revenue collectors. They alternate on weekly basis. The LMA hold an annual general meeting and prioritize the community needs. For bursaries they consider cases uniqueness. Repairs are handled by both the county government and community (co-shared). All the shops have an operating license. Hawkers and any unlicensed stall pay 50/= per market day. On Average, the LMA receives 1.2 million shillings annually and records are kept. There is a selected team that audits the LMAs' records/accounts. The team is comprised of 3 recognized village experts (a nurse, county director revenue officer and another professional), 3 chiefs and 2 area administrators. They compare with the records from the county government. They are planning to have the audits done quarterly.

Challenges: Lack of transparency, low numbers of marketed animals, especially during drought, due to shifting in search of water and pasture. This translates to significant fluctuations in revenue collected. When they combine revenue clerks (using both county and community revenue collectors) there is a drop in collected revenue. If a revenue clerk is not working well, they are dismissed or stopped from working in the market for 3 months. The previous LMA served for 2 years and 3 months

Interview with external traders

Overview: These are external traders from Meru county. They began trading in this market in 2012. They mainly purchase animals from: Archers post, Lungusak and Lupus. The Meru traders mainly sell their animals in Meru and Nyambene where they sell to butchers and other traders.

Challenges: Insecurity, poor road infrastructure, poor market infrastructure which can mean escape of animals and subsequent large loss to buyers. These traders indicated that they are happy about the current LMA, county government and the current market location.

Cess: Cattle/Camel 300/=, split equally between buyer and seller. Goats 100/=, split equally but sometimes the buyer pays the entire amount if the seller refuses to pay.

Interview with local traders

Overview: The local traders are aware of co-management which they believe began in 2004. In 2004/2005 the cess charged was 30/= per goat after which it was increased to 50/= in 2013. For cattle, cess was 100/= and, since 2013, is 150/= . Cess was increased because of increased in animal prices, increased number of

buyers and sellers and hence market vibrancy and higher offtake. The location of the market was relocated to the current location. Most producers are Morans.

Benefit of co-management: Bursaries, hospitals bills and sponsorship of the elderly and orphans

Challenges: Sale of stolen animals, sometimes producers sell sick animals which die on the way to the end market, trekkers to the market lose the animals on way to the market, price fluctuations.

Preferred improvements: Better ways of tracking stolen animals which can favor buyers to protect them from livestock loss. Increase the number of trained veterinarians in the market to help with diseases surveillance and treatment. Provide more water for human and animals. Currently, they pay 20/= per jerrycan (20L) of water.

Perceived role of LMA: They help to restrict animal movements within the sales yard. They help mitigate challenges of stolen animals. Settling disputes. LMA restrict the community from cutting trees around and in the market. Revenue collection (they really appreciate this role) The local traders are not aware about LMA election procedures.

Services rendered in this market: During market days they are happy of different services offered, including other products. The community can shop for the entire week. They feel their income has increased with co-management model.

Interview with LMA revenue clerks

Overview: Began in 2004. All revenue collectors are paid 15% of individual revenue collected. The community revenue collectors have created a WhatsApp page which they use for disseminating information (market information) (e.g. number of animals supplied, livestock prices). This information is then shared with community members to make them bring the animals to the market. This increases offtake.

Challenges: No toilet in the market. Need for construction of a modern market (metallic) to maintain high-quality fencing. Tax evasion, LMA should devise a simple way to explain to market actors why they should pay the cess (explain the benefits). Some of the LMA money is lent to community members but a few of them fail to repay. They feel that educated / and young LMA leadership are involving community unlike previous LMA majority of whom were illiterate. They would like to see fairness in allocation of opportunities to participate in revenue collection (favoritism was there with the previous LMA).

MARALAL LIVESTOCK MARKET

Interview with LMA

Background: Co-management began 2 years ago. Before the market was run by the county council and county government, an auction system was in operation but failed because brokers did not want this system. They do not have data monitors in the market and are happy with the market location.

Cess: Cattle 300/=, split equally between buyer and seller. Shoats 100/=, split equally between buyer and seller.

Volume of animals supplied and sold per market day

		Supplied	Sold
Cattle	Mon/Fri	100	60
	Other days	20	3-4
Shoats	Mon	150	50
	Other days	50	20

Benefits of Co-management: Now better management. The community reports incidences to the LMA (e.g. theft cases, environment cleaning and breakages). LMAs handle minor repairs using their share.

Election of LMA: The market players elect LMA members amongst them. The communities (market players) are part of LMA and are registered with CLMC. Only the registered members participate in LMAs elections. There are 144 registered people out of which 11 are elected as LMA members. The LMA has 4 Women and 7 men. The LMA officials are: Chairman-M, Vice chairman-M, Treasurer-F, Secretary-M, Vice secretary-F. The LMA has bi-laws and meet once a month and they keep written minutes.

Challenges: Theft cases are common, no water in the market and no fodder stores. LMA is not happy about the current arrangement of revenue collection. The active /vibrant days are Mon/Friday. The LMA is given Tuesday and Saturdays which are not vibrant days and hence low revenue for LMA.

Revenue collected: Livestock taxes—Monday 5,000/= while Friday 10,000/=. The other days of the week it is about 2,000 to 4000/= per week. Membership dues—The community members (144) contribute 200/= a month to keep active membership. There are penalties of failure to contribute and a member can even lose their membership. Expenditures are mainly used for membership welfare. There are also two operational stalls where they collect 1,000/= per month and two other stalls which are not operational (but future plans to fix).

Expenditures: Repairs which amount to 10,000/= but they have spent as much as 50,000/= for smaller repairs in the market. Allowances for LMA during meetings 2,000/=. Stationery 1,500/=. Hospital bills (3,000-5,000/=) among the community members. The LMA would like to have an equal share with the county government in terms of days shared for revenue collection. Alternatively, they would like to be given one of the vibrant market days to be collecting revenue. This will motivate them, and they will work to ensure revenue collections increases.

Future plans: Improve water and fodder security. Construct holding pens/for external traders where they can keep animals as they can temporary keep the animals as they continue with the purchases. Improve linkages with external market actors, possibly through advertising. Buy a lorry for transporting animal to external markets which they can hire out to market actor. The LMA intend to write proposal to source for funding to assist in meeting some of the above needs

LMA Training /Capacity: They have been trained twice by the county government in 2010 and 2017 as well as the CLMC in 2017. They were trained on: market management and business skills.

LMA training needs: Good agricultural practices (GAP) on healthy animal production, fodder production and storage, need exposure visits to other co-managed markets, management skills (regular trainings) and business skills (development of small enterprises).

Interview with sub county livestock officer

Overview: Co-Management model was piloted by SNV and Arid Land resource management. It began in Lolkuniani. MoUs were developed between LMA and county government. For Lolkuniani the MoU is 50:50 for revenue sharing. LMA are expected to do minor repairs and manage the livestock markets. LMA uses the same money for social support like: school fees and payment of medical bills for the community members. In Maralal the MoU is 70:30 (County government: LMA). The model is not standard for all markets in all markets. The county government has devised other approaches for sharing the revenue for example; in some markets, the county government collects revenue for 5 days while LMA collects revenue for 2 days. The co-managed markets are Lolkuniani and Maralal only. The county has many small markets and only a few big markets.

Benefits of co-management model: The county government may not have the capacity to manage all the livestock markets. Increases in revenue collected for the county. Increase ownership by the community. The community may not vandalize the market. Market are regularly maintained for co-managed markets but not well maintained in non-comanaged n non co-managed markets nobody cares (ie. cleanliness of the market).

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Challenges: In cases where there is no MoU the informal agreements are not always adhered to. Hence the need for an MOU agreement. Management of the money by LMA – Accountability challenges. Some LMA committees overstay or prolong their term by using crude ways to get re-elected. Insecurity along trade routes where traders are attacked along the way and this slows down the market. Droughts seriously affect prices and volume of animals traded.

County government assistance: Market monitors –supported by regional pastoral livelihood resilience project (RPLRP). Six monitors were recruited for: Lolkuniani, Lekuru and Baragoi. Their main role is to collect livestock market data, volume and prices which is disseminated through the local radio station. They also produce a monthly market bulleting accessible to community members. The government has developed/ constructed new 4 markets supported by drought resilient and sustainable livelihood project (DRSLP) eg Lekuru, Lakuru, Poro, Maralal. Two other markets (Latakwe and Baragoi) were also supported by RPLRP. Provision of security especially for the Isiolo-Lolkuniani market with police patrolling along the route. Insecurity and poor infrastructure are a big challenge across the county. The LMAs (Lekuru, Maralal) have been trained on market management.

Way Forward: There is a sale yard bill which has been passed and signed by the governor. This will see mean most markets will be co-managed. There is need to consider unique parameters for each market to implement co-management. A guideline is needed.

Interview with revenue officers

Background: In West Sub-county there are 4 big livestock markets and 2 small ones. The 4 big markets were funded by AfDB.

Revenue Collection: There is no standard approach for revenue collection. Some markets are given 2-3 days to collect revenue e.g. in Maralal they have 2 days (Tuesday and Saturday). The LMA collects the money and then banks it. The other 4 days the county revenue clerks collect and bank the money in county revenue account. LMAs use their money for repairs, social responsibility. Revenue collection is higher in co-managed markets than in non-co-managed markets. This is because the LMA sensitizes the community members and this helps to reduce resistance to payment of cess.

Resistance by community to county government tax collection: The community does not understand why the county government is collecting the money. Where there is no co-management there is no sensitization of the community.

Challenges: Some co-managed markets generate lower revenue than other co-management markets because: conflict leading to insecure markets, poor location of the market, volume of animals is low, poor management of the market and county revenue clerks are stricter than LMA tax collectors and hence lower revenue.

Interview with local traders

Overview: They are aware of LMA but do not know the role they play. They are not registered community members and have not followed up on becoming members.

Challenges: Low prices in the market especially during dry spells. Few buyers (external traders) and at times traders have been forced to stay with an animal for as long as a month before selling. During drought, expenses are higher, No water and fodder.

Way forward: They would appreciate if the market can have water installed and also sell fodder.

LEKURU MARKET

Interview with LMA

There are 13 LMA members: 4 women and 9 men. They are comprised of producers and traders. The current LMA has been in the office for about 1 ½ years who were selected/elected from 18 villages in this location each village select two people, but small villages only one is selected. They have a constitution and LMA election is done annually. They agreed with revenue director to share two days in a month and county government receives 2 days a month. The LMA meet once a month. The secretary keeps minutes but not always.

Revenue collected: The weekly average revenue collected is 3,000-4,000/=. Previously, before the market was constructed with metallic post, the wooden sale yard was bigger and could hold more animals and revenue collected was a lot higher about 10,000/= but after construction of the current metallic structure which is smaller revenue decreased. The payment given to revenue clerks was also higher about 400/= (minimum). This reduction in amount paid to revenue clerks demoralized them.

LMA expenditures: LMA employs 4-5 revenue collectors, and each is paid 300/= on a good market day but if collection is low, they are paid 200/=. Payment to 3-4 elders/peace makers 300/=. Security (2 rangers) are paid 300/=. The LMA members also act as the revenue clerks and as peace makers. The majority of them have other personal businesses and therefore do not bother to work in the markets.

Benefits of co-management: Benefits are minimal. Community members are very demotivated and are hence not keen. The LMA helped a local primary school to establish the school. They gave 10,000/= to the school. They also gave 10,000/= to assist search for an animal which got lost. They are planning to use part of the money to do minor repair in the market (e.g. gate repair and gutters/ taps) or tackle any other problem/challenge within the community.

Challenges: Significant tax evasion by community member (e.g. only 7 people out of 100 pay cess). The community does not understand why they are made to pay the tax revenue. The LMA try to make the community understand but they still are not willing to pay. Insecurity: they feel the policemen are not doing the work. Previously, stalls the market were being rented at 200/= per market day but the now the stalls are not rented because they say there is no business in the stalls.

Way forward: LMA intends to engage police to arrest those who fail to pay the revenue.

Capacity of LMA: They have been trained on LMA election and formations of LMA by the county. No other training has been received. They desire training in market management and business skills. How to use the weight scale. The weighing scale is there but was they never taught how to use it.

Volume of animals supplied and sold per market day

	Supplied	Sold
Cattle	600 - 700	300 - 400
Shoats	1000	600

Interview with a data monitor

The interviewee started working 3 years ago in 2016 and is employed by RPLRP world bank project. His role is to collect data on livestock prices and uploads them into the computer system on a weekly basis. The data collected includes information on livestock grades, prices and volume sold. The market has two data monitors. He is paid 4,000/= per month and he volunteers to serve his community. The current LMA was elected 2 years ago. There are 10 members in total (2 women, 3 youths and 5 men) elected from the community.

Cess: Cattle 300/=: split equally between buyer and seller. Shoats 100/=: split equally between buyer and seller.

Challenges: The market participants do not understand why the monitors collect this information. So, they think it's a waste of time. Fluctuation of animal volume in the market. LMAs are not serious in

management of the market and revenue collection. If he tries to guide the LMA they feel like they are being investigated. At times the LMA declares less revenue than what they collect per market day. Tax evasion by actors (both trades and buyers) they do side transactions which is not disclosed to revenue collectors. The LMA alternate with country revenue tax collectors on a weekly basis. The sale yard is so small that only cattle is accommodated. Shoats are sold in the open field which makes it very difficult to monitor sales hence tax evasion since animals are not contained. A weighing scale was installed but actors were not trained on its use, yet some buyers from Laikipia ranches like to buy in weight (at least 250kgs and above) and so sellers are forced to take animals all the way to Laikipia and drive back those that fail to reach the required market weight. Livestock diseases are common (e.g. FMD), especially common in young female cattle, and most sick animals come from Mirot (around Narok).

Way forward: There is need for a sale yards bill to guide enforcement of LMA operations. Training and sensitization of data monitors, the LMA and community members for both ownership and encouragement on the usefulness to pay cess. Need for the county government to be more committed to promote livestock market and support market management and running of the market. There is need for a permanent data monitor in the livestock market for sustainability of data collected. Provision of water and fodder for sale.

Interview with county revenue officer

Overview: This revenue officer collects revenue from different markets.

Challenges: Insecurity, sale of stolen animals, lack of perimeter fence for shoats hence challenges of revenue collection in the open air, lack of awareness and by-in on cess collection hence unwillingness to pay cess hence tax evasion, too few revenue clerks to collect revenue now there only 4 clerks, fluctuations of price and volume especially during droughts, few buyers especially the external buyers and a lack of transparency from the LMA and the community members. There is poor collaboration between the community and the LMA.

Role of LMA: Settling of disputes within the livestock market, revenue collection, maintaining security in the market and creating awareness on importance of payment of tax revenue.

Way forward/solution. Create community awareness on the need to pay cess (there is need for the county to showcase the benefit of paying the cess). Construct an enclosure for the shoats (ie. construct a perimeter fence). Increase the number of youths who can help in revenue collection. Give exposure visits and train the LMA on market management and they will be able to share experiences of others to improve management. Advertising the market to attract external trader this will increase market vibrancy and increase the prices. Need for transparency between LMA and the community. Currently, the community is happy with the current LMA.

Revenue collected: The revenue collected from this market per market day is about 5,000/= from shoats and 4,000/= from cattle. Revenue is collected by both the LMA and the county revenue clerks. Co-management began 1 year ago but before that, the LMA used to collect the revenue but after the construction of the metallic market the county government took over revenue collection. The LMA negotiated to be given at least two days hence co-management began 1 year ago.

Benefit of co-management: Increase in revenue collected. The LMA use their share to assist with hospital bills, give school fees, etc.

Interview with producers/sellers

Overview: They are happy about the current market location. They are also happy about the fencing /contraction of the market. This is because previously it was very challenging (the animals used to escape to the bush). Before construction of the market, the volume of animals supplied was lower but after construction, the volume supplied has increased. The producers were not aware of co-management and LMA. Neither are they aware about LMA election process.

Challenges experienced: Cases of stolen animals and sick animals are common. Broken gates in the market. Water is a challenge in this market.

Way forward: Have a permanent source of water. The slaughter slab is dilapidated and not sanitized hence need to have it renovated. Need to have veterinary doctors in the market for meat inspection.

WAJIR COUNTY

Interview with LMA

Overview: LMA was formed in 2012 and KLMC has assisted training the LMA. Revenue is not co-shared. The county government has refused to co-share with the LMA. There are about 45 LMA members (both men and women) and most of them are illiterate. They meet once a month to discuss peace issues/ how to resolve dispute. Have not had exposure visits to other markets. No security police officers in the market. The LMA just volunteer to maintain law and order in the market. The LMA has formed two groups, one has 27 members and the other 28 members. Each group contributes 200/= every month. They have a separate account in the bank (welfare group). No supportive businesses like Mpesa agents or banks. No water troughs in the market. No proper stalls for other business, the LMA does not know what the county government does with the revenue collected. Renovation is needed in the market. No road infrastructure. The market is surrounded by buildings and so animals are scared to go to the market especially camels. Lack of veterinary doctor in the market. LMA are not clear about utilization of the money collected by the county and whether receipts given are genuine or the money goes to the revenue clerks' pockets. During drought the county government buys fodder but LMA are not involved in distribution of the fodder. No support from the county government. They would like to have insurance for animals to get compensation for animals. They hear of Takaful but they are corrupt and are not helpful. Need to have pens for holding animals sold within the sale yard. No veterinary doctors in the market. They use the money during sickness and during death or solve disputes between husband and wife. They would like to buy a vehicle (water tanks) to supply water to community members and make little money for the LMA. The resilience project is not helping the community and there is a lot of corruption involved. The elders handle difficult issues and they fine the offender 1500/= which is given to the offended person

Sources of Revenue: Camels seller gives LMAs about 200/= each to motivate them. The stall pays 600 per month to the county government. Movement permits 1,000/= for shoats. Export/import fee for cattle /camel is 600/= per lorry. Does not change movement permit for large herd. They would prefer the permit to be issued from the sale yard and not from the offices.

End market: This is the biggest market and a central market supplying animal to: Somalia, Garissa and Mombasa. Shoats are mainly taken to Nairobi and Mombasa while cattle are mainly sold in Nairobi and Mombasa.

Catchment: Moyale, Mandela, Isiolo (for camels), Marsabit.

Average animal Prices and number sold

Animal	Size	Price (in ksh)		Volume Supplied	Volume Sold
		Male	Female		
Cattle	Big	50,000	35,000	1,500	1,400
	Medium	35,000	25,000		
	Small	22,000	20,000		
	Calves	15,000	15,000		
Camels	Big	80,000	30,000	100 – 150	All Sold
	Medium	60,000	28,000		
Goats	Big	8,000	6,000	Shoats- 1,200	All sold
	Medium	6,000	4,500		
	Small	5,000	2,500		
	Kids	3,500	1,500		
Sheep	Big				
	Medium	6,500	4,000		
	Small	4,000	2,800		
	Kids	3,000	1,500		
Donkeys				150 (every Monday)	All Sold

Interview with traders and producers

Overview: One trader has been in this market for 10 years but does not know the role of LMA. The shoats' market is an open-air market and there are many brokers hence there is no direct interaction between buyer and seller. Therefore, the buyer ends up paying the tax revenue alone. Tax revenue is collected by country government revenue clerks. In most cases, the arrangement is such that the producers send the animals to the broker who waits for the animals at the market. Therefore, the producer does not accompany the animal to the market. There is no insecurity in the market; it's a very good market to do business. There are no incidences of stolen animals. Cattle market once a week.

Cess: Cattle/camel 400/=, split equally between buyer and seller. Shoats 80/=, paid exclusively by buyer.

Challenges: Disease outbreak hence market closure (no help came from the county government). Long distance and poor terrain to the end market (takes 3 days on the road). No water in the market yet they are always paying tax revenue. The loading ramp is only one and therefore they are forced to que so as to load animals in lorries. Lower prices in some end markets like Isiolo probably due to their high transaction cost, animal prices here are a bit high. So, they at times incur losses. No holding pens in the market to hold purchased animals. No toilet in the market and the structure present is very dirty and another one is always closed and very dirty. During Islamic festivals some charitable organizations buy animals, but those tenders are only given to the big /rich people from Nairobi and not to local traders. The felt that the LMA should be more proactive and try to get such tenders which can benefit the locals. Frequent drought and

yet no help from the government. They would like to have a ready market, emergency funds and fodder for their animals. There is no revenue sharing between LMA and the county government.

Way Forward: LMA to be reconstituted and get new LMA. They don't know the composition of the current LMA. The current LMA has been in office since 2014 and traders do not know how they were elected. No community meetings between LMA communities. They would like to the LMA to be holding annual community meetings to give an update of their roles and achievements. Water and toilet provision.

Average animal prices and number sold

Animal	Size	Highest Price (in ksh)	Lowest Price (in ksh)	Highest Price (in ksh)	Lowest Price (in ksh)	Highest Price (in ksh)	Lowest Price (in ksh)	Volume Supply/Sold
		Festivals		Normal		Drought		
Cattle	Male	45,000	40,000	40,000	35,000	15,000	15,000	600-700
	Female	24,000	24,000	22,000	20,000	10,000	8,000	50 Not Sold
Camel	Male	90,000	80,000	60,000	50,000	30,000	30,000	50
	Female	45,000	40,000	40,000	35,000	20,000	20,000	5-7 not Sold
Shoats	Male	8,000	8,000	6,500	6,500	2,500	2,500	800
	Female	5,500	5,500	5,000	5,000	2,200	2,200	All Sold

Interview with producers

Overview: There are two different LMAs one for shoats and one for cattle/camel. The LMAs were elected from market actors. The producers know them. The LMA members are not paid. Theft issues are not common. They are happy about the market location because since it is in a central location. The Current LMA has been in office since 1998. They are happy with the work the current LMA are doing. They are tough and would like them to continue.

Role of LMAs: They solve disputes, settle insecurity/ theft issues.

Challenges: Poor road infrastructure-no direct road to the market and there are many buildings around the market which makes animals scared, especially the camels, making it difficult to get them into the market. There is no proper entry to the market. Cattle market is only on Mondays (they said they would like to have a daily market). High tax revenue and whether you sell or not you are still taxed. You may get lucky and not pay if the revenue clerk gets tired and leave. No routine animal vaccination. The tax revenue for shoats is not standard sometimes its 50/= for seller and at times 80/= for buyer. There is too much sand inside the livestock market hence transportation of animals with trucks is a big challenge (the transporters can over charge due to road status). No water trough and means for pumping water from the wells.

Way Forward: Change the cattle market day to be every day. Make road infrastructure inside the sales yard. (improve sale yard infrastructure). Need to have shades/ stalls inside the sale yard for supportive business e.g. for clothes, animal drugs, etc. instead of such sellers leaving the market when it too hot. Need for a machine to pump water from the wells for the animals. Need for cleaners of toilets and a big water tank in the market.

Average animal Prices and number sold

Animal	Size	Price (in ksh)		Volume (High Season)
		Male	Female	
Cattle	Big	50,000	32,000	800
	Medium	15,000	24,000	
	Calf			
Camel	Big Male	60,000	70,000	80 - 100
	Medium	40,000	45,000	
	Small	21,000	21,000	
Goats	Big	6,000-7,000		200 - 300
	Medium	5,500		
	Calf	4,000		
Sheep	Big	5,000	5,000	800 - 1000
	Medium	3,300	3,300	
	Small	2,800	2,800	

Catchment areas: Garse, Khirof- Harar, Adhibokol, Tarbaj, Arbajahan, Wjir-Bor, Hadado, Dambas, Bramil, Riba, Shanta-Araq, Boji-Garas, West/East Tardos, Lagboqol and Bona.

BUTE MARKET WAJIR COUNTY

Interview with LMA

Overview: The LMA said that there are 7 LMA members comprising of 2 women and 5 men. They have 3 officials including a chairman (male), treasurer (female) and secretary (male) and they meet every day in the market. Every day is a market day for camel and shoats and Thursdays for cattle.

Role of the LMA: Settling disputes or any other challenge in the market. Managing the market and inspecting the market before allowing animals into the market. In case of sale of stolen animals, the LMA handle these cases.

Challenges: Sale of stolen animals. Poor quality of the current fence. Poor market access (in case of tribal clashes, they sell mostly animals from Ethiopia and this affects the performance of this market). No water, shelter/ shade or office in the market. Insecurity along the way between Wajir and Bute. So, they are not able to access Wajir market. One toilet is not enough to serve all the market participants.

Way Forward: Need more external traders. Improve road infrastructure and security along the way to Wajir. Better fencing in the market. Get water and an extra toilet in the market.

Training needs: They have so far been trained by KLMC on: market management and business skills. They, however, said that they currently have not training need, but they would like to have some support to improve the market infrastructure.

Tax Revenue: Buyers pay a tax revenue of 480/= paid equally by both buyers and sellers mainly for camels. The money is collected by the LMA who remits to the county government. The LMA are paid 200/= by both the seller and the buyer (Seller 100/=; buyer 100/=) over and above the 480/=, for a total of 680/= per camel. Cattle tax revenue is 300/= and shoats are 100 paid equally by buyer and seller (no extra payment to LMA).

LMA expenditure: Minor repairs in the market (e.g welding of the gate). Buy water during market day. Remaining proceeds are shared among LMA members who are present at the market

Interview with producers and traders

The market was constructed 5 years ago. No insecurity issues in this market were reported. However, there are several challenges encountered.

Challenges: Animals left in the market after sale are sometimes eaten by wild animals or may escape and are lost. Ticks are a big issue and so a cattle dip is needed. No source of water in the market. The market needs holding pens, especially for vaccination. The market expenses are high: for example, they pay 480/= per animal and 200/= to the LMA. They would be happy if LMA can be paid from a different source so that they are only left to pay tax revenue. Poor road infrastructure to the market and there is insecurity in between Bute and Wajir. Concerning LMA, there are only 3 men who manage the market for the last 6 years, but they are happy with them. They assumed office about 6 years ago. These LMA members were the initial traders in this market and they work closely with the local chiefs.

Tax Revenue: Buyers pay a tax revenue of 480/= paid by both buyers (240/=) and sellers (240/=) mainly for camels. The money is collected by the LMA who remits to the county government. The LMA are paid 200/= by both the seller and the buyer (Seller 100/=; buyer 100/=) over and above the 480/=, for a total of 680/= per camel.

Animal	Size	Highest Price (in ksh)	Lowest Price (in ksh)	Volume Supply/Sold
		Normal		
Cattle	Big Male	55,000	40,000	40-120 80% Sold
	Big Female	35,000	30,000	
	Med. Male	45,000	35,000	
	Med. Female	25,000	20,000	
	Small Male	25,000	15,000	
	Small Female	20,000	20,000	
Camel	Big Male	90,000	75,000	20-150 20-130 Sold
	Big Female	70,000	30,000	
	Med. Male	60,000	40,000	
	Med. Female	45,000	30,000	
	Small Male	35,000	20,000	
	Small Female*	50,000	30,000	
Shoats	Big	7,000	4,000	120-170 80% Sold
	Medium	3,500	2,500	
	Small	2,000	2,000	

* The small female camel is highly priced because of its high demand for breeding purposes.

Catchment areas: Ethiopia, Sololo in Marsabit, Buna, Korondille, Gulani Turbi, Danaba, Batalu, Moyale,

End Markets: Mogadishu in Somali, Da (a refugee camp), Mandera, Nairobi

Way Forward: Sink a borehole to have the water in the market to attract more market players. Improve animal prices. Improve the market infrastructure (perimeter fence and holding pens). Lobby for better road infrastructure especially from Bute to Wajir. Elect more LMA members to at least a membership of 7. They would like to have revenue sharing between the county and the community implemented (ie. co-managed).

Interview with a revenue clerk/officer

The main economic activity in the county is livestock rearing and sale. The markets are managed by the county government which holds meetings with the market players. The county finance bill guides revenue collection from the markets. The county has constructed a big regional livestock market which is 4 km from Bute but it is not operational as yet. This new market is intended to serve different markets as well as international market. The county also has an abattoir.

Revenue Collection: Export Fees for shoats 40/=, donkeys 100/= and cattle/camel 200/= that are paid equally by buyers and sellers. Auction fees for shoats 100/=, donkeys 200/= and cattle/camel 200/= that are paid equally by buyers and sellers.

Challenges: Tax evasion. The county government has currently no money released from treasury and so it's difficult to do enforcement of revenue collection. Low revenue is collected from this market. The county does not have a laboratory where they can test diseases, so they rely on Nairobi offices which takes a lot of time. The community does not understand why they must pay tax. Low literacy levels in the community. There is a need for a revenue administrative bill. The revenue team needs capacity building to know how to deal with the market actors. Understanding drought and seasonal variations which affect the volume of animals brought to the market. Security/insecurity especially due to clans' clashes and hence some clans cannot access the market. Majority of herders are older, and most children are now going to school. So, younger people are seeing no future in pastoralism. Growing villagization in the rangelands which is reducing grazing areas.

On Co-management: There is no revenue sharing. There is a need for cost benefit analysis of co-management models on whether to adopt.

Way forward: Intend to use fines on those evading paying taxes (the national government is encouraging the counties to increase own revenue collection from their respective counties and subsequently awarding those counties that hit or surpass their target). Conduct community civic education in collaboration with AHADI.

Director of livestock production

Overview: Seventy to eighty percent of the Wajir population depends on livestock and are mainly nomadic pastoralists. There are many livestock markets in the county including 3 main markets (Wajir, Habaswein and Darfur) and 4 other markets (Griftu, Eldas, Bute and Da).

Challenges: Flooding, drought, diseases, poor livestock prices and expansion of the county. The market infrastructure is poor and most of them are dilapidated. USAID is constructing a modern market in Griftu and Habaswein. For Wajir livestock market, it is surrounded by residential buildings which makes its access a big challenge. The county is thinking of relocating the market. LMAs are present in Wajir, Bute, Griftu and Babaswein markets. They have been trained at least twice but they have not taken up their roles. The LMAs are not organized in implementation of co-management and so, there is no co-management in the whole county. There is a national sale yards bill but not yet customized to suit Wajir county. The county government is thinking of customizing the sale yards bill. Much of the revenue collected from the livestock markets is not ploughed back to the markets. the director thinks that co-management is a good model which ought to be implemented. He further said, though he was involved during the formation of KLMC he feels that CLMC structure is very weak, yet they are the ones who should oversee the LMAs. The LMA performance is also very poor due to low monitoring as well as supervision. There is need to have structured a co-management model. The LMAs especially officials and some few members have been trained on: group dynamics, revenue remittances, group formation, their roles and writing of by-laws.

Way Forward: Policy formulation; there is a need for a sale yards bill. Continuous training of LMAs. Have functional CLMCs that can negotiate with the county government, especially on co-management. Continue with infrastructure development and collaboration with partners.

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